Department of Civil Engineering					
Semester – VI (Session 2019-2020)					
Subject: 6CE02: DESIGN OF RCC & PRESTRESS CONCRETE STRUCTURES **Subject Code: 6CE02 Section: A**					
SUBJECT TEACHER: Prof. P.S.Pajgade					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Design of interior panel of flat slab by direct design method. (Problem on square panel only)	Dr. Shah V.L. &Karve S.R.: Limit State Design.	6	Total Lectures for Unit I: 14
	2	Design of cantilever retaining wall and Counterfort retaining wall.		6	
II	1	Design of combined footing.	Dr. Shah V.L. &Karve S.R.: Limit State Design.	8	Total Lectures for Unit II: 12
	2	Complete design of simple, small structures like Canopies & Parking shed.		6	
III	1	Introduction to Prestressed concrete: Materials and their characteristics, types of prestressing, Methods and various prestressing systems, Losses of prestress	Krishna Raju, N.; Prestressed Concrete Structures; TMH; Delhi	5	Total Lectures for Unit III: 8
	2	Analysis of beams for flexure, under working load for Rectangular and flanged sections.		3	
IV	1	Basic Design of rectangular sections for flexure by limit state method, Design of one way single span slabs.	Krishna Raju, N.; Prestressed Concrete Structures; TMH; Delhi	4	Total Lectures for Unit IV: 6
	2	Design of prestressed concrete circular water tanks by IS code method.		2	
			Total Lectures Required	**40**	

Semester – IV (Session 2019-2020)					
Subject: Estimating And Costing					
SUBJECT TEACHER: Prof. P. S. Deshmukh					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	General, Importance and Purpose	R.H. Namavati. : Estimating and Valuation	1	Total Lectures for Unit I: 8
	2	Modes and units of measurments as per IS1200		1	
	3	Methods of cost estimating		2	
	4	Methods of Approximate estimates		2	
	5	Specifications, Purpose		2	
II	1	Types of specifications	B.N. Datta : Estimating & Costing – S. Datta Lucknow.	2	Total Lectures for Unit II: 10
	2	Specifications of Irrigation Work Items		2	
	3	Specifications of Road Work Items		2	
	4	Problems on working out quantities		2	
	5	Problems on working out quantities		2	
III	1	Cost building-up : Purpose and principles	V.N. Vazirani, S.P. Chandola: C.E. Estimating & Costing, Khanna Publisher Delhi.	2	Total Lectures for Unit III: 10
	2	Rate Analysis : Importance and factors affecting		4	
	3	Fixed, Variable and Prime costs		1	
	4	Supplimentary and Overhead costs, its allocation		2	
	5	NBO recommendations for Task work , No. of workers		1	
IV	1	Schedule of rates, CSR/DSR	B.N. Datta : Estimating & Costing – S. Datta Lucknow.	2	Total Lectures for Unit IV: 10
	2	Working out quantitits of ingredients for various items of work		2	
	3	Working out quantitits of ingredients for various items of work		2	
	4	Working out quantitits of ingredients for various items of work		2	
	5	Detailed Estimates, Abstract and Measurment Sheets		2	
V	1	NBO recommendations for Task work , No. of workers	B.N. Datta : Estimating & Costing – S. Datta Lucknow.	1	Total Lectures for Unit V: 12
	2	Schedule of rates, CSR/DSR		2	
	3	Working out quantitits of ingredients for various items of work		5	
	4	Detailed Estimates, Abstract and Measurment Sheets		4	

VI	1	Bar Bending Schedule	B.N. Datta : Estimating & Costing – S. Datta Lucknow.	**2**	Total Lectures for Unit V: 12
	2	Detailed estimate of Framed Structure		**4**	
	3	Earthwork calculations		**3**	
	4	Detailed estimate of building		**2**	
	5	Earthwork for Road		**1**	
			Total Lectures Required	**52**	

Department of Civil Engineering

Semester – IV (Session 2019-2020)

Subject: Building Planning Designing and CAD

SUBJECT TEACHER: Prof. P. S. Deshmukh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction: Importance of building drawing for Civil Engineering	Shah, Kale & Patki, Building Planning & Drawing, Tata McGraw-Hill plubication	1	Total Lectures for Unit I: 5
	2	Method of drawing – Selection ofscales for various drawings, types		1	
	3	Abbreviations & graphical symbols used in Civil EngineeringDrawing		2	
	4	Combined first angle & third anglemethod of projection.		1	
II	1	Layout of sheet for civil engineering drawing	Shah, Kale & Patki, Building Planning & Drawing, Tata McGraw-Hill plubication	1	Total Lectures for Unit II: 6
	2	Requirements of drawing as per plan sanctioning authorities.		1	
	3	Concept of line plan & working drawings of the building.		1	
	4	Developing working drawings of the building from the given lineplan		2	
	5	Necessityand use of working drawing.		1	
	1	Concept of site plan, block plan andlayout plan. Importance and detail	Dr. Kumar Swamy & Rao Swamy,	1	

III	2	Developing workingdrawing and foundation plan for load bearing	Charotar publications	1	Total Lectures for Unit III: 6
	3	Planning of residential building. Introduction, general principleso		1	
	4	Planning of residential building. Introduction, general principleso		2	
	5	Climate and design consideration. Orientation of buildings		1	
IV	1	Building rules and by laws, for residential buildings, conversionof	Shah, Kale & Patki, Building Planning & Drawing, Tata McGraw-Hill plubication	1	Total Lectures for Unit IV: 6
	2	Types of public building and their requirements, planning of publicb		2	
	3	Preparing line plans of different public buildings suchas schools,		2	
	4	Free-hand sketching : Importancein Civil engineering.		1	
	5	Perspective drawing		1	
			Total Lectures Required	**23**	

Department of Civil Engineering					
Semester – VIII (Session 2019-2020)					
Subject: Project Planning Management					
SUBJECT TEACHER: Prof. V. S. Gohatre					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Project, Project Stakeholders, Project life cycle	CPM & PERT- Dr. B.C.Punmia & K K Khandelwal Project Planning & Management – Kundan Singh, M.L.Kansal	1	Total Lectures for Unit I: 7
	2	Conceptual Phase, Planning Phase, Execution Phase, Termination phase.		1	
	3	Concept of feasibility study, Budgeting, Cash Flow		1	
	4	Risk assessment plan. Project planning- Steps, work break down structure		1	
	5	Scheduling. Project Monitoring & Controlling- Concept of Tracking		1	
	6	Reviewing and Rescheduling. Planning Tools: Basic concept of Gantt chart, Bar Chart		1	
	7	Mile stone chart, their advantage, limitations and overcoming measures		1	
II	1	Networking – Activity, Event, dummy Activity	CPM & PERT- Dr. B.C.Punmia & K K Khandelwal Project Planning & Management – Kundan Singh, M.L.Kansal	2	Total Lectures for Unit II: 5
	2	Fulerson's numbering rule, Geometrical consideration.		1	
	3	Critical Path Method: Concept, technique, Critical path, Numerical on Time and Floats computation		1	
	4	concept of Updating Network and its numerical for computation.		1	
III	1	PERT: Concept, technique, three time estimates average time,	CPM & PERT- Dr. B.C.Punmia & K K Khandelwal Project Planning & Management – Kundan Singh, M.L.Kansal	2	Total Lectures for Unit III: 5
	2	Critical path, slack computation S.D, Variance,		1	
	3	Probability factor, crash programme, normal and crash cost, normal and crash time		1	
	4	cost slope, Numerical on Probability computation, crashing		1	
IV	1	Concept of resource smoothening and leveling, Cost Curves	CPM & PERT- Dr. B.C.Punmia & K K Khandelwal Project Planning & Management –	1	Total Lectures
	2	Numerical of it. Introduction to Planning		2	
	3	Various stages and process for Work Breakdown structure		1	

	4	planning, scheduling and resource allocation for project by software	Kundan Singh, M.L.Kansal	1	for Unit IV: 6
	5	scheduling and resource allocation for construction project using software		1	
V	1	Management- Feyol's Principal of Management, Functions of management	CPM & PERT- Dr. B.C.Punmia & K K Khandelwal Project Planning & Management – Kundan Singh, M.L.Kansal	1	Total Lectures for Unit V: 7
	2	organization definition, type line, line and staff functional organization, quality control, ISO		1	
	3	Safety management, construction hazards in multistage building method of prevention of accident, injury rate		2	
	4	injury severity rate, injury index, National safety council, its role recommendation		2	
		Material management, Objective, Functions, Inventory, Need for inventory, ABC, EOQ analysis.		1	
VI	1	Power shovel: Construction, working, Output, factors affecting, cycle time, Problem on Output	CPM & PERT- Dr. B.C.Punmia & K K Khandelwal Project Planning & Management – Kundan Singh, M.L.Kansal	1	Total Lectures for Unit V: 6
	2	payback period of equipments		1	
	3	Dragline: Construction, working, output, factor affect ting output		2	
	4	cycle time, Problem on output		1	
	5	Concrete mixer, Tilting and non-tilting type construction working.		1	
			Total Lectures Required	**36**	

Department of Civil Engineering

Semester – I (Session 2019-2020)

Subject: **Transportation Engg –I**

SUBJECT TEACHER: Prof. V. S. Gohatre

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Development and planning, road transports charactoristics	Highway Engineering Khanna & Justo	1	Total Lectures for Unit I: 7
	2	classification of Roads, Road development plans & Salient features		1	
	3	Road Transport characteristics		1	
	4	Road pattern		1	
	5	Egg. Survey for highway.		1	
	6	Material And Testing, Various properties of aggregates		1	
	7	Egg. Survey for highway, bituminous materials and Test		1	
II	1	cross sectional elements, cross section elements	Highway Engineering Khanna & Justo	2	Total Lectures for Unit II: 5
	2	Right of way, Camber, Gradient		1	
	3	PIEV Theory, transition curves, vertical alignment		1	
	4	Design of summit and valley curves, IRC Standards for Geometric design		1	
III	1	Components of Flexible and Rigid pavement	Highway Engineering Khanna & Justo	2	Total Lectures for Unit III: 8
	2	Flexible pavement design by C.B.R. Method		1	
	3	Westergards analysis for wheel load & Temperature stresses in rigid pavement		1	
	4	Rigid pavement by IRC method (As per IRC-37),		1	
	5	Combination of stresses, Joints in Rigid Pavement		1	
	6	Construction And Maintenance – WBM Surface dressing		1	
	7	Bituminous roads, cement concrete Pavement, construction procedure		1	
IV	1	Traffic Characteristics	Highway Engineering Khanna & Justo	1	Total Lectures
	2	Traffic studies, road parking system		2	
	3	accident study,		1	

	4	motor vehicle Act & Rule		1	for Unit IV: 6
	5	traffic control devices,		1	
V	1	Component, classification and identification	Highway Engineering Khanna & Justo	1	Total Lectures for Unit V: 6
	2	data collection, site selection, economic span		1	
	3	At grade intersections – clover leaf, diamond, 3 E's of traffic		2	
	4	marking, signs, signals, island its type, rotary intersections & design elements		2	
VI	1	different structural form – culverts, causeways	Highway Engineering Khanna & Justo	1	Total Lectures for Unit V: 6
	2	major and minor bridges		1	
	3	types of foundation, abutments, piers and wing wall bearing their types and choices		2	
	4	Erection of bridge superstructure		1	
	5	regulation for driving motor vehicle		1	
			Total Lectures Required	**36**	

Department of Civil Engineering

Semester – III (Session 2019-2020)

Subject: **Transportation Engg –I**

SUBJECT TEACHER: Prof. V. S. Gohatre

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Development and planning, road transports charactoristics	Highway Engineering Khanna & Justo	1	Total Lectures for Unit I: 7
	2	classification of Roads, Road development plans & Salient features		1	
	3	Road Transport characteristics		1	
	4	Road pattern		1	
	5	Egg. Survey for highway.		1	
	6	Material And Testing, Various properties of aggregates		1	
	7	Egg. Survey for highway, bituminous materials and Test		1	
II	1	cross sectional elements, cross section elements	Highway Engineering Khanna & Justo	2	Total Lectures for Unit II: 5
	2	Right of way, Camber, Gradient		1	
	3	PIEV Theory, transition curves, vertical alignment		1	
	4	Design of summit and valley curves, IRC Standards for Geometric design		1	
III	1	Components of Flexible and Rigid pavement	Highway Engineering Khanna & Justo	2	Total Lectures for Unit III: 8
	2	Flexible pavement design by C.B.R. Method		1	
	3	Westergards analysis for wheel load & Temperature stresses in rigid pavement		1	
	4	Rigid pavement by IRC method (As per IRC-37),		1	
	5	Combination of stresses, Joints in Rigid Pavement		1	
	6	Construction And Maintenance – WBM Surface dressing		1	
	7	Bituminous roads, cement concrete Pavement, construction procedure		1	
IV	1	Traffic Characteristics	Highway Engineering Khanna & Justo	1	Total Lectures
	2	Traffic studies, road parking system		2	
	3	accident study,		1	

	4	motor vehicle Act & Rule		1	for Unit IV: 6
	5	traffic control devices,		1	
V	1	Component, classification and identification	Highway Engineering Khanna & Justo	1	Total Lectures for Unit V: 6
	2	data collection, site selection, economic span		1	
	3	At grade intersections – clover leaf, diamond, 3 E's of traffic		2	
	4	marking, signs, signals, island its type, rotary intersections & design elements		2	
VI	1	different structural form – culverts, causeways	Highway Engineering Khanna & Justo	1	Total Lectures for Unit V: 6
	2	major and minor bridges		1	
	3	types of foundation, abutments, piers and wing wall bearing their types and choices		2	
	4	Erection of bridge superstructure		1	
	5	regulation for driving motor vehicle		1	
			Total Lectures Required	**36**	

Department of Civil Engineering

Semester – VII (Session 2019-2020)

Subject: Design of steel Structures Subject Code:7CE03 Section: A

SUBJECT TEACHER: Prof. P.S.Pajgade

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to WSM, LSM & plastic analysis.	Duggal, S. K., Design of Steel Structures, Tata McGraw Hill Pub. Company Ltd. N. Subrramanyam, Design of Steel Structures, Oxford University Press, 2008.	8	Total Lectures for Unit I: 14
	2	Design of bolted & welded connections subjected to axial loading.		6	

II	1	1. Design of compression & tension member.	Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	6	Total Lectures for Unit II: 12
	2	1. Design of roof truss.		6	
III	1	1. Design of simple & compound columns for axial & eccentric loading.	Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	4	Total Lectures for Unit III: 8
	2	1. Design of column bases (Slab base & Gusseted base) subjected to axial load.		4	
IV	1	1. Design of simple Beams.	Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	4	Total Lectures for Unit IV: 6
	2	1. Design of compound Beams.		2	
			Total Lectures Required	**40**	

Department of Civil Engineering					
Semester – IV (Session 2019-2020)					
Subject: Geotechnical Engineering - I					
SUBJECT TEACHER: Prof. P. V. Kolhe					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	History of development of soil mechanics, formation of soil, its significance to the field problems	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit I: **8**
	2	Soil properties and its classification		1	
	3	Definition of soil, soil as a three phase system, weight – volume relationship		1	
	4	Index properties of coarse and fine grained soil		1	
	5	BIS classification of fine grained & coarse grained soil		1	

	6	Numericals		3	
II	1	Concept of clay mineral, major soil minerals, their structural formation and properties	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit II: **6**
	2	Mechanics of compaction, factors affecting compaction, different structures of soil		1	
	3	Standard and modified Proctor test, their field Determination, zero air void line, concept of wet of optimum, and dry of optimum		1	
	4	Field compaction & their control. CBR test and CBR value for soak and unsoaked conditions.		1	
	5	Numericals		2	
III	1	Concept of absorbed water, surface tension	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit III: **7**
	2	Capillarity and its effect on Soil properties permeability of soil		1	
	3	Darcy's law and validity, Discharge and seepage velocity, factors affecting Permeability		1	
	4	Determination of coefficient of permeability laboratory and field methods.		1	
	5	Permeability for stratified deposits, Drainage and Dewatering Methods		1	
	6	Numericals		2	
IV	1	Laplace equation, its derivation in Cartesian co-ordinate system, its application for the computation of discharge seepage	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit IV: **8**
	2	Seepage pressure, Quick sand condition with numericals		1	
	3	Concepts flow net, method to draw flow nets, characteristics and use of flow net		1	
	4	Preliminary problem of discharge, estimation of discharge through homogenous earthen embankment		1	
	5	Design Terzaghi's criteria for graded filter, concept of piping and criteria of stability against piping		2	
	6	Numericals		2	
V	1	A physical concept of shear strength, Introduction of Mohr's stress diagram	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit V: **7**
	2	Mohr's failure criteria, Mohr- Coulomb's theory and development of failure envelopes		1	
	3	Unconfined compression test, Laboratory measurement of shear strength for different drainage, conditions by direct shear test		1	
	4	Triaxial test for various drainage conditions Merits and demerits of various shear strength tests.		1	
	5	Concept of pore pressure coefficient shear characteristics of sand, NC and OC clays and partially saturated soil		1	
	6	Numericals		2	

VI	1	State of stress at a point, stress distribution in soil mass	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit VI: **6**
	2	Boussinesq's theory and its applications, point load, uniformly loaded rectangular and circular area		1	
	3	New-mark's chart, its preparation and use, equivalent point load Compression of laterally confined soil, concept of consolidation spring analogy		1	
	4	Terzaghi's theory of one dimensional consolidation		1	
	5	Determination of Cv Cassagrande's method for determination of pre-consolidation pressure.		1	
	6	Numericals		1	
Total Lectures Required				**42**	

Department of Civil Engineering					
Semester – VII (Session 2019-2020)					
Subject: Geotechnical Engineering - II					
SUBJECT TEACHER: Prof. P. V. Kolhe					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Field exploration, objectives and methods of exploration	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit I: **7**
	2	Planning of exploration programme soil boring, Introduction to methods of soil exploration		1	
	3	SPT test, field vane shear test		1	
	4	Geophysical methods, electrical resistivity and soil refraction methods		1	
	5	Soil log bore presentation and interpretation exploration data. Ground improvement techniques		1	
	6	Numericals		2	
II	1	Bearing capacity and concept of local and general shear failure	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit II: **8**
	2	Terzaghi's and Skempton's Theory of BC		1	
	3	Meyerhof's and BIS method for bearing capacity		1	
	4	Determination bearing capacity of granular soils based on SPT value		1	
	5	Plate load test, Static Cone Penetrometer (In Situ methods for bearing capacity)		1	
	6	Pressure meter test contact pressure distribution diagram below the base of footing, Concept of raft foundation and floating foundation		1	

	7	Numericals		2	
III	1	Earth pressure at rest, general & local Stages of plastic equilibrium, Rankine's and coulomb's theory of active and passive earth pressure on retaining wall	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit III: **8**
	2	Influence of surcharge, water table, wall friction		1	
	3	Rebhann's and Culmann's simple graphical methods		1	
	4	Introduction to sheet pile and bulkhead and their classifications		1	
	5	(No design criteria) Cofferdam purpose, various types and their suitability.		1	
	6	Numericals		3	
IV	1	Classification of piles and their uses	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit IV: **8**
	2	Static analysis along with numericals		2	
	3	Dynamic analysis along with numericals		2	
	4	Piles in group and their capacity, group efficiency, factors affecting group efficiency		1	
	5	Behaviour of group of pile in sandy and in clayey soil, pile load test, effect of pile cap		1	
	6	Criteria for spacing and depth of piles. IS design criterion for undereamed Pile in clay and sands		1	
V	1	Immediate, primary and secondary settlement for footing resting on homogenous isotropic, cohesive and cohesion less soils related to single footing, combined footing, & raft foundation etc	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit V: **6**
	2	Concept of differential settlement factors and causes for differential settlement, BIS requirement for total as well as differential settlement		1	
	3	Proportioning of footing for uniform settlement		1	
	4	Computation of total and differential settlement of a single pile and group of piles in sandy and clayey soil.		1	
	5	Numericals		2	
VI	1	Component & their function, sinking of well, types of force system, and their computation	Soil Mechanics and Foundation Engineering - Dr. K. R Arora Soil Mechanics and Foundations – Prof. B. C. Punmia	1	Total Lectures for Unit VI: **7**
	2	Design criteria for various components of wells		1	
	3	Tilting and shifting, Bearing capacity of well as per BIS.		1	
	4	Stability analysis of infinite and finite slope, causes of failure of slopes		1	
	5	Stability analysis of infinite and finite slope in cohesive and non-cohesive soils		1	
	6	Numericals		2	
Total Lectures Required				**44**	

Department of Civil Engineering					
Semester – VIII (Session 2019-2020)					
Subject: Dam Engineering					
SUBJECT TEACHER: Prof. S.A.Baitule					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Introduction to Dam Engineering : Different classification for dams	Sharma H.D : Concrete Dams, Metropolitan Book Co, Delhi Satyanarayanan : Construction, Planning & Equipment, Standard Pub.	1	Total Lectures for Unit I: **7**
	2	Relative advantages and disadvantages of various dam selection or types of dam		1	
	3	Investigation of dam sites		1	
	4	Engineering surveys, geological investigation, subsurface exploration programme		1	
	5	Economic height of dam		1	
	6	Construction machinary, material, money, inventory.		2	
II	1	Rockfill dam : Introduction	Sherard et al : Earth and Rockfill Dam, John Wiley, New York.	1	Total Lectures for Unit II:**6**
	2	General characteristics		1	
	3	Materials and testing of rockfill material		1	
	4	Foundation requirements of rockfill dam		1	
	5	Design consideration of rockfill dam		1	
	6	Rockfill placement,		1	
III	1	Arch dam :- components	Sharma H.D : Concrete Dams, Metropolitan Book Co, Delhi. USBR : Design of Gravity Dam.	1	Total Lectures for Unit III: **8**
	2	Types and methods for design of Arch dam		2	
	3	Buttress dam : components, types		1	
	4	Forces acting, Buttress spacing		1	
	5	Master curve for economic spacing		1	
	6	Preliminary design Solid Gravity dams : Analysis & Design of gravity dam.		2	
IV	1	Spillways: choice of types, crest gates	Sharma H.D : Concrete Dams, Metropolitan Book Co, Delhi. Varshney R.S. : Concrete Dam, Ox IBH, Mumbai.	2	Total Lectures for Unit IV: **7**
	2	Hydraulic design, comparison		1	
	3	Approach and tail channel, J.H.C. & tail water rating curve		1	
	4	Energy Dissipaters: types, components		1	
	5	Design of hydraulic jump type, basins		1	
	6	Ski-bucket type, roller bucket.		1	

V	1	Head Regulators : requirements, types	USBR : Design of Small Dams. Sharma H.D : Concrete Dams, Metropolitan Book Co, Delhi.	1	Total Lectures for Unit V: **7**
	2	Foundation treatment including uplift consideration		1	
	3	Bank connection, energy dissipation, hydraulic design of opening and barrel, ventilation, types of gates.		2	
	4	Approach Channel, case study for one on rock foundation and one on permeable foundation.		1	
	5	Model Studies: scales design principles, materials, scale effects for model of dams spillway		2	
VI	1	Instrumentation : In earth dam and solid gravity dams, piezo meters, settlement, gauges (surface monuments, base plate, cross arm)	Peurifoy R.L. : Construction, Planning and Equipments, McGraw Hill Book Co. Satyanarayanan : Construction, Planning & Equipment, Standard Pub.	1	Total Lectures for Unit VI: **7**
	2	Strain meters joint meters		1	
	3	Thermometers, stress meters, pore pressure cells, plumb-bob Seismograph		1	
	4	Water level gauges (description, object, location, working, installation of each		1	
	5	Increasing height of masonry and concrete dams		1	
	6	Strengthening, repairs and maintenance, leakage, evaporation controls. evaporation controls.		2	
Total Lectures Required				**44**	

Department of Civil Engg

Semester –VI (Session 2019-20)

Subject: Transportation Engg II

SUBJECT TEACHER: Prof. V. S. Gohatre

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Railway Transportation, Classification of railway	S.C.SAXENA S.P.ARORA NPTL	1	Total Lectures for Unit I: 6
	2	Track sections in embankment `		1	
	3	Track sections in cutting		1	
	4	TRack Std Terminology, Traction		1	
	5	Tractive Resistances		2	

II	1	Survey	S.C.SAXENA S.P.ARORA NPTL	1	Total Lectures for Unit II: 8
	2	Permanent Way c/s		1	
	2	Rails, Sleepers		1	
	3	Sleeper Density		1	
	4	Problems On Sleeper		1	
	5	Coning Of Wheel,		1	
	6	Rail Section		2	
III	1	Points and crossing Left & right hand turnouts	S.C.SAXENA S.P.ARORA NPTL	2	Total Lectures for Unit III: 8
	2	design calculations for turnout & cross over		2	
	3	types of Track junction, long welded rails. Station and yards : types, function, facilities & equipment		1	
	4	Railway signalling and interlocking: objects, classification		1	
	5	types of signals		1	
	6	, control & movement of trains.		1	
IV	1	Various surveys to be conducted, airport site selection	S.C.SAXENA S.P.ARORA NPTL	1	Total Lectures for Unit IV: 6
	2	Airport drainage		1	
	3	Aeroplane component parts, Aircraft characteristics		1	
	4	Airport obstructions: Zoning laws, imaginary surfaces approach		1	
	5	turning zone Runway and Taxiway design		1	
	6	wind rose diagram		1	
	7	basic runway length and corrections			
	1	Airport Markings	S.C.SAXENA	1	

V	2	Airport lighting	S.P.ARORA NPTL	1	Total Lectures for Unit V: 7
	3	Airport terminal		1	
	4	Aircraft parking & parking system		1	
	5	taxiway and other areas		1	
	6	Airport traffic contro		1	
	7	instrumental landing systems accidents in the air.		1	
VI	1	Tunnel imoportance, Neccesity	S.C.SAXENA S.P.ARORA NPTL	1	08
	2	Methods of tunneling in soft ground		1	
	3	tunneling methods		1	
	4	Needle beam method		1	
	5	Tunnel lining, drainage		2	
	6	ventilation & lighting of tunnels		2	
			Total Lectures Required	**43**	

Department of Civil Engg

Semester –VI (Session 2017-18)

Subject: Transportation Engg II

SUBJECT TEACHER: Prof . M.S.Mahalle

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Railway Transportation, Classification of railway	S.C.SAXENA S.P.ARORA NPTL	1	Total Lectures for Unit I: 6
	2	Track sections in embankment `		1	
	3	Track sections in cutting		1	
	4	TRack Std Terminology, Traction		1	
	5	Tractive Resistances		2	

II	1	Survey	S.C.SAXENA S.P.ARORA NPTL	1	Total Lectures for Unit II: 8
	2	Permanent Way c/s		1	
	2	Rails, Sleepers		1	
	3	Sleeper Density		1	
	4	Problems On Sleeper		1	
	5	Coning Of Wheel,		1	
	6	Rail Section		2	
III	1	Points and crossing Left & right hand turnouts	S.C.SAXENA S.P.ARORA NPTL	2	Total Lectures for Unit III: 8
	2	design calculations for turnout & cross over		2	
	3	types of Track junction, long welded rails. Station and yards : types, function, facilities & equipment		1	
	4	Railway signalling and interlocking: objects, classification		1	
	5	types of signals		1	
	6	, control & movement of trains.		1	
IV	1	Various surveys to be conducted, airport site selection	S.C.SAXENA S.P.ARORA NPTL	1	Total Lectures for Unit IV: 6
	2	Airport drainage		1	
	3	Aeroplane component parts, Aircraft characteristics		1	
	4	Airport obstructions: Zoning laws, imaginary surfaces approach		1	
	5	turning zone Runway and Taxiway design		1	
	6	wind rose diagram		1	
	7	basic runway length and corrections			
	1	Airport Markings	S.C.SAXENA	1	

V	2	Airport lighting	S.P.ARORA NPTL	1	Total Lectures for Unit V: 7
	3	Airport terminal		1	
	4	Aircraft parking & parking system		1	
	5	taxiway and other areas		1	
	6	Airport traffic contro		1	
	7	instrumental landing systems accidents in the air.		1	
VI	1	Tunnel imoportance, Neccesity	S.C.SAXENA S.P.ARORA NPTL	1	08
	2	Methods of tunneling in soft ground		1	
	3	tunneling methods		1	
	4	Needle beam method		1	
	5	Tunnel lining, drainage		2	
	6	ventilation & lighting of tunnels		2	
			Total Lectures Required	**43**	

Department of Civil Engineering

Semester – IV (Session 2019-2020)

Subject: Fluid Mechanics - I

SUBJECT TEACHER: Prof. S. V. Dharpal

Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Properties of Fluid	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	1	Total Lectures for Unit I: 8
	2	problems on properties of fluid		1	
	3	Rheological classification of fluid, cohesion, adhesion and surface tension		1	
	4	problems on dynamic viscosity		1	
	5	problems on kinematic viscosity		1	
	6	capillarity & Surface Tension & problems		1	

	7	Pascal's Law & Problems		1	
	8	Manometers and Problems		1	
II	1	Forces on immersed areas- Plane	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	1	Total Lectures for Unit II: 8
	2	Forces on immersed areas- Curves		1	
	3	Buoyancy, Equilibrium of floating body		1	
	4	Metacenter & Metacentric height		1	
	5	Types of flow, Eulerian approach of describing fluid motion		1	
	6	Velocity potential		1	
	7	Stream function		1	
	8	Continuity equation		1	
III	1	Eulers equation of motion	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	1	Total Lectures for Unit III: 8
	2	Bernoulli's equation		2	
	3	HGL, EGL, Velocity distribution		1	
	4	Energy & Momentum correction factor		1	
	5	Momentum equation		1	
	6	Forces on pipe bends		2	
IV	1	Venturi meter & Orifice meter	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	2	Total Lectures for Unit IV: 8
	2	Pitot tube, Circular orifice & mouthpieces		2	
	3	Rectangular notch		1	
	4	Triangular notch		1	
	5	Trapezoidal notch & Cipolletti weir		1	
	6	Velocity of approach & Fancies equation		1	
V	1	Laminar flow through circular pipes		2	Total Lectures for Unit V: 8
	2	Velocity distribution		1	
	3	Hayegen Puiseuille equation		2	
	5	Reynold's no., Boundary layer		2	
	6	Nominal, energy, momentum & displacement thickness		1	
	1	Drag and lift		1	Total Lectures for Unit VI: 8
	2	Calculation of drag & lift on cylindrical bodies		1	
	3	Darcy weisbach equation		1	

VI	4	Major & minor losses		2	
	5	Pipe in series & Parallel		1	
	6	Equivalent pipe		1	
	7	Water hammer in pipes		1	
			Total Lectures Required	**48**	

Department of Civil Engineering
Semester – V (Session 2019-2020)
Subject: Fluid Mechanics - II
SUBJECT TEACHER: Prof. S. V. Dharpal

Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Karman-prandtl's equation	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	2	Total Lectures for Unit I: 8
	2	Nikuradse's experiment		2	
	3	Velocity distribution laws & Universal resistance laws		2	
	4	Hydraulitically smooth & rough pipes		2	
	1	Uniform flow, open channel flow		1	

II	2	Geometric elements of rectangular & Trapezoidal sections	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	2	Total Lectures for Unit II: 8
	3	Chezys and Mannings equations		1	
	4	Most efficient rectangular & trapezoidal section		2	
	5	Specific energy curve, normal & critical depth		1	
	6	Analysis of surface profile		1	
III	1	Gradually varied flow, dynamic equation	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	1	Total Lectures for Unit III: 8
	2	Analysis of surface profile		2	
	3	Rapidly varied flow		2	
	4	Hydraulic jump		2	
	5	Relation between conjugate depths		1	
IV	1	Buckingham's pie theoram	Fluid Mechanics: R.K.Bansal Fluid Mechanics: R.K.Rajput	3	Total Lectures for Unit IV: 8
	2	similitude		1	
	3	Dimensionless no.		1	
	4	Geometrically similar models		1	
	5	Reynolds law		1	
	6	Froudes law, model study of spillway		1	
V	1	Impact of jet on stationary & moving plates		2	Total Lectures for Unit V: 8
	2	Symmetrical and asymmetrical curve vanes		1	
	3	Moment of momentum equation		2	
	5	Hydraulic turbines- Pelton wheel & Francies		2	
	6	Work done power & efficiency, Specific speed of turbine		1	
VI	1	Classification of pump, Centrifugal pump		2	Total Lectures for Unit VI: 8
	2	Velocity diagram, work done, efficiency		1	
	3	Reciprocating pump		2	
	4	Jet pump		1	
	5	Submersible pump		1	
	6	Hydraulical ramp		1	
	7	Priming of pump		1	
			Total Lectures Required	**48**	

Department of Civil Engineering					
Semester – VII (Session 2019-2020)					
Subject: Environmental Engineering-I					
SUBJECT TEACHER: Prof. R. S. Adhau					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Quantity Estimation of water: Demand of water Consumption for various purposes.	Water Supply Engineering- S. K. Garg	1	Total Lectures for Unit I: 7
	2	Fire Demand, Per capita demand. Factors affecting consumption.		2	
	3	Fluctuation in demand. Design period, forecasting population.		2	
	4	Sources: Surface sources, ground water sources		1	
	5	Infiltration Galleries, Relative merits of sources		1	
II	1	Water quality: Impurities in water, their effects and significance.	Water Supply Engineering- S. K. Garg	1	Total Lectures for Unit II: 10
	2	Water borne diseases, collection of water samples.		1	
	3	Water analysis- physical		2	
	4	chemical and bacteriological		1	
	5	Water quality standards: I.S. & WHO		1	
	6	Flow diagrams and layouts of different water treatment works		2	
	7	Intakes- type, location, requirement & features		2	
III	1	Aeration: Purpose, types of gravity aerators & spray aerators	Water Supply Engineering- S. K. Garg	1	Total Lectures for Unit III: 7
	2	Sedimentation: Plain and with coagulation		1	
	3	Different coagulants used, dose of coagulant, Jar test,		1	
	4	Flocculation, Clarrifloculator		1	
	5	Design criteria for sedimentation tanks, surface loading		1	
	6	Simple problems on design of sedimentation tanks		2	

IV	1	Filtration :- Rapid sand and slow sand filters	Water Supply Engineering- S. K. Garg	1	Total Lectures for Unit IV: 7
	2	Filter media, Rate of filtration,		1	
	3	Under drainage system and washing process		1	
	4	Control system, Negative head		1	
	5	operating difficulties		1	
	6	Simple design problems on rapid sand filters		2	
V	1	Disinfection :- Requirement of good disinfectant	Water Supply Engineering- S. K. Garg	1	Total Lectures for Unit V: 8
	2	methods of disinfection		1	
	3	Chlorination: Methods, prechlorination, post chlorination		1	
	4	Break point chlorination and super chlorination, forms of chlorine		2	
	5	Use of bleaching powder - Simple problems.		2	
	6	Introduction to tertiary treatments-Softening and Defloridation.		1	
VI	1	Distribution system: - Types of supply: Continuous, and intermittent	Water Supply Engineering- S. K. Garg	**1**	Total Lectures for Unit VI: 6
	2	Types of system: Gravity, Pumping and combined gravity and pumping, Layouts of distributions system.		**2**	
	3	Maintenance of distribution system		**1**	
	4	Equalising storage, Type of storage reservoirs, capacity		**1**	
	5	Types of conduits, joints, appurtenances. Pipe laying and testing.		**1**	
			Total Lectures Required	**45**	

Department of Civil Engineering					
Semester – VII (Session 2019-2020) Section C					
Subject: Design of Steel Structure (7CE03)					
SUBJECT TEACHER: Prof. S. R. Bhuskade					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**

I	**1**	Basic Introduction	Duggal, S. K., Design of Steel Structures, Tata McGraw Hill Pub. Company Ltd. N. Subrramanyam, Design of Steel Structures, Oxford University Press, 2008. Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	1	Total Lectures for Unit I: 11
	2	Introduction To LSM & WSM		1	
	3	Introduction To Plastic Analyasis		2	
	4	Design of Bolted Connection		4	
	5	Design of Welded Connection		3	
II	**1**	Design of Tension Member	Duggal, S. K., Design of Steel Structures, Tata McGraw Hill Pub. Company Ltd. N. Subrramanyam, Design of Steel Structures, Oxford University Press, 2008. Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	4	Total Lectures for Unit II: 11
	2	Design of Compression Member		3	
	3	Design of Industrial shed		4	
III	**1**	Design of simple Column	Duggal, S. K., Design of Steel Structures, Tata McGraw Hill Pub. Company Ltd. N. Subrramanyam, Design of Steel Structures, Oxford University Press, 2008. Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	2	Total Lectures for Unit III: 10
	2	Design of compound Column		3	
	3	Design of column bases subjected to axial load & moment, gusseted base.		2	
	4	Design of column bases subjected to axial load & moment, solid slab base.		3	
IV	**1**	Design of Simple Beam	Duggal, S. K., Design of Steel Structures, Tata McGraw Hill Pub. Company Ltd. N. Subrramanyam, Design of Steel Structures, Oxford University Press, 2008. Shah & Karve, Design of steel structures. Sheyakar, Design of steel structure. Bhavikatti, Design of steel structure	3	Total Lectures for Unit IV: 10
	2	Design of Compound Beam		3	
			Total Lectures Required	**42**	

Department of Civil Engineering					
Semester – VI (Session 2019-2020) Section C					
Subject: Design of RCC & Prestress Concrete Structures (6CE02)					
SUBJECT TEACHER: Prof. S. R. Bhuskade					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	**1**	Introduction of Flat Slab-1	Jain, A. K., Reinforced Concrete Jaikrishna and Jain, Plain and Reinforced Concrete, Volume I and II Sinham S. N., Reinforced Concrete Dr. Shah V.L. & Karve S.R.: Limit State Design.	1	Total Lectures for Unit I: 11
	2	Design of Flat Slab		5	
	3	Design of Cantilever Retaining Wall		3	
	4	Design of Countrfort Retaining Wall		2	
II	**1**	Design of Combine Footing	Jain, A. K., Reinforced Concrete Jaikrishna and Jain, Plain and Reinforced Concrete, Volume I and II Sinham S. N., Reinforced Concrete Dr. Shah V.L. & Karve S.R.: Limit State Design.	5	Total Lectures for Unit II: 10
	2	Complete design of simple, small structures like Canopies & Parking shed		5	
III	**1**	Introduction to Prestress Concrete	Edward G. Nawy "Prestressed Concrete- A fundamental Approach", Prentice Hall Lin, T. Y. and Burns N. H., Design of Prestressed Concrete Structures, John Wiley and Sons Krishna Raju, N.; Prestressed Concrete Structures; TMH; Delhi	3	Total Lectures for Unit III: 11
	2	Analysis of Prestress Beam		4	
	3	Losses in Prestress Concrete		4	
IV	**1**	Design of Prestress Beam	Managerial Economics- Dr. D.M. Mithani HP Managerial Economics- Grrtika Managerial Economics- Ahuja	3	Total Lectures for Unit IV: 10
	2	Design of Prestress Slab		3	
	3	Design of water tank		4	
			Total Lectures Required	**42**	

Department of Civil Engineering
Semester – VII (Session 2019-2020)
Subject: Theory of Structure II
SUBJECT TEACHER: Dr. N. P. Kataria

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Moment distribution method, application to portal frames with sway. Multibay, multistoried, symmetrical frames subjected to symmetric loads only.	Structural Analysis (Volume I,II) S.S. Bhavikatti, Theory of Structure (Volume I, II) S. Ramamuttam	4	Total Lectures for Unit I: 8
	2	Slope deflection method: Application to portal frames with side sway.		4	
II	1	Kani's method: Continuous beams and single bay single storey portal frames with side sway.	Structural Analysis (Volume I,II) S.S. Bhavikatti, Theory of Structure (Volume I, II) S. Ramamuttam	4	Total Lectures for Unit II: 8
	2	Multi- bay, multi storeyed frames subjected to symmetric loads.		4	
III	1	Castigliano's second theorem, principle of least work, Analysis of redundant frames. (up to two degree redundancy).	Structural Analysis (Volume I,II) S.S. Bhavikatti, Theory of Structure (Volume I, II) S. Ramamuttam	4	Total Lectures for Unit III: 8
	2	Analysis of redundant trusses (up to second degree of redundancy), lack of fit, temperature effect.		4	
IV	1	Maxwell's reciprocal theorem, Betty's theorem, Muller - Breslau's principle, Influence line diagrams for continuous beams, upto two span only.	Structural Analysis (Volume I,II) S.S. Bhavikatti, Theory of Structure (Volume I, II) S. Ramamuttam	4	Total Lectures for Unit IV: 8
	2	Tension coefficient method & its applications to simple space trusses.		4	
V	1	Flexibility method, static redundancy, flexibility coefficients, compatibility condition application to beams.	Structural Analysis (Volume I,II) S.S. Bhavikatti, Theory of Structure (Volume I, II) S. Ramamuttam	3	Total Lectures for Unit V: 8
	2	Introduction to plastic analysis of steel structure, shape factor, plastic section modulus, Redistribution of moment, upper and lower bound theorems, collapse loads for beams, single bay, single storey portals.		5	
VI	1	Stiffness method, kinematic redundancy, stiffness coefficients, direct stiffness approach,	Structural Analysis (Volume I,II) S.S. Bhavikatti, Theory of Structure (Volume I, II) S. Ramamuttam	2	Total Lectures for Unit VI: 8
	2	application to continuous beams and single - bay, single - storey portal.		6	

			Total Lectures Required	**48**

Department of Civil Engineering					
Semester – IV (Session 2019-2020)					
Subject: RCC I					
SUBJECT TEACHER: Prof. S.D.Malkkhede					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Introduction, Syllabus	Concrete technology by MS shetty	1	Total Lectures for Unit I: 6
	2	Cement Manufacturing process.		1	
	3	Wet & Dry process		1	
	4	Properties of fresh concrete:		2	
	5	Mixing, centering & formwork, placing, compaction and curing of concrete		1	
II	1	Properties of hardened concrete:,	Concrete technology by MS shetty	1	Total Lectures for Unit II: 8
	2	Grades of concrete		1	
	2	Properties of concrete,		1	
	3	Elasticity, creep, shrinkage.		1	
	4	Durability of concrete, laboratory tests on concrete		1	
	5	Durability of concrete, laboratory tests on concrete		1	
	6	Durability of concrete, laboratory tests on concrete		2	
III	1	Pozzolana and Admixtures	Concrete technology by MS shetty	1	Total Lectures for Unit III: 8
	2	Plasticizer, retarders		1	
	3	Accelerators, water proofing agents,		1	
	4	Mineral admixtures, IS code provisions.		1	
	5	Concreting techniques: Guniting, grouting and shotcreting concrete, introduction & application of Ferrocement.		1	
	6	Concrete curing compounds		1	
	7	Bond aid for plastering,		2	
IV	1	Special concrete	Concrete technology by MS shetty	1	Total Lectures for Unit IV: 8
	2	Light weight concrete		2	
	3	Fibre reinforced concrete		1	
	4	Roller compacted concrete, selfcompacted concrete,		1	
	5	Concreting techniques: Guniting		1	

	6	Grouting and shotcreting concrete, introduction & application of Ferrocement.		2	
V	1	Introduction of mix design,	Concrete technology by MS shetty	1	Total Lectures for Unit V: 6
	2	Factors governing mix design		1	
	3	IS code method of mix design (IS:10262 – 1982) and ACI method.		2	
	4	IS code method of mix design (IS:10262 – 1982) and ACI method.		2	
VI	1	Basic elastic theory and concept of reinforced concrete,	Concrete technology by MS shetty	1	Total Lectures for Unit VI: 8
	2	Types of reinforcement,		2	
	3	Analysis of rectangular sections by working stress method		1	
	4	Modes of failure		1	
	5	Design of singly reinforced beams		1	
	6	One-way slabs		2	
			Total Lectures Required	**42**	

Department of Civil Engineering					
Semester – V (Session 2019-2020)					
Subject: RCC II					
SUBJECT TEACHER: Prof. S.D.Malkkhede					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Design of circular tanks with rigid base resting on firm ground by working stress method. (By IS code Method, IS 3370-2009)	**Dr.Shah V.L. &Karve S.R.: Limit State Design**.	1	Total Lectures for Unit I: 7
	2	Design of circular tanks with rigid base resting on firm ground by working stress method. (By IS code Method, IS 3370-2009)		1	
	3	Design of circular tanks with rigid base resting on firm ground by working stress method. (By IS code Method, IS 3370-2009)		1	
	4	Design of circular tanks with flexible base resting on firm ground by working stress method. (By IS code Method, IS 3370-2009)		1	
	5	Design of circular tanks with flexible base resting on firm ground by working stress method. (By IS code Method, IS 3370-2009)		1	
	6	Design of circular tanks with flexible base resting on firm ground by working stress method. (By IS code Method, IS 3370-2009)		1	
	7	Design of circular tanks with rigid base resting on firm ground by Limit State method. (By IS code Method, IS 3370-2009)		1	
II	1	Introduction to limit state method,	**Dr.Shah V.L. &Karve S.R.: Limit State Design**.	1	Total Lectures for Unit II: 7
	2	Basic concept of singly reinforced and flanged beams,		1	
	3	Basic concept of singly reinforced and flanged beams		1	
	4	Basic concept of doubly reinforced and flanged beams		1	
	5	Analysis and design of one way single span and continuous slabs.		1	
	6	Analysis and design of one way single span and continuous slabs.		1	

	7	Analysis and design of one way single span and continuous slabs.		1	
III	1	Analysis and design of two way solid slabs.	**Dr.Shah V.L. &Karve S.R.: Limit State Design**.	1	Total Lectures for Unit III: 7
	2	Analysis and design of two way solid slabs		1	
	3	Analysis and design of two way solid slabs		1	
	4	Analysis and design of two way solid slabs		1	
	5	Staircases, Design of Dog legged type staircase only.		1	
	6	Staircases, Design of Dog legged type staircase only.		1	
	7	Staircases, Design of Dog legged type staircase only.		1	
IV	1	Transfer of load from slab on beam	**Dr.Shah V.L. &Karve S.R.: Limit State Design**.	1	Total Lectures for Unit IV: 7
	2	Analysis and complete design of beams,		1	
	3	Analysis and complete design of beams		1	
	4	Analysis and complete design of beams		1	
	5	Rectangular and flanged sections for bending moment and shear.		2	
	6	Rectangular and flanged sections for bending moment and shear.		1	
	7	Rectangular and flanged sections for bending moment and shear.		1	
V	1	Transfer of load from beam on column. Analysis and design of columns for axial load, uniaxial (Problem on uniaxial bending only	**Dr.Shah V.L. &Karve S.R.: Limit State Design**.	1	Total Lectures for Unit V: 7
	2	Transfer of load from beam on column. Analysis and design of columns for axial load, uniaxial (Problem on uniaxial bending only		1	
	3	Transfer of load from beam on column. Analysis and design of columns for axial load, uniaxial (Problem on uniaxial bending only		1	
	4	Transfer of load from beam on column. Analysis and design of columns for axial load, uniaxial (Problem on uniaxial bending only		1	
	5	Design of Isolated footings: Square and rectangular footings of uniform depth subjected to axial load only.		2	
	6	Design of Isolated footings: Square and rectangular footings of uniform depth subjected to axial load only.		1	
	7	Design of Isolated footings: Square and rectangular footings of uniform depth subjected to axial load only.		1	
VI	1	Design of grid slab by I.S. code method.	**Dr.Shah V.L. &Karve S.R.: Limit State Design**.	1	Total Lectures for Unit VI: 7
	2	Design of grid slab by I.S. code method.		1	
	3	Design of grid slab by I.S. code method.		1	
	4	Detailing for earthquake resistant construction. Introduction, Cyclic behavior of concrete and reinforcement		1	
	5	Detailing for earthquake resistant construction. Introduction, Cyclic behavior of concrete and reinforcement		2	
	6	Significance of Ductility, Ductile detailing for beams, Columns, joints & shear walls.		1	
	7	Significance of Ductility, Ductile detailing for beams, Columns, joints & shear walls.		1	

			Total Lectures Required	**42**

Department of Management Studies					
Semester – VIII (Session 2019-2020)					
Subject: Water Resources Engineering-II					
SUBJECT TEACHER: Prof. R.V. Langote					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Reservoir Planning	Dr. Modi P.N. : Irrigation, Water Resources & Water Power Engg.	1	Total Lectures for Unit I: 6
	2	Reservoir Planning		1	
	3	Dams		1	
	4	Dams		1	
	5	Earth Dams		2	
II	1	Gravity Dams	Punmia : Irrigation & Water Power Engg.	1	Total Lectures for Unit II: 6
	2	Types of dams forces acting,		1	
	3	modes of failure;		1	
	4	principles of design of straight gravity dams,		1	
	5	Elementary and practical profile,		1	
	6	Earthquake and its effect on dams.		1	
III	1	Diversion Head Works: Selection of site and layout, components of diversion head works	Garg S.K. : Irrigation & Water Power Engg.	1	Total Lectures for Unit III: 6
	2	design of weirs on permeable foundation, construction details of Kolhapur type weirs.		1	
	3	Spillways: Types of spillway, spillway capacity, Flood routing through spillways,		1	
	4	Types of crest gates. Energy dissipaters: meaning,		2	
	5	Objectives, location. Types hydraulic jump, jet diffusion and Bucket type		1	
	1	Canal Irrigation: Types of canals, Parts of Canal irrigation system, Canal alignment	Dahigaonkar J.G. : T.B. of Irrigation Engg., Wheeler & Co.	1	
	2	Design of unlined and lined Canals,		2	

IV	3	Balancing depth		2	Total Lectures for Unit IV: 6
	4	cross section of canal, propose and types of canal lining		1	
V	1	Canal Masonry Works: Types and only design principles and description	Garg S.K. : Irrigation & Water Power Engg.	1	Total Lectures for Unit V: 5
	2	Regulation works: Canal fall's, Head Regulator, Cross regulator, Canal escapes and canal outlets.		2	
	3	Cross drainage works: Aqueduct, Syphon aqueducts, super passage, canal siphon, level crossing		2	
VI	1	Well Irrigation : open wells and tube wells, types of tube walls, duty of tube well water.	Garg S.K. : Irrigation & Water Power Engg.	1	Total Lectures for Unit V: 6
	2	Water Management : Water management and distribution, cooperative water user's organization, warabandi, conjunctive use of water.		1	
	3	Water shed Management : Need of watershed management, importance of soil conservation measures, techniques ground water harvesting.		3	
	4	River Training Works : Need and types of river training works.		1	
			Total Lectures Required	**35**	

Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Lesson Plan (Session 2019-20)

Course Number and Title: - Real Time Embedded System (7IT04)
Name of Faculty: - Prof. A. A. Gulhane
Semester: -VII **Section**: - A

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-1	
1	24-06-2019	Discussion on Vision, Mission. CLO, PEO, Syllabus, Graduate Attributes, Objective of Subject	
2	25-06-2019	Introduction to embedded systems	
3	27-06-2019	Processor in the system, types of processor	
4	28-06-2019	Hardware units required in the exemplary cases	
5	01-07-2019	Software embedded into a system. Final Machine implement able software for a product	
6	02-07-2019	Software in Processor specific assembly language and high level language	9
7	04-07-2019	Device drivers device management using an operating systems	
8	05-07-2019	Software design for scheduling multiple tasks and devices using RTOS	
9	08-07-2019	Embedded SoC and in VLSI circuits.	
		Unit-2	
10	09-07-2019	Structural units of the processor	
11	11-07-2019	Allocation of memory to program segment and blocks	
12	12-07-2019	Memory map of the system	
13	15-07-2019	Memory blocks for different data sets and structures	
14	16-07-2019	Serial communication using I2C, CAN and advanced I/O buses between the networked multiple devices	8
15	18-07-2019	Device drivers, Virtual Devices,	
16	19-07-2019	Device drivers for parallel port, serial and timing devices	
17	22-07-2019	Context and periods for context switching. deadline and interrupt latency	

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-3	
18	23-07-2019	Software programming in assembly language and C	8
19	25-07-2019	Program Elements: Use of data structures Queues, Stacks, Lists and Trees	
20	26-07-2019	Use of data structures Function pointers, Function queues and ISR queues	
21	29-07-2019	Queues for implementing protocol for a network, Queuing of functions on interrupts	
22	30-07-2019	Use of FIPO queues, Stacks,	
23	01-08-2019	Lists and Ordered Lists	
24	02-08-2019	Embedded Programming in C++	
25	05-08-2019	Embedded Programming in Java	
		Unit-4	
26	06-08-2019	Modeling process, Use of dataflow & control data flow graphs.	7
27	13-08-2019	Programming model for event controlled or response time constraint, Real time programs.	
28	16-08-2019	use of finite states machine model	
29	19-08-2019	finite states machine model-timer. c function	
30	20-08-2019	Petri net Model	
31	22-08-2019	Modeling of Multiprocessor systems	
32	23-08-2019	IPC and Synchronization: Multiple processes in an application: Process, Tasks, Threads, Sharing data by multiple tasks	
		Unit-5	
33	26-08-2019	Use of Semaphores for a task or for Critical section of code.	8
34	27-08-2019	Mutex & P & V semaphores	
35	29-08-2019	Priority inversion problems & Deadlock situations	
36	30-08-2019	IPC issues: Use of signals, Use of Semaphore flags	
37	03-09-2019	Use of Mutex as resource key.	
38	05-09-2019	Use of message queues,	
39	09-09-2019	Mailboxes, pipes.	
40	12-09-2019	Virtual sockets, RPCs	

41	13-09-2019	**Unit-6**	
42	16-09-2019	Introduction to RTOS, OS Services, RTOS Services, Schedule management for multiple tasks in Real Time, Handling of interrupt source call	9
43	17-09-2019	RTOS task scheduling models, Cooperative Round Robin Scheduling using a Circular Queue of ready tasks	
44	19-09-2019	Using an Ordered list as per precedence constraints, Cycling scheduling in Time Slicing	
45	20-09-2019	Preemptive scheduling, Critical section service by preemptive scheduler,	
46	23-09-2019	Fixed Real Time scheduling, Precedence assignment in Scheduling algorithms.	
47	24-09-2019	Performance metrics, IEEE Standard POSIX 1003.1B,	
48	26-09-2019	Fifteen-point' strategy for Synchronization,	
49	27-09-2019	Embedded Linux Kernel	
50	30-09-2019	IC Technology	**Content beyond Syllabus**
51	01-10-2019	Issues in Design Technology	

Faculty: - Prof. A. A. Gulhane

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Lesson Plan: Session 2019-20

Course Name & Code: Electronics Devices & Circuits [3IT04]
Name of Faculty: Prof. Avinash G. Mahalle
Year & Semester: Second Year III [B]

Lecture No.	Planned Dates	Topics to be covered	Total Hours
1	24-06-2019	Vision & Mission of Institute, Vision & Mission of Dept. Graduate Attributes, COs & CLOs, Grading Scheme, Text books & reference books, Syllabus	01
		UNIT-1	
2	25-06-2019	Basics Required [Semiconductor Physics]	08
3	26-06-2019	Semiconductor Diode: Forward & Reverse Resistance	
4	29-06-2019	Rectifying Circuits [HWR, FWR, BR]	
5	01-07-2019	Performance comparison & Numericals	
6	02-07-2019	Filter Circuits, Capacitive, Inductive, & π Filter	
7	03-07-2019	Zener Diode as Voltage Regulator	
8	06-07-2019	LED and Seven Segment Display	
9	08-07-2019	Photodiodes: Principal of operation & application	
		UNIT-2	
10	09-07-2019	BJT basic Principal, BJT Connection	08
11	10-07-2019	CB, CE & CC. Input-Outputs Characteristics	
12	13-07-2019	Amplification factor The CE amplifier (Simple analysis)	
13	15-07-2019	DC load line and Operating point	
14	16-07-2019	Stability factor, Transistor Biasing circuits	
15	17-07-2019	Base resistor method, biasing with feedback resistor	
16	20-07-2019	Voltage divider method	
17	22-07-2019	FET basic principle	
		UNIT-3	
18	23-07-2019	RC Oscillator: Basic Principle, Barkhausen criterion	07
19	24-07-2019	Phase shift oscillator, Wien Bridge oscillator	
20	27-07-2019	Crystal oscillator, Transistor as a switch	
21	29-07-2019	Opto–couplers, Introduction to PSPICE, Input Files	
22	30-07-2019	Element values, nodes sources, output command	
23	31-07-2019	Type of analysis, output variables, output files	
24	03-08-2019	Finding Node voltage and current.	

Lecture No.	Planned Dates	Topic to be covered	Total Hours
		UNIT-4	
25	05-08-2019	Introduction to Operational Amplifier	08
26	06-08-2019	Block diagram of op-amp,	
27	07-08-2019	Differential amplifier, DC Analysis	
28	19-08-2019	Constant current source,	
29	20-08-2019	DC level Shifting, Op-Amp Parameters	
30	21-08-2019	Transfer Characteristics	
31	26-08-2019	Study of IC uA741	
32	27-08-2019	Inverting & non-inverting amplifier	
		UNIT-5	
33	28-08-2019	Linear & nonlinear application of Op-Amp	07
34	31-08-2019	Voltage follower	
35	03-09-2019	Summing Amplifier, Subtractor	
36	04-09-2019	Op-Amp as Integrator,	
37	11-09-2019	Op-Amp as Differentiator	
38	14-09-2019	Comparator, Zero crossing detector	
39	16-09-2019	3 pin IC Voltage regulator 78XX, 79XX series	
		UNIT-6	
40	17-09-2019	Timer: block diagram of IC555,	08
41	18-09-2019	Application of Timer IC555 as Astable	
42	21-09-2019	Application of Timer IC 555 as Monostable multivibrator	
43	23-09-2019	Numericals based on IC 555	
44	24-09-2019	Phase locked loops (PLL)	
45	25-09-2019	operations of phase locked loop system	
46	30-09-2019	Transfer characteristics, lock range capture range.	
47	01-10-2019	Lock range capture range.	
48	09-10-2019	Difficulty Session-I	02
49	12-10-2019	Difficulty Session-II	
		Total Lectures Planned	49

Prof. A. G. Mahalle

Dr. P. V. Ingole
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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Session:2019-20

Course Number and Title: - Professional Elective- I
Modeling & Simulation (7IT05 (2))

Name of Faculty: - Dr.A.S.Alvi

Semester:-VII[th]

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-I	
1	24-6-2019	Objectives of the Subject, Course Learning Outcomes , Basic concepts of systems	8
2	25-6-2019	System Models and System Studies , System Environment	
3	26-6-2019	System modeling ,Types of Models	
4	28-6-2019	Principles used in modeling.	
5	01-7-2019	Corporate models	
6	02-7-2019	Types of System Study-analysis, System design	
7	03-7-2019	Types of System Study- System postulation	
8	05-7-2019	Exercise Problems	
		Unit-II	
9	08-7-2019	Basic Concepts and continuous systems	8
10	09-7-2019	Monte Carlo Method	
11	10-7-2019	Numerical Computation Technique for Continuous Models	
12	12-7-2019	Numerical Computation Technique for Discrete Models	
13	15-7-2019	Distributed log models	
14	16-7-2019	Cobweb Models	
15	17-7-2019	Cobweb Models Examples	
16	19-7-2019	Analog and hybrid computers , CSMP III.	
		Unit-III	
17	22-7-2019	System dynamics, probability concepts and basic principles of discrete simulation,	8
18	23-7-2019	Growth and decay models	
19	24-7-2019	System dynamics diagrams examples.	
20	26-7-2019	Discrete Probability functions	
21	29-7-2019	Continuous Probability functions	
22	30-7-2019	Measures of Probability functions , Numerical on evaluation of Continuous Probability functions,	
23	31-7-2019	Continuous Uniformly Distributed Random Numbers, Computer Generation of Random number	
		Unit-IV	
24	02-8-2019	Simulation of Queueing System and PERT Network Simulation of Queueing systems: Basic Concepts.	8
25	05-8-2019	Rudiments of queueing theory, simulation of a single server queue	
26	06-8-2019	Simulation of a two-server queue	
27	07-8-2019	Simulation of more general queues.	
28	09-8-2019	Simulation of a PERT Network: Network model of a project.	
29	13-8-2019	Analysis of an activity network, Examples	

30	14-8-2019	Critical path computation, and uncertainties in activity durations.	
31	19-8-2019	Simulation of an activity network.	
Unit -V			
32	20-8-2019	Simulation of Inventory Control & Forecasting Design and Evaluation of Simulation Experiments	8
33	21-8-2019	Inventory Control and Forecasting: Elements of inventory theory	
34	23-8-2019	More complex inventory models, Simulation example-1	
35	26-8-2019	Generation of Poisson and Erlang variates, Simulation example2	
36	27-8-2019	Forecasting and regression analysis	
37	28-8-2019	Design and Evaluation of Simulation Experiments: Length of simulation runs	
38	30-8-2019	variance reduction techniques	
39	03-9-2019	Experimental layout, validation	
Unit-VI			
40	04-9-2019	Simulation Languages and Introduction to GPSS	8
41	09-9-2019	Different special purpose languages used for continuous and discrete systems	
42	11-9-2019	Comparison-factors affecting the selection of discrete system simulation language	
43	13-9-2019	Comparison of GPSS and SIMSCRIPT	
44	16-9-2019	A detailed study of GPSS with examples	
45	17-9-2019	Exercise Examples	
46	18-9-2019	Exercise Examples	
47	20-9-2019	Exercise Examples	
48	23-9-2019	Algorithms : Basic Concepts	Content beyond Syllabus
49	24-9-2019	Use of Loops, Efficiency of Algorithms	
50	25-9-2019	Algorithm Strategies	
51	27-9-2019	Divide And Conquer	
52	30-9-2019	Greedy Methods	
53	01-10-2019	Dynamic Programming	

25.6.2019

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
(Session 2019 - 20)

Course Number and Title: - Assembly Language Programming(3IT05)
Name of Faculty: - Prof. A. S. Mahalle
Semester :- III **Section :-** A

Lecture No.	Planned Date	Topic Name	Total hours
		Unit-1	
1	25/06/19	Introduction to Number system(Decimal, Binary, Hexadecimal)	9
2	26/06/19	Microprocessor 8086 architecture-BIU and EU	
3	28/06/19	pin configuration of 8086	
4	29/06/19	pin configuration of 8086	
5	02/07/19	Software model of 8086,	
6	03/07/19	Memory addresses space and data organization,	
7	05/07/19	Data types, Segment registers, memory segmentation	
8	06/07/19	IP & Data registers, Pointer, Index registers	
9	09/07/19	Memory addresses generation, Maximum and Minimum Modes.	
		Unit-2	
10	10/07/19	8086 Instruction set overview	8
11	12/07/19	Addressing modes	
12	13/07/19	8086 instruction formats	
12	16/07/19	8086 programming: Integer instructions and computations	
14	17/07/19	Data transfer instructions	
15	19/07/19	Arithmetic instructions and their use in 8086 programming	
16	20/07/19	Arithmetic instructions and their use in 8086 programming	
17	23/07/19	**Revision Unit 2**	
		Unit-3	
18	24/07/19	8086 instructions: logical instructions	8
19	26/07/19	Shift and rotate instructions and their use in 8086 programming.	
20	27/07/19	8086 flag register and Flag control instructions	
21	30/07/19	Compare instructions, control flow and jump instructions	
22	31/07/19	Loops & loop handling instructions	
23	02/08/19	8086 programming using these instructions	
24	03/08/19	8086 programming using these instructions	

25	06/08/19	**Revision Unit 3**	
		Unit-4	
26	07/08/19	Stack and Subroutines	**9**
27	20/08/19	8086 stack segment and stack related instructions	
28	21/08/19	8086 I/O Address space	
29	23/08/19	Subroutines and related instructions	
31	27/08/19	Parameter passing. Concept of Macros	
32	28/08/19	Concept of recursion at assembly Program level	
33	30/08/19	8086 programming using subroutines	
34	31/08/19	Recursion and macros.	
35	03/09/19	**Revision Unit 4**	
		Unit-5	
36	03/09/19	8086 I/O Types of input output	**8**
37	04/09/19	Isolated I/O interface	
38	07/09/19	Input output data transfers	
39	11/09/19	I/O instructions and bus cycles	
40	13/09/19	Programmable Peripheral Interface 8255 PPI	
41	14/09/19	pin diagram	
42	17/09/19	Internal organization	
43	18/09/19	modes of operation. **Revision Unit V**	
		Unit-6	
44	20/09/19	8086 Interrupts Interrupts types	**6**
45	21/09/19	Priority and instructions. Interrupt vector table	
46	24/09/19	External hardware-interrupt interface signals & interrupts sequence	
47	25/09/19	Programmable Interrupt Controller 8259: pin diagram	
48	27/09/19	Internal organization, modes of operations	
49	01/10/19	Introduction to Intel's 32-bit processors.	
50	02/10/19	8288 Bus Controller	Content Beyond Syllabus
51	08/10/19	Programmable Timer 8253	
52	09/10/19	Gate Questionnaire	

Faculty: - A. S. Mahalle

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Teaching Plan (Session 2019-20)

Course Number and Title: - COMPUTER ARCHITECTURE AND ORGANIZATION (5IT03)

Name of Faculty: - Prof. A. W. Burange

Semester: - V

Section :- B

Sr No.	Planned Date	Topic Name	Total hours
		UNIT-I	
1	24-06-19	Vision Mission Discussion, objective of subject, grading scheme, Text books & reference books, syallabus & CLO, Application & importance of subject, Graduate Attributes Introduction to basic structure of computer	10
2	25-06-19	Basic strucutre of computer: Hardware & software	
3	26-06-19	Addressing methods	
4	27-06-19	Program sequencing	
5	29-06-19	concept of memory locations & address	
6	01-07-19	Main memory operation	
7	02-07-19	Instructions & instruction sequencing	
8	03-07-19	Addressing modes	
9	04-07-19	Basic I/O operations, Queues & subroutines	
10	06-07-19	Revision UNIT-I	
		UNIT-II	
11	8-07-19	Introduction to Processing Unit: Fundamental concepts	9
12	9-07-19	Execution of a complete instruction	
13	10-07-19	Hardwired control	
14	11-07-19	Performance consideration	
15	13-07-19	Microprogrammed control	
16	15-07-19	Microinstructions, microprogram sequencing	
17	16-07-19	Microinstruction prefetching	
19	17-07-19	Emulation	
19	18-07-19	Revision UNIT-II	
		UNIT III	
20	20-07-19	Introduction to I/O organization	10
21	22-07-19	accessing I/O devices	
22	23-07-19	Introduction and study of interrupts	
23	24-07-19	direct memory access : bus arbitration	
24	25-07-19	I/O hardware introduction	
25	27-07-19	processor bus and interfacing circuits	
26	29-07-19	standard I/O interfaces fundamentals	
27	30-07-19	SCSI bus	
28	31-07-19	backplane bus standard	
29	01-08-19	Revision UNIT-III	
		UNIT IV	
30	03-08-19	Memory Unit: basic concepts	11
31	05-08-19	semiconductor RAM memories	

32	06-08-19	IP security architecture	
33	07-08-19	Web Security: Web security requirements	
34	19-08-19	internal organization of memory	
35	20-08-19	Static & dynamic RAMs,ROMs	
36	21-08-19	speed, size & cost considerations	
37	22-08-19	Cache memories: performance considerations	
38	26-08-19	Virtual memories, address translation	
39	27-08-19	Memory management requirements	
40	28-08-19	Revision UNIT-lV	
		UNIT-V	
41	29-08-19	Arithmetic number representation	9
42	31-08-19	Arithmetic number representation	
43	03-09-19	design of fast adders	
44	04-09-19	signed addition and subtraction	
45	05-09-19	Multiplication of positive numbers	
46	16-09-19	Booths' algorithm	
47	11-09-19	Integer division.	
48	12-09-19	Floating-point numbers and related operations.	
49	14-09-19	Revision UNIT-V	
		UNIT-VI	
50	16-09-19	Introduction to Computer Peripherals	9
51	17-09-19	Computer Peripherals: Input-output devices like video displays, video terminals	
52	18-09-19	graphics input devices and printers	
53	19-09-19	Introduction to Online storage devices	
54	21-09-19	Online storage devices: magnetic disks	
55	23-09-19	magnetic tape systems	
56	24-09-19	CD-ROM systems	
57	25-09-19	Communication devices : Modems	
58	26-09-19	Revision UNIT-VI	
59	30-09-19	GATE Questionnaire	Content beyond syllabus
60	01-10-19		

25/06/19

Faculty: - Prof. A.W. Burange

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
(Session 2019-20)

Course Number and Title: - Digital Integrated Circuits(5IT02)
Name of Faculty: - Prof. G. K. Wadnere
Semester :- V
Section :- B

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-1	
1	24/6/18	Review of Boolean Algebra	9
2	25/6/18	Boolean Functions & Logic Families: Canonical & Standard Forms	
3	26/6/18	Digital Logic Gates	
4	27/6/18	Digital Integrated Circuits: Special Characteristics like fan-out , Power dissipation, propagation delay & noise margin	
5	28/6/18	Bipolar Transistor Characteristics	
6	1/7/18	TTL, ECL	
8	2/7/18	TTL,ECL	
9	3/7/18	MOS & CMOS families: Basic characteristics	
10	4/7/18	Operation and typical characteristics	
		Unit-2	
11	5/7/18	Simplification of Boolean functions: The K-Map method, Two Variable, Three Variable	11
12	8/7/18	Four Variable K-Map	
13	9/7/18	Four Variable K-Map	
14	10/7/18	Five Variable K-Map	
15	11/7/18	Five Variable K-Map	
16	12/7/18	Implementation using logic gates	
17	15/7/18	Implementation using logic gates	
18	16/7/18	Tabulation Method	
19	17/7/18	Tabulation Method	
20	18/7/18	Determination of Prime Implicants.	
21	19/7/18	Selection of Prime Implicants	
		Unit-3	
22	22/7/18	Combinational Logic: Introduction	13
23	23/7/18	Design Procedure	
24	24/7/18	Adders	
25	25/7/18	Subtractors	
26	26/7/18	Code Converters	
27	29/7/18	Code Converters	
28	30/7/18	Analysis Procedure for Combinational Circuits	
29	31/7/18	Multilevel NAND Circuits	
30	1/8/18	Multilevel NAND Circuits	
31	2/8/18	Multilevel NOR Circuits	

32	5/8/18	Multilevel NOR Circuits	
33	6/8/18	Exclusive-OR function: Odd function	
34	7/8/18	Parity generation & Checking.	
		Unit-4	
35	13/8/18	MSI & PLD Components: Introduction	11
36	14/8/18	Binary Parallel Adder	
37	16/8/18	Binary Adder-Subtractor	
38	19/8/18	Decimal adder	
39	20/8/18	BCD Adder	
40	21/8/18	Magnitude Comparator	
41	22/8/18	Decoders, Encoders	
42	27/8/18	Multiplexers	
43	28/8/18	Multiplexers	
44	28/8/18	ROM, Various types of ROMs	
45	29/8/18	Programmable Logic Arrays, Programmable Array Logic	
		Unit-5	
46	30/8/18	Synchronous Sequential Circuits: Introduction	12
47	31/8/18	Flip Flops: Basic Circuits	
48	3/9/18	SR, JK Master – Slave	
49	4/9/18	D & T Flip Flop,	
50	5/9/18	Triggering of Flip Flops	
51	6/9/18	Analysis of Clocked sequential circuits	
52	7/9/18	State Reduction & assignment	
53	10/9/18	Flip Flop excitation table	
54	11/9/18	Design procedure for sequential circuit	
55	12/9/18	Design of counters: Ripple Counters	
56	14/9/18	Synchronous Counters	
57	17/9/18	Asynchronous Counters	
		Unit-6	
58	18/9/18	Types of Shift Registers	4
59	19/9/18	RAM: Static & Dynamic RAM	
60	21/9/17	Algorithmic State Machines: Introduction	
61	24/9/18	ASM Charts	
62	25/9/18	Improvement Classes + Remdial Classes	
63	26/9/18	Improvement Classes + Remdial Classes	
64	27/9/18	Problems on ASM Charts and Flow diagrams	Content beyond Syllabus
65	28/9/18	Designing a complex Sequential Cicuits.	

Faculty: - Prof. G. K. Wadnere

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Teaching Plan (Session 2019-20)

Course Number and Title: - COMPUTER ARCHITECTURE AND ORGANIZATION (5IT03)
Name of Faculty: - Prof. H.D.Kale
Semester: - V
Section :- A

Sr No.	Planned Date	Topic Name	Total hours
1	24-06-19	Vision Mission Discussion,Objective of Subject,Grading Scheme,Text Books & Reference Books,Syllabus and CLO,Application and Importance of Subject,Graduate Attributes	01
		UNIT-I	
2	25-06-19	Introduction to Basic strucutre of computer	10
3	26-06-19	Basic strucutre of computer: Hardware & software	
4	27-06-19	Addressing methods	
5	28-06-19	Program sequencing	
6	01-07-19	concept of memory locations & address	
7	02-07-19	Main memory operation	
8	03-07-19	Instructions & instruction sequencing	
9	04-07-19	Addressing modes	
10	05-07-19	Basic I/O operations, Queues & subroutines	
11	8-07-19	Revision UNIT-I	
		UNIT-II	
12	9-07-19	Introduction to Processing Unit: Fundamental concepts	9
13	10-07-19	Execution of a complete instruction	
14	11-07-19	Hardwired control	
15	12-07-19	Performance consideration	
16	15-07-19	Microprogrammed control	
17	16-07-19	Microinstructions, microprogram sequencing	
19	17-07-19	Microinstruction prefetching	
19	18-07-19	Emulation	
20	19-07-19	Revision UNIT-II	
		UNIT III	
21	22-07-19	Introduction to I/O organization	10
22	23-07-19	accessing I/O devices	
23	24-07-19	Introduction and study of interrupts	
24	25-07-19	direct memory access : bus arbitration	
25	26-07-19	I/O hardware introduction	
26 .	29-07-19	processor bus and interfacing circuits	
27	30-07-19	standard I/O interfaces fundamentals	
28	31-07-19	SCSI bus	
29	01-08-19	backplane bus standard	
30	02-08-19	Revision UNIT-III	

		UNIT IV	
31	05-08-19	Memory Unit: basic concepts	11
32	06-08-19	semiconductor RAM memories	
33	07-08-19	IP security architecture	
34	19-08-19	Web Security: Web security requirements	
35	20-08-19	internal organization of memory	
36	21-08-19	Static & dynamic RAMs,ROMs	
37	22-08-19	speed, size & cost considerations	
38	26-08-19	Cache memories: performance considerations	
39	27-08-19	Virtual memories, address translation	
40	28-08-19	Memory management requirements	
41	29-08-19	Revision UNIT-IV	
		UNIT-V	
42	30-08-19	Arithmetic number representation	9
43	03-09-19	Arithmetic number representation	
44	04-09-19	design of fast adders	
45	05-09-19	signed addition and subtraction	
46	09-09-19	Multiplication of positive numbers	
47	11-09-19	Booths' algorithm	
48	12-09-19	Integer division.	
49	13-09-19	Floating-point numbers and related operations.	
50	16-09-19	Revision UNIT-V	
		UNIT-VI	
51	17-09-19	Introduction to Computer Peripherals	9
52	18-09-19	Computer Peripherals: Input-output devices like video displays, video terminals	
53	19-09-19	graphics input devices and printers	
54	20-09-19	Introduction to Online storage devices	
55	23-09-19	Online storage devices: magnetic disks	
56	24-09-19	magnetic tape systems	
57	25-09-19	CD-ROM systems	
58	26-09-19	Communication devices : Modems	
59	30-09-19	Revision UNIT-VI	
60	01-10-19	GATE Questionnaire	Content beyond syllabus
61	03-10-19		

Faculty: - Prof. H.D.Kale

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Teaching Plan (Session 2019-20)

Course Number and Title: - 3IT02 Programming Methodology

Name of Faculty: - Prof. Harshal D. Misalkar

Semester: - 3rd

Section: - B

Lecture No.	Planned Date	Topic to be Covered	Remark
		UNIT I	
1	24/06/19	Discussion about Vision and Mission of the Institute Discussion about Vision and Mission of the Department Objective of Subject Syllabus and course Learning Objectives Application and Importance of Subject Graduate Attributes	
2	25/06/19	Introduction to Computer and Languages	**11 Lectures**
3	26/06/19	OOPS and Software development	
4	27/06/19	Difference between POPL and OOPL	
5	28/06/19	Software Engineering and SDLC	
6	01/07/19	Java Basics	
7	02/07/19	Program Components	
8	03/07/19	Application Compilation Cycle	
9	04/07/19	Applet Compilation Cycle	
10	05/07/19	Introduction to Applet and Application	
11	08/07/19	Data types and Variables	
		UNIT II	
11	09/07/19	Operators: Arithmetic operators	**10 Lectures**
12	10/07/19	Relational operators, Assignment operators	
13	11/07/19	Control statement: Selection statement	
14	12/07/19	if statement, nested if statement	
15	15/07/19	Switch Case statement	
16	16/07/19	Repetition statements: while, do-while, for, nested loops	
17	17/07/19	Introduction to Math class	
18	18/07/19	Arrays: Basics, One dimensional	
19	19/07/19	Multidimensional Array	
20	22/07/19	Array of Objects, Passing array to method.	

		UNIT III	
21	23/07/19	Introducing classes	**9 Lectures**
22	24/07/19	class fundamentals	
23	25/07/19	Declaring objects	
24	26/07/19	methods, access control	
25	29/07/19	class data,& instance data	
26	30/07/19	constructor	
27	31/07/19	this keyword	
28	01/08/19	Introduction to String class	
29	02/08/19	Introduction to String Buffer class	
		UNIT IV	
30	05/08/19	Event handling: Event handling mechanism	**10 Lectures**
31	06/08/19	Delegation Event model	
32	07/08/19	Event, Event Listener	
33	13/08/19	Action Listener, mouse Listener	
34	14/08/19	mouse Motion Listener, window Listener	
35	16/08/19	Introduction to AWT class: Button, Text Field, Label	
36	19/08/19	Working with Graphics	
37	20/08/19	Working with Color, AWT controls	
38	21/08/19	Fundamentals: Adding & removing controls	
39	22/08/19	Handling mouse events	
		UNIT V	
40	23/08/19	Applet class and its methods	**8 Lectures**
41	26/08/19	Adapter classes	
42	27/08/19	Inheritance	
43	28/08/19	Polymorphism	
44	29/08/19	Abstract classes and Interface	
45	30/08/19	Packages	
46	03/09/19	Multithreaded Programming: The java thread mode	
47	04/09/19	Creating a thread, Creating multiple threads.	
		UNIT VI	
48	05/09/19	Java File I/O: File, File Dialog object	**8 Lectures**

49	09/09/19	Low and High level File I/O	
50	11/09/19	Stream classes, Byte Stream: Input/Output stream	
51	12/09/19	File Input stream, File Output stream	
52	13/09/19	Data Input stream, Data Output stream, Print Writer	
53	16/09/19	Exception handling: Exception types, uncaught Exceptions using try and catch	
54	17/09/19	GUI objects programming: Frame class	
55	18/09/19	Menus and other GUI objects	
Content Beyond Syllabus			
56	19/09/19	Network Protocols	**5 Lectures**
57	20/09/19	Introduction to Servlet	
58	23/09/19	Servlet life cycle	
59	24/09/19	Database Programming using JDBC	
60	25/09/19	JDBC Drivers & Architecture	

Faculty: - Prof. Harshal D. Misalkar

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Prof. Ram Meghe Institute of Technology & Research, Badnera
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(Session 2019-20)

Course Number and Title: - Real Time Embedded Systems (7IT04)
Name of Faculty: - Prof. M. S. Deshmukh
Semester:- VII **Section :-** B

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-1	
1	24-06-19	Discussion on Vision, Mission, CLO, PEO, Syllabus, Graduate Attributes, Objective of Subject	9
2	26-06-19	Introduction to embedded systems	
3	27-06-19	Processor in the system, types of processor	
4	28-06-19	Hardware units required in the exemplary cases	
5	01-07-19	Software embedded into a system Final Machine implement able software for a product	
6	03-07-19	Software in Processor specific assembly language and high level language	
7	04-07-19	Device drivers device management using an operating systems	
8	05-07-19	Software design for scheduling multiple tasks and devices using RTOS	
9	08-07-19	Embedded SoC and in VLSI circuits.	
		Unit-2	
10	10-07-19	Structural units of the processor	8
11	11-07-19	Allocation of memory to program segment and blocks	
12	12-07-19	Memory map of the system	
13	15-07-19	Memory blocks for different data sets and structures	
14	17-07-19	Serial communication using I2C, CAN and advanced I/O buses between the networked multiple devices	
15	18-07-19	Device drivers, Virtual Devices,	
16	19-07-19	Device drivers for parallel port, serial and timing devices	
17	22-07-19	Context and periods for context switching, deadline and interrupt latency	
		Unit-3	
18	24-07-19	Software programming in assembly language and C	8
19	25-07-19	Program Elements: Use of data structures Queues, Stacks, Lists and Trees	
20	26-07-19	Use of data structures Function pointers, Function queues and ISR queues	
21	29-07-19	Queues for implementing protocol for a network, Queuing of functions on interrupts	
22	31-07-19	Use of FIPO queues, Stacks.	
23	01-08-19	Lists and Ordered Lists	
24	02-08-19	Embedded Programming in C++	
25	05-08-19	Embedded Programming in Java	

		Unit-4	
26	07-08-19	Modeling process, Use of dataflow & control data flow graphs,	7
27	14-08-19	Programming model for event controlled or response time constraint, Real time programs,	
28	16-08-19	use of finite states machine model	
29	19-08-19	finite states machine model-timer, c function	
30	21-08-19	Petri net Model	
31	22-08-19	Modeling of Multiprocessor systems	
32	23-08-19	Inter process Communication and Synchronization: Multiple processes in an application: Process, Tasks, Threads, Sharing data by multiple tasks	
		Unit-5	
33	26-08-19	Use of Semaphores for a task or for Critical section of code,	8
34	28-08-19	Mutex & P & V semaphores	
35	29-08-19	Priority inversion problems & Deadlock situations	
36	30-08-19	IPC issues: Use of signals, Use of Semaphore flags	
37	04-09-19	Use of Mutex as resource key,	
38	05-09-19	Use of message queues,	
39	09-09-19	Mailboxes, pipes,	
40	11-09-19	Virtual sockets, RPCs	
		Unit-6	
41	12-09-19	Introduction to RTOS, OS Services, RTOS Services,	8
42	13-09-19	Schedule management for multiple tasks in Real Time, Handling of interrupt source call	
43	16-09-19	RTOS task scheduling models, Cooperative Round Robin Scheduling using a Circular Queue of ready tasks	
44	18-09-19	Using an Ordered list as per precedence constraints, Cycling scheduling in Time Slicing	
45	19-09-19	Preemptive scheduling, Critical section service by preemptive scheduler,	
46	20-09-19	Fixed Real Time scheduling, Precedence assignment in Scheduling algorithms.	
47	23-09-19	Performance metrics, IEEE Standard POSIX 1003.1B,	
48	25-09-19	Fifteen-point' strategy for Synchronization,	
49	26-09-19	Embedded Linux Kernel	**Content beyond Syllabus**
50	27-09-19	IC Technology	
51	30-09-19	Issues in Design Technology	

Faculty: - Prof. M. S. Deshmukh

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(Session 2019-20)

Course Number and Title: - Artificial Intelligence and Expert System (7IT05)
Name of Faculty: - Prof. N. S. Band
Semester :- VII **Section :-** A&B

Lecture No.	Planned Dates	Topic Name	Total hours
		Introduction to Course	
1	24/06/2018	Vision Mission of Institution, Vision Mission of our Department ,Objective of subject, Grading scheme, Text Books and Ref Books, Syllabus and Course Learning Outcomes (CLO),Application and importance of the Subject, Graduate Attributes	01
		Unit-1	
2	25/06/2018	Introduction to Artificial Intelligence, The AI Problems.	06
3	26/06/2018	The Underlying Assumption.	
4	28/06/2018	What is an AI Technique,	
5	01/07/2018	Problems, Problem Spaces and Search.	
6	02/07/2018	Problem Characteristics, Production Systems	
7	03/07/2018	Production System Characteristics, Issues in the Design of Search Programs	
		Unit-2	
8	05/07/2018	Heuristic Search Techniques:	08
9	08/07/2018	Generate-and-Test.	
10	09/07/2018	Hill Climbing.	
11	10/07/2018	Best-first Search, A* Algorithm	
12	12/07/2018	Problem Reduction, AND-OR Graphs.	
13	15/07/2018	The AO* Algorithm,	
14	16/07/2018	Constraint Satisfaction.	
15	17/07/2018	Means ends Analysis	
		Unit-3	

Prof. Ram Meghe Institute of Technology & Research, Badnera
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Lesson Plan (Session 2019-20)

Course Number and Title: - Numerical Methods & Operational Research Technique (**4IT05**)

Name of Faculty: - Prof. A. A. Gulhane

Semester: -IV **Section**: - B

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-1	
1.	06-01-2020	Error Analysis, Absolute, relative and percentage errors.	6
2.	07-01-2020	Solution of Nonlinear and polynomial equations.	
3.	08-01-2020	Bisection Method	
4.	11-01-2020	False Position method	
5.	13-01-2020	Secant method	
6.	14-01-2020	Newton Raphson methods.	
		Unit-2	
7.	15-01-2020	Solution of Linear Systems of Equation: Gauss elimination method	6
8.	18-01-2020	Gaussian elimination method	
9.	20-01-2020	Gauss Seidel Iterative Method	
10.	21-01-2020	Gauss Jorden Method , Regression	
11.	22-01-2020	Curve fitting: Least Square Method	
12.	25-01-2020	Correlations	
		Unit-3	
13.	27-01-2020	Integration and Differential equations	9
14.	28-01-2020	Numerical Integration-Trapezoidal	
15.	29-01-2020	Simpsons one third and three eight rules	
16.	01-02-2020	Romberse Method	
17.	03-02-2020	Newtons forward and backword interpolation formula	
18.	04-02-2020	Numerical differentiation: Maximum and minimum values,	
19.	05-02-2020	Lagrange's Interpolation Method	
20.	08-02-2020	Euler's method, Runge Kutta methods	
21.	10-02-2020	Predictor Corrector method, Taylor Series	

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-4	
22.	11-02-2020	Operations Research Models and Dynamic Programming	8
23.	12-02-2020	classification of problems	
24.	15-02-2020	phases of operation research, scope and limitation operations research	
25.	22-02-2020	Dynamic programming	
26.	24-02-2020	Investment problem	
27.	25-02-2020	Stagecoach Problem, Equipment Replacement problem	
28.	26-02-2020	Conversion of final value problem into an initial value problem	
29.	29-02-2020	Equipment Replacement problem	
		Unit-5	
30.	02-03-2020	Linear Programming and Sequencing	8
31.	03-03-2020	Concept of Linear Programming	
32.	04-03-2020	Simplex method, Two Phase Simplex Method	
33.	07-03-2020	Big-M Method, Concept of duality	
34.	09-03-2020	Transportation problems, Assignment Problem	
35.	11-03-2020	Hungarian Method	
36.	14-03-2020	Sequencing Problem: Two-Machine	
37.	16-03-2020	N-Jobs, and Three Machine Problem.	
		Unit-6	
38.	17-03-2020	PERT and CPM	7
39.	18-03-2020	Pert Networks, ET, TE, TL, SE	
40.	21-03-2020	Critical path, Probability of completion	
41.	23-03-2020	Decision theory: Introduction	
42.	24-03-2020	Minimax decision procedure	
43.	28-03-2020	Bayes decision procedure with and without data	
44.	30-03-2020	Regret function Vs. Loss function	
45.	31-03-2020	Floating-point representation	Content beyond Syllabus
46.	01-04-2020	Chopping	
47.	04-04-2020	Condition and instability	

Faculty: - Prof. A. A. Gulhane

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Department of Information Technology

Lesson Plan: Session 2019-20

Course Name & Code: Communication Engineering [4IT02]
Name of Faculty: Prof. Avinash G. Mahalle
Year/Semester: Second Year [B]/ Fourth

Lecture No.	Planned Dates	Topics to be covered	Total Hrs
1	06-01-2020	Vision & Mission of Institute, Vision & Mission of Dept. Graduate Attributes, COs & CLOs, Grading Scheme, Text books & reference books, Syllabus	01
		UNIT-1	08
2	09-01-2020	Modulation, need of modulation, types of modulation	
3	10-01-2020	AM Modulation, Frequency spectrum,	
4	11-01-2020	Principles of DSB-FC, DSB-SC,	
5	13-01-2020	Principles of SSB-SC modulation and Comparison of DSB-FC, DSB-SC & SSB-SC	
6	16-01-2020	Details of DSB-FC Transmitter,	
7	17-01-2020	Generation of DSB-SC by using balanced modulators,	
8	18-01-2020	DSB-SC Transmitter	
9	20-01-2020	Generation of SSB-SC by phase-shift method	
		UNIT-2	07
10	27-01-2020	TRF receiver, Superhetrodyne receiver,	
11	30-01-2020	Details of each block such as RF amplifier, mixer oscillator, IF amplifier, Diode detector, Audio Amplifier	
12	31-01-2020	Need and type of AGC,	
13	01-02-2020	Communication Receiver, Selectivity filter method	
14	03-02-2020	Phase shift method , sensitivity	
15	06-02-2020	Image rejection ration of communication receiver	
16	07-02-2020	Noise calculation in DSB-FC,DSB-SC & SSB-SC	
		UNIT-3	07
17	08-02-2020	FM Modulation, Frequency Spectrum,	
18	10-02-2020	Circuits & Analysis for direct FM generation using FET	
19	17-02-2020	Circuits & Analysis for direct FM generation using varactor diode	
20	20-02-2020	Circuit & analysis of Indirect FM generation	
21	22-02-2020	Narrow Band and Wide Band FM	
22	24-02-2020	Comparison of NBFM and WBFM	
23	27-02-2020	Pre-emphasis and De-emphasis	

Lecture No.		Topic to be covered	Total Hrs
		UNIT-4	**07**
24	28-02-2020	Details of FM receiver	
25	02-03-2020	blocks such as R.F. amplifier, local oscillator,	
26	05-03-2020	IF amplifier, Mixer, Audio Amp!., AGC, Limiter	
27	06-03-2020	FM Discriminator,	
28	07-03-2020	Single Slope and Balanced Slope Detector	
29	09-03-2020	Analysis of Foster Seeley and ratio detectors,	
30	12-03-2020	Stereo FM receiver, Noise in FM Reception, FM threshold effect	
		UNIT-5	**07**
31	13-03-2020	The sampling theorem, Sampling of Band-Pass Signal	
32	14-03-2020	Linear and Non-linear quantization,	
33	16-03-2020	Aliasing effect, Aperture effect	
34	19-03-2020	Reconstruction of filter	
35	20-03-2020	Time Division Multiplexing	
36	21-03-2020	Pulse Amplitude Modulation, Pulse Time Modulation	
37	23-03-2020	PCM, DM, ADM	
		UNIT-6	**06**
38	26-03-2020	Fourier Series	
39	27-03-2020	Exponential Fourier Series	
40	28-03-2020	Properties of Fourier Transform, Delta Function	
41	30-03-2020	Fourier Transform of Periodic functions	
42	03-04-2020	Fundamental of Power Spectral Density & Energy Spectral Density	
43	04-04-2020	Correlation, Auto-correlation, Cross-correlation	
	Total Lectures Planned		**43**

Prof. A. G. Mahalle

Dr. P. V. Ingole
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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Lesson Plan (Session 2019-20)

Course Number and Title: - Web Commerce (8IT04)
Name of Faculty: - Dr.A.S.Alvi
Semester: - VIII
Section :- A+B

Sr No.	Planned Date	Topic Name	Total hours
		UNIT-I	
1	06-01-2020	Basic web commerce concepts	6
2	07-01-2020	Basic web commerce concepts	
3	08-01-2020	Electronic commerce environments,	
4	09-01-2020	Electronic marketplace technologies,	
5	10-01-2020	EDI	
6	13-01-2020	Electronic commerce with www internet, commerce net advocacy.	
		UNIT-II	
7	14-01-2020	Approach to safe E-commerce: overview	6
8	15-01-2020	Secure transport protocol and transaction	
9	16-01-2020	Secure Electronic Payment Protocol(SEPP)	
10	17-01-2020	Secure Electronic Transaction(SET)	
11	20-01-2020	Certificate for authentication	
12	21-01-2020	Security on web server and enterprise network.	
		UNIT III	
13	22-01-2020	Electronic cash and Electronic payment scheme: overview	8
14	23-01-2020	Internet monetary payment and security requirements	
15	24-01-2020	Internet monetary payment and security requirements	
16	03-02-2020	Payment & purchase order process:Account Holder Registration	
17	04-02-2020	Merchant Registration	
18	05-02-2020	Account Holder Ordering, Payment Authorization	
19	06-02-2020	Online Electronic cash	
20	07-02-2020	Electronic Payment Schemes	
		UNIT-IV	
21	10-02-2020	Internet/Intranet Security issues and solutions: Needs for computer security	10
22	11-02-2020	Security strategies	
23	12-02-2020	Encryption	
24	17-02-2020	MasterCard/ visa secure Electronic Transaction: Introduction, requirements	
25	18-02-2020	MasterCard/ visa secure Electronic Transaction : concepts	
26	20-02-2020	payment processing: Cardholder Registration	
27	24-02-2020	Payment processing: Cardholder Registration	
28	25-02-2020	Payment processing: Merchant Registration	
29	26-02-2020	Payment processing: Purchase Request	
30	27-02-2020	Payment processing: Payment Authorization & Capture	

UNIT-V			
31	28-02-2020	Secure E-mail Technologies: Introduction	6
32	02-03-2020	Means of distribution, Models for message handling	
33	03-03-2020	How does Email work?	
34	04-03-2020	MIME	
35	05-03-2020	S/ MIME ,MOSS	
36	06-03-2020	MIME and Related facilities for EDI over the internet	
UNIT-VI			
37	09-03-2020	Internet & web site Establishment:Internet Resources for commerce: introduction,	6
38	11-03-2020	Web server Technologies	
39	12-03-2020	Internet tools Relevant to commerce	
40	13-03-2020	Internet applications for commerce	
41	16-03-2020	Internet Access and Architecture	
42	17-03-2020	Internet searching	
43	18-03-2020	Revision of Unit I	
44	19-03-2020	Revision of Unit II	
45	20-03-2020	Revision of Unit III	
46	23-03-2020	Revision of Unit IV	
47	24-03-2020	Revision of Unit V	
48	26-03-2020	Revision of Unit VI	

Faculty: - Dr. A.S.Alvi

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Lesson Plan (Session 2019-20)

Course Number and Title: -OBJECT ORIENTED TECHNOLOGY (4IT03)
Name of Faculty: -Prof. A. W. Burange
Semester: - IV
Section:-A

Sr No.	Planned Date	Topic Name	Total Hours
		Unit I	
1	14-01-20	Introduction to procedural, modular, object-oriented and generic programming techniques	8
2	15-01-20	Limitations of procedural programming	
3	16-01-20	Need of object-oriented programming	
4	17-01-20	fundamentals of object-oriented programming	
5	18-01-20	Objects & classes in C++	
6	21-01-20	Declaring & using classes	
7	22-01-20	Constructors, Objects as functions arguments	
8	23-01-20	Copy Constructor, Static class data. Arrays of objects	
		Unit II	
9	24-01-20	C++ string Class	8
10	25-01-20	Operator overloading	
11	28-01-20	Overloading unary & binary operators	
12	29-01-20	Data conversion, Pitfalls of operator overloading	
13	30-01-20	Pointers& Arrays	
14	31-01-20	Pointer & functions	
15	01-02-20	New & delete operators	
16	04-02-20	Pointers For objects	
		Unit III	
17	05-02-20	Inheritance in C++ :Derived class & base class	8
18	06-02-20	Derived class Constructors	
19	07-02-20	Function overloading	
20	08-02-20	Class hierarchies	
21	11-02-20	public and private inheritance	
22	18-02-20	Multiple inheritance	
23	20-02-20	Multilevel, Hybrid, Hierarchical inheritance	
24	22-02-20	Containership: classes within classes.	
		UNIT-IV	
25	25-02-20	Virtual functions concepts	8
26	26-02-20	Abstracts classes & pure virtual Functions	
27	27-02-20	Virtual base classes	
28	28-02-20	Friend functions	
29	29-02-20	static Functions, Assignment and copy initialization	
30	03-03-20	this pointer	
31	04-03-20	Dynamic type information. Introduction to C++ graphics	
32	05-03-20	creating basic shapes, using colors and styles .	

		UNIT-V	
33	06-03-20	Streams & File in C++: Stream classes	8
34	07-03-20	Stream Errors	
35	11-03-20	file I/O File I/ O with stream file pointers	
36	12-03-20	Error handling in file I/O	
37	13-03-20	File I/O with member functions	
38	14-03-20	Overloading the extractions & insertion operator	
39	17-03-20	Memory as a stream object	
40	18-03-20	command line arguments, multifile programs.	
		UNIT-VI	
41	19-03-20	Function Tamplate	8
42	20-03-20	class templates	
43	21-03-20	Exception syntax Multiple exceptions	
44	24-03-20	exception with arguments	
45	26-03-20	Introduction to the Standard Template Library	
46	27-03-20	Algorithms, Sequential Containers iterators	
47	28-03-20	Specialized iterators	
48	31-03-20	Associative containers Function objects	

Faculty: - Prof. A. W. Burange

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Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of Information Technology

(Session 2019-2020)

Course Number and Title: - Object Oriented Technology (4IT03)

Name of Faculty: - Prof. G.K.Wadnere

Semester: - IV **Section: -** B

Lecture No.	Planned Dates	Topic Name	Total Hours
		Unit 1	
1	07/01/20	Introduction to Vision, Mission, CO & CLO, Graduate Attributes	9
2	08/01/20	Introduction to procedural, modular, object-oriented and generic programming techniques	
3	09/01/20	Limitations of procedural programming	
4	10/01/20	Need of object-oriented programming	
5	11/01/20	Fundamentals of object-oriented programming	
6	14/01/20	Objects & classes in C++	
7	15/01/20	Declaring & using classes	
8	16/01/20	Constructors, Objects as functions arguments	
9	17/01/20	Copy Constructor, Static class data. Arrays of objects	
		Unit 2	
10	18/01/20	C++ string Class	8
11	21/01/20	Operator overloading	
12	22/01/20	Overloading unary & binary operators	
13	23/01/20	Data conversion, Pitfalls of operator overloading	
14	24/01/20	Pointers& Arrays	
15	25/01/20	Pointer & functions	
16	28/01/20	New & delete operators	
17	29/01/20	Pointers For objects	
		Unit 3	
18	30/01/20	Inheritance in C++ :Derived class & base class	
19	31/01/20	Derived class Constructors	

20	01/02/20	Function overloading	
21	04/02/20	Class hierarchies	08
22	05/02/20	public and private inheritance	
23	06/02/20	Multiple inheritance	
24	07/02/20	Multilevel, Hybrid, Hierarchical inheritance	
25	08/02/20	Containership: classes within classes.	
		Unit 4	
26	11/02/20	Virtual functions concepts	
27	12/02/20	Abstracts classes & pure virtual Functions	08
28	13/02/20	Virtual base classes	
29	14/02/20	Friend functions	
30	15/02/20	static Functions, Assignment and copy initialization	
31	18/02/20	this pointer	
32	20/02/20	Dynamic type information. Introduction to C++ graphics	
33	21/02/20	creating basic shapes, using colors and styles .	
		Unit 5	
34	25/02/20	Streams & File in C++: Stream classes	
35	26/02/20	Stream Errors	
36	27/02/20	file I/O File I/ O with stream file pointers	
37	28/02/20	Error handling in file I/O	08
38	29/02/20	File I/O with member functions	
39	03/03/20	Overloading the extractions & insertion operator	
40	04/03/20	Memory as a stream object	
41	05/03/20	command line arguments, multifile programs.	
		Unit 6	
42	06/02/20	Function Tamplate	
43	11/03/20	class templates	
44	12/03/20	Exception syntax Multiple exceptions	08

45	13/03/20	exception with arguments	
46	14/03/20	Introduction to the Standard Template Library	
47	17/03/20	Algorithms, Sequential Containers iterators	
48	18/03/20	Specialized iterators	
49	19/03/20	Associative containers Function objects	
50	20/03/20	Remedial Classes	

Subject Teacher
Prof. G.K Wadnere

HOD
Dr. P.V. Ingole

Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Teaching Plan (Session 2019-20)

Course Number and Title: - **Principles of Management** (6IT01)
Name of Faculty: - Prof. H.D.Kale
Semester: - VI **Section :-** A

Sr No.	Planned Date	Topic Name	Total hours
		UNIT-I	
1	13-01-20	Introduction: Definition and concepts of management	08
2	14-01-20	Importance of management	
3	15-01-20	Various management functions	
4	16-01-20	Control, responsibilities	
5	17-01-20	Human resources planning	
6	20-01-20	Decision-making	
7	21-01-20	Trade unions	
8	22-01-20	Collective bargaining	
		UNIT-II	
09	23-01-20	Organization planning	08
10	24-01-20	Design and development-Introduction	
11	27-01-20	Design and development	
12	28-01-20	Production resources	
13	29-01-20	Production planning	
14	30-01-20	Types of production system	
15	31-01-20	Production systems	
16	03-02-20	Production control	
		UNIT-III	
17	04-02-20	Product design & development-Introduction	08
18	05-02-20	Product design & development	
19	06-02-20	Design of the product	
20	07-02-20	Design of the product and types	
21	10-02-20	New product development	
22	11-02-20	New product development types	
23	12-02-20	Material planning and control	
24	13-02-20	Material planning and control	
		UNIT-IV	
25	14-02-20	Maintenance and system reliability	08
26	17-02-20	Concepts and Objectives of maintenance	
27	18-02-20	Failure analysis	
28	19-02-20	Reliability Maintenance	
29	20-02-20	Reliability Maintenance system & Classification	
30	21-02-20	Maintenance planning	
31	24-02-20	TQM ISO 9000 a	
32	25-02-20	Quality audit	
		UNIT-V	
33	26-02-20	Marketing management- Introduction	08
34	27-02-20	Marketing planning	
35	28-02-20	Consumer behavior	
36	02-03-20	Product management	
37	03-03-20	Pricing & promotion decision	
38	04-03-20	Financial planning	
39	05-03-20	Source of finance	

40	06-03-20	Source of finance & types	
		UNIT-VI	
41	09-03-20	Project Management	**08**
42	10-03-20	Concepts and importance of project	
43	11-03-20	Project implementation	
44	12-03-20	MIS MIS meaning and objectives	
45	13-03-20	Types of data, methods of data collection	
46	16-03-20	Analysis and presentation of data	
47	17-03-20	Editing, reporting and presentation of data	
48	18-03-20	Decision options	

Faculty: - Prof. H.D.Kale

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Teaching Plan (Session 2019-20)

Course Number and Title: - **Principles of Management** (6IT01)
Name of Faculty: - Prof. H.D.Kale
Semester: - VI **Section** :- B

Sr No.	Planned Date	Topic Name	Total hours
		UNIT-I	
1	13-01-20	Introduction: Definition and concepts of management	08
2	14-01-20	Importance of management	
3	15-01-20	Various management functions	
4	16-01-20	Control, responsibilities	
5	20-01-20	Human resources planning	
6	21-01-20	Decision-making	
7	22-01-20	Trade unions	
8	23-01-20	Collective bargaining	
		UNIT-II	
09	27-01-20	Organization planning	08
10	28-01-20	Design and development-Introduction	
11	29-01-20	Design and development	
12	30-01-20	Production resources	
13	03-02-20	Production planning	
14	04-02-20	Types of production system	
15	05-02-20	Production systems	
16	06-02-20	Production control	
		UNIT-III	
17	10-02-20	Product design & development-Introduction	08
18	11-02-20	Product design & development	
19	12-02-20	Design of the product	
20	13-02-20	Design of the product and types	
21	17-02-20	New product development	
22	18-02-20	New product development types	
23	19-02-20	Material planning and control	
24	20-02-20	Material planning and control	
		UNIT-IV	
25	24-02-20	Maintenance and system reliability	08
26	25-02-20	Concepts and Objectives of maintenance	
27	26-02-20	Failure analysis	
28	27-02-20	Reliability Maintenance	
29	02-03-20	Reliability Maintenance system & Classification	
30	03-03-20	Maintenance planning	
31	04-03-20	TQM ISO 9000 a	
32	05-03-20	Quality audit	
		UNIT-V	
33	09-03-20	Marketing management- Introduction	08
34	10-03-20	Marketing planning	
35	11-03-20	Consumer behavior	
36	12-03-20	Product management	
37	16-03-20	Pricing & promotion decision	
38	17-03-20	Financial planning	
39	18-03-20	Source of finance	

40	19-03-20	Source of finance & types	
		UNIT-VI	
41	23-03-20	Project Management	**08**
42	24-03-20	Concepts and importance of project	
43	25-03-20	Project implementation	
44	26-03-20	MIS MIS meaning and objectives	
45	27-03-20	Types of data, methods of data collection	
46	30-03-20	Analysis and presentation of data	
47	31-03-20	Editing, reporting and presentation of data	
48	01-04-20	Decision options	

Faculty: - Prof. H.D.Kale

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
(Session 2019-20) Even Sem

Course Number and Title: - Computer Network (6 IT 04)
Name of Faculty: - Prof. Harshal D. Misalkar
Semester :- VIth **Section :-** B

Lecture No.	Planned Dates	Topic Name	Total hours
		Unit-1	
1	13/01/2020	Introduction to Computer network	8
2	14/01/2020	Uses, Hardware, Software	
3	15/01/2020	reference Model, standardization	
4	16/01/2020	Physical Layer, Theoretical Basis for DC	
5	17/01/2020	Guided transmission Media, Wireless Transmission	
6	20/01/2020	communication satellite, Public Switched Telephone network	
7	21/01/2020	Mobile Telephone System	
8	22/01/2020	Cable Television	
		Unit-2	
9	23/01/2020	Design issues	8
10	24/01/2020	Error detection and correction	
11	27/01/2020	Elementary Data Link protocols	
12	28/01/2020	Sliding window Protocols	
13	29/01/2020	Protocol Verification	
14	30/01/2020	Protocol Verification	
15	31/01/2020	Example DL protocols	
16	3/02/2020	Example DL protocols	
		Unit-3	
17	4/02/2020	Static and Dynamic channel allocation	8
18	5/02/2020	Multiple Access protocols	

19	6/02/2020	ALHOA	
20	7/02/2020	CSMA, Collision Free Protocols	
21	10/02/2020	Ethernet, Wireless LANS	
22	11/02/2020	Broadband Wireless	
23	12/02/2020	Blue tooth	
24	17/02/2020	Data Link Layer Switching	
		Unit-4	
25	18/02/2020	Design Issues	8
26	20/02/2020	Routing methods: Shortest path	
27	24/02/2020	flooding, Link state	
28	25/02/2020	Distance vector routing and broadcast , multicast routing	
29	26/02/2020	Congestion control algorithms	
30	27/02/2020	quality of services	
31	28/02/2020	internet working	
32	2/03/2020	network layer in the Internet	
		Unit-5	
33	3/03/2020	Service primitives	8
34	4/03/2020	UDP: RPC	
35	5/03/2020	RTTP	
36	6/03/2020	TCP: TCP Services and Features	
37	9/03/2020	TCP segment format	
38	11/03/2020	TCP Connections	
39	12/03/2020	TCP Timers	
40	13/03/2020	Performance issue.	
		Unit-6	
41	16/03/2020	DNS	8
42	17/03/2020	Electronic Mail	

43	18/03/2020	WWW	
44	19/03/2020	Multimedia: Voice over IP	
45	20/03/2020	H.323	
46	23/03/2020	Video on demand	
47	24/03/2020	The M-Bone	
48	26/03/2020	The M-Bone	
49	27/03/2020	GATE QUESTIONAIRE	Content Beyond Syllabus
50	30/03/2020		
51	31/03/2020		
52	1/04/2020		
53	3/04/2020	Revision of UNIT 1 ,2 & 3	
55	13/04/2020	Revision of UNIT 4,5&6	

Faculty: Prof. Harshal D. Misalkar

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Lesson Plan (Session 2019-20)

Course Number and Title: - THEORY OF COMPUTATION (6IT03)
Name of Faculty: - Prof. M. S. Deshmukh
Semester: - VI **Section:-** B

Sr No.	Planned Date	Topic Name	Total hours
		UNIT-I	
1	30-12-20	Alphabet	11
2	31-12-20	Language , Operations	
3	01-01-20	Finite state machine, definitions, Finite automation model	
4	02-01-20	Acceptance of strings and languages	
5	04-01-20	Non deterministic finite automation	
6	06-01-20	Finite Automation	
7	07-01-20	Equivalence Between NFA And DFA	
8	08-01-20	Conversion of NFA into DFA	
9	09-01-20	Minimisation Of FSM, Equivalence Between Two FSM's	
10	11-01-20	Moore machines	
11	13-01-20	Melay machines	
		UNIT-II	
12	14-01-20	Regular sets	9
13	15-01-20	Regular Expressions, Identity Rules	
14	16-01-20	Manipulation of regular expressions	
15	18-01-20	Equivalence Between RE And FA	
16	20-01-20	Inter Conversion, Pumping Lemma	
17	21-01-20	Closure properties of regular sets	
18	22-01-20	Regular Grammers, Right Linear & Left Linear Grammers	
19	23-01-20	Equivalence Between Regular Linear Grammer And FA	
20	25-01-20	Inter conversion between RE and RG.	
		UNIT III	
21	27-01-20	Context Free Grammer	9
22	03-02-20	Derivation Trees	
23	04-02-20	Chomsky Normal Form	
24	10-02-20	Greibach Normal Form	
25	11-02-20	Push Down Automata	
26	12-02-20	Definition, Model, Acceptance of CFL	
27	13-02-20	Equivalence of CFL and PDA	
28	15-02-20	Interconversion	
29	17-02-20	Enumeration of Properties of CFL	
		UNIT-IV	
30	18-02-20	Turing Machine	9
31	20-02-20	Definition, Model, Design of TM	
32	22-02-20	Design of TM	
33	24-02-20	Computable Functions	
34	25-02-20	Computable Functions	
35	26-02-20	Recursive Ensumerable Language	
36	27-02-20	Church's Hypothesis	
37	02-03-20	Counter Machine	
38	03-03-20	Types of TM's	

		UNIT-V	
39	04-03-20	Chomshy Hierarchy of Languages	6
40	05-03-20	Linear Bounded Automata	
41	07-03-20	Context Sensitive Language	
42	09-03-20	Introduction of DCFL And DPDA	
43	11-03-20	LR (O)	
44	12-03-20	Grammer, Decidability of Problems	
		UNIT-VI	
45	14-03-20	Properties of Recursive Ensumarable Languages	5
46	16-03-20	Properties of Non Recursive Ensumarable Languages	
47	17-03-20	Universal Turing Machine	
48	18-03-20	Post correspondance Problem	
49	19-03-20	Introduction to Recursive Function Theory	
50	21-03-20	GATE Questionnaire	**Content beyond syllabus**
51	23-03-20		
52	24-03-20		
53	26-03-20		
54	28-03-20	Revision of Unit I and II	
55	30-03-20	Revision of Unit III and IV	
56	31-03-20	Revision of Unit V and VI	
57	01-04-20		
58	04-04-20		

Faculty: - Prof. M. S. Deshmukh

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Information Technology
Lesson Plan (Session 2019-20)

Course Number and Title: - THEORY OF COMPUTATION (6IT03)
Name of Faculty: - Prof. N. V. Kadam
Semester: - VI **Section:-** A

Sr No.	Planned Date	Topic Name	Total hours
		UNIT-I	
1	13-01-20	Alphabet	11
2	14-01-20	Language , Operations	
3	15-01-20	Finite state machine, definitions, Finite automation model	
4	16-01-20	Acceptance of strings and languages	
5	17-01-20	Non deterministic finite automation	
6	20-01-20	Finite Automation	
7	21-01-20	Equivalence Between NFA And DFA	
8	22-01-20	Conversion of NFA into DFA	
9	23-01-20	Minimisation Of FSM, Equivalence Between Two FSM's	
10	24-01-20	Moore machines	
11	27-01-20	Melay machines	
12	28-01-20	Regular sets	9
13	29-01-20	Regular Expressions, Identity Rules	
14	30-01-20	Manipulation of regular expressions	
15	31-01-20	Equivalence Between RE And FA	
16	03-02-20	Inter Conversion, Pumping Lemma	
17	04-02-20	Closure properties of regular sets	
18	05-02-20	Regular Grammers, Right Linear & Left Linear Grammers	
19	06-02-20	Equivalence Between Regular Linear Grammer And FA	
20	07-02-20	Inter conversion between RE and RG.	
21	10-02-20	Context Free Grammer	9
22	11-02-20	Derivation Trees	
23	12-02-20	Chomsky Normal Form	
24	13-02-20	Greibach Normal Form	
25	14-02-20	Push Down Automata	
26	17-02-20	Definition, Model, Acceptance of CFL	
27	18-02-20	Equivalence of CFL and PDA	
28	19-02-20	Interconversion	
29	20-02-20	Enumeration of Properties of CFL	
30	21-02-20	Turing Machine	9
31	24-02-20	Definition, Model, Design of TM	
32	25-02-20	Design of TM	
33	26-02-20	Computable Functions	
34	27-02-20	Computable Functions	
35	28-02-20	Recursive Ensumerable Language	

Name of Faculty :- Prof. P. P. Thosare	Lesson Plan	Semester:- I
Subject:	Basic Electrical Engineering	Section : F
Lecture No.	Topics	Remark
1	Importance of subject & Introduction to syllabus	
	Unit – I: Fundamentals	
2	Basic concept of voltage, current, Power and energy.	
3	Resistance, resistivity, conductance, conductivity, Ohm's Law	
3	Temperature effect on resistance , Temperature coefficient of resistance	
4	Numerical on Temperature coefficient of resistance.	
5	Series & Parallel circuits	
6	Numerical on Series & Parallel circuits	
7	Delta – Star & Star-Delta transformation	
8	Numerical on Star Delta transformation	
9	Kirchhoff 's laws (KCL & KVL)	
10	Superposition Theorem	
11	Thevenin's Theorem	
12	Numericals on Superposition & Thevenin's Theorem	
	Unit-II: Magnetic Circuit & Electromagnetism	
13	Basic concepts of Magnetic flux, Flux density, MMF, Reluctance, Magnetic field intensity & their relationship	
14	Magnetic Leakage & Fringing of flux	
15	Series & Parallel magnetic circuit	
16	Series & Parallel magnetic circuit with air gap	
17	Series & Parallel magnetic circuit without air gap	
18	Numerical on series magnetic circuit	
19	Principles of electromagnetic induction, Self and mutual induction	
20	Magnetization curves	
	Unit – III : AC fundamentals	
21	RMS and average values, Form factor, peak factor (for sinusoidal waveform only)	
22	Purely resistive, inductive & capacitive circuit	
23	Single phase AC Series circuit with resistance , inductance & Capacitance	
24	Numericals on RLC series circuit.	

25	Phasor diagrams for series circuit & Series resonance	
26	Impedance triangle. Active & reactive power.	
27	Resonance in Series R-L-C Circuit and Numericals	
	Unit – IV : Polyphase Circuit	
28	Generation of three phase EMF.	
29	3 Phase Balanced Delta and Star connected system.	
30	Voltage and Current relationship between phase and line quantities for star connection	
31	Numerical on three phase star connected system	
32	Voltage and Current relationship between phase and line quantities for Delta connection	
33	Numerical on three phase Delta connected system	
	Unit – V : Electrical Machines	
35	A) Single phase Transformer:	
36	Principle of operation	
37	Construction & Classification	
38	EMF equation, losses, efficiency, Regulation of Transformer	
39	Numericals on efficiency , regulation of transformer	
40	B) Electromechanical Energy Conversion:	
41	Construction & various parts of DC machines	
42	Classification of DC machines, Characteristics & applications of DC machines	
	Unit – VI : Electrical Apparatus & Safety	
43	Measurement of current & voltage (Ammeter & Voltmeter)	
44	Measurement of power & energy (Wattmeter & Energy- meter)	
45	Range extension of Ammeter, Voltmeter, Wattmeter & Energy- meter	
45	Necessity of Earthing, Limiting values for various installation, Types of Earthing (Pipe earthing & plate earthing)	
46	Measurement of current & voltage (Ammeter & Voltmeter)	

Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of First Year Engineering Department

AY:	2019-20 **Lession Plan**	
Name	**Prof.** Shailesh S. Dhok	Semester:- I st
Subject	**Computer Programming** Subject Code:-1A4	Section : A
Leture No.	Topics	Remark
Unit-I	**Fundamental of the Computer and Computing Concepts**	
Lect1	Generation of computers	
Lect2	Classification of computers	
Lect3	Basic Anatomy of Computer System,Input Devices, Processor, Output Devices, Memory Management	
Lect4	Types of Computer Software, Overview of Operating system,	
Lect5	Networking Concepts, Microsoft Office,	
Lect6	Number systems: Decimal, Binary, Hexadecimal, Octal	
Lect7	Conversion of Numbers,Binary Arithmetic Operations	
Lect8	Programming Languages, Logic Gates	
Unit-II	**C Fundamentals:**	
Lect9	Introduction, Importance of C	
Lect10	Basic Structure of C Programs, Program execution	
Lect11	Basic programs based on C such as Printing Message	
Lect12	Adding two numbers, Interest calculations	
Lect13	Use of subroutines, math function	
Lect14	C tokens, Keywords and Identifiers,	
Lect15	Operators & their precedence, Assignment statement.	
Lect16	Declaration of Variables, Declaration of Storage Class	
Unit-III	**Operators, Expression and Input-Output operation**	
Lect17	Operators, Types of Operators: Arithmetic, Relational	
Lect18	Assignment, Increment-decrement	
Lect19	Logical operator Assignment, Conditional operator	
Lect20	Bitwise operator, Special operator	
Lect21	Evaluation of Expression	
Lect22	Precedence of Arithmetic Operators	
Lect23	Input-Output Operation: Reading and Writing Character	
Lect24	Formatted Input, Formatted Output.	
Unit - IV	**C Control constructs**	
Lect25	Decision-making using if, if-else	
Lect26	Nested if, else if ladder	
Lect27	switch-case statement	
Lect28	Operator, GotoOperator	
Lect29	Loops using for, while, do-while statements	
Lect30	break and continue statements	
Lect31	Jumps in loop	
Lect32	Concise Test Expressions	
Unit - V	**Array, Strings and Structures**	
Lect33	Introduction to array, One Dimensional Array: Declaration & Initialization,	

Lect34	Two Dimensional: Declaration & Initialization, Multi Dimensional,	
Lect35	Strings: Declaration and Initialization, Reading String from terminal, Writing String to Screen	
Lect36	Putting Strings together, Comparison of Two Strings	
Lect37	String-Handling Functions	
Lect38	Table of Strings, Other features of String,	
Lect39	Structures – Define, Declaration	
Lect40	Accessing the members of a structure	
Unit - VI	**User Defined Functions, Pointers and File Management**	
Lect41	Functions, Need for User defined Functions	
Lect42	Multi Function Program, Elements of User Defined Functions	
Lect43	Return Values and their types, Function Calls	
Lect44	Function Declaration, and Categories of Functions	
Lect45	Definition and uses of pointers, Accessing the address of a variable,	
Lect46	Introduction to File Management	
Lect47	Defining and Opening File, Closing File, Input/output Operations on File.	
Lect48	Input/output Operations on File.	

2019-20
(I & II)

Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of First Year Engineering Department

AY:-

Lesson Plan

Name of Faculty :- Prof. DR. K. D. Umatey		Semester: I & II
Subject:	ENGG-CHEMISTRY (1B21)	Section: 1W
Lecture No.	**Topics**	**Remark**
	Water Treatment and Analysis	
1	Introduction, Hardness of water, Types of hardness - temporary & permenant hardness, Units of Hardness and their inter-conversion	
2	Hardness determination by EDTA method	
3	Disadvantages of hard of water, Boiler troubles: Scale and Sludge formation, Caustic embritlement,	
4	Priming & Foaming, Boiler corrosion	
5	Zeolite process and Reverse Osmosis (RO)	
6	Softening of hard water by Ion exchange process & its regeneration	
7	Numerical Problem based on Hardness of water	
8	Numerical Problem based on Zeolite process	
	UNIT No. 2	
	Corrosion and Energy storage system	
9	Introduction of corrosion, Dry and its mechanism	
10	Wet corrosion and its mechanism	
11	Pitting, waterline and inter-granular corrosion	
12	Galvonic and stress corrosion	
13	Role of design and material selection in corrosion control	
14	Anodic and cathodic protection, Hot dipping(Galvanizing and tinning processes)	
15	Basic principles of batteries & their types,	
16	Construction, working and application of lithium- ion battery, Ni-Cd battery.	
	UNIT No. 3	
	Engineering Materials	
17	Introduction of Portland cement, Raw materials for the manufacturing of portland cement.	
18	Manufacturing of portland cement by wet Process	
19	Properties of cement- Setting and hardening	
20	Heat of hydration and soudness of cement	
21	Introductuion of Lubricants and its classification, Machanism of Lubrication	
22	Testing of lubricants for viscosity and viscosity index, flash and fire point	
23	Industrial Material: Definition, properties and Applications of ceramics & refractories.	
24	Industrial Material: Definition, properties and Applications of thermal insulating material and Nanomaterial	
	UNIT No. 4	
	Energy Science	

	Energy Science	
25	Introduction of Fuels and its classification, Calorific value and its type- net and gross calorific value	
26	Proxiamte and its significance	
27	Ultimate analysis and its significance	
28	Cracking of petroleum fractions, Use of gasoline and diesel in internal combusion engines	
29	Knocking, chemical constitution and knoking properties, octane and cetane number	
30	Numerical based on combustion	
31	Numerical based on combustion	
32	Numerical based on combustion	
	UNIT No. 5	
	Polymer chemistry	
33	Introduction, Classification of polymer on the basis of their structure	
34	Method of polymerization	
35	Cationic and Anionic mechanism of polymerization	
36	Thermosetting and thermoplastic resin	
37	Preparation, properties and uses of PVC, Teflon,	
38	Preparation, properties and uses Bakelite, Introduction of Natural rubber, vulcanization of rubber	
39	Preparation, properties and uses of synthetic rubber-styrene, nitrile and butyl rubber	
40	Biodegradable polymers: properties and applications, Conducting polymers: Introduction, types of conducting polymer and their examples	
	UNIT No. 6	
41	Phase rule, Explanation of the terms: Phase, Components and Degree of Freedom	
42	Application of Phase rule to One Component System (Water System),	
43	Condensed phase rule and its application to two component system (Bi-Cd).	
44	Principles and instrumentation of spectrophotometry	
45	U.V and.IR spectroscopy	
46	Principle & instrumentation of NMR spectroscopy	
47	Surface characterization technique: X-ray diffraction	

Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of First Year Engineering Department

AY:- 2019-20 **Lesson Plan**

Name of Faculty :- Prof. Dr. N. B. Ingale		Semester :- I
Subject:	Engineering Physics (107)	Section :- A
Lecture No.	Topics	Remark
1	Introduction	
2	Formation of energy band	
3	Classification of solid on the basis of energy band gap	
4	Fermi level in intrinsic ,P and N type semiconductor	
5	Effect of temperature and impurity on fermi level	
6	Fermi level equation for intrinsic semiconductor	
7	Conductivity Equation, Problems	
8	Law of mass action and Charge neutrality equation	
9	Hall effect	
10	Problems	
11	Properties of photon	
12	De Broglie's hypothesis and equation	
13	Compton effect and its characteristics	
14	Compton shift Eqution	
15	Problems	
16	Heisenberg's Uncertainty principle	
17	Energy-time equation	
18	Applications of Uncertainty principle	
19	Problems	
20	Basic concepts of electric and magnetic field	
21	Motion of electron in transversed electric field	
22	Motion of electron in transversed magnetic field	
23	deflection of electron confined to a small region	
24	motion of e- in cross electric and magnetic field	
25	Positive Rays ,Bainbridge mass spetrograph	
26	CRO:Block diagram, its working and applications	
27	Problems	
28	Interference:Thin film due to reflected light	
29	Newton's ring	
30	Applications of Newton's rings	
31	Diffraction:Theory and Grating equation	
32	Problems	
33	FIBER OPTICS : Construction and principle	
34	Acceptance angle and NA	
35	Types of Optical fiber	
36	Attenuation,Advantages and applications	
37	Problems	
38	Laser: Properties,Applications	
39	Absorption, spontaneous and stimulated emission	
40	Metastable state, Pumping, Three level laser	
41	Ruby laser	
42	Acaustics of Buildings: reverberation,Sabine's Eqn.	
43	Basic Requirements for Acoustically Good Hall	
44	Factors affecting acoustically Good Hall	
45	Problems	
46	Continuity equation,Viscosity, Stoke's law	
47	Bernoulli's theorem	
48	Poiseuille's Equation	
49	Ultrasonics: Properties, Production of Ultrasonic	
50	Uses of Ultrasonics waves and Problems	

Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of First Year Engineering Department

AY: 2019-20

Lesson Plan

Name of Faculty :- Prof. C.T. Prajapati		Semester: I
Subject:	Engineering Mechanics	Section : C
Lecture No.	**Topics**	Remark
1	RESULTANT- Concept of a force	
2	RESULTANT- Moment of a force about a point and about an axis, couple	
3	RESULTANT- Resolution and compositions of coplanar force system.	
4	RESULTANT- Reduction of system of forces into a force and a couple equivalent force system.	
5	EQUILIBRIUM- Free-body diagrams, equations of equilibrium	
6	EQUILIBRIUM- Problems of equilibrium involving co-planar force system acting on a particle	
7	EQUILIBRIUM- Rigid body and system of rigid bodies	
8	EQUILIBRIUM- Problems of equilibrium of non-coplanar concurrent force system	
9	TRUSS- Analysis of simple plane trusses	
10	TRUSS- Method of joints	
11	TRUSS- Method of sections	
12	TRUSS- Analysis of frames involving ideally connected members.	
13	FRICTION- Coulomb's law of friction	
14	FRICTION- Problems on Friction	
15	FRICTION- Static belt friction	
16	FRICTION- Wedge friction	
17	CENTROID- First moment of an area and centroid	
18	CENTROID- Second moment of an area	
19	CENTROID- Centroid	
20	CENTROID- Product of area	
21	CENTRE OF GRAVITY- Transfer theorems, polar moment of inertia	
22	CENTRE OF GRAVITY- Radius of gyration	
23	CENTRE OF GRAVITY- Definition of principle axes and principle moment of inertia.	
24	KINEMATICS- Definitions of displacement, velocity and acceleration and their relations	
25	KINEMATICS- Rectilinear motion under variable & constant accelerations	
26	KINEMATICS- Motion curves	
27	KINEMATICS- Simple relative motion between two particles	
28	KINEMATICS- Curvilinear motion using rectangular coordinates	
29	KINEMATICS- Normal and tangential components	
30	KINEMATICS- Kinematics of rigid body motion in rectilinear translation	
31	KINEMATICS- Rotation about a fixed axis and plane motion	

32	KINETICS- Kinetics of rectilinear and circular motion of a particle acted upon by constant force system	
33	KINETICS- Kinetics of rectilinear and circular motion of a particle acted upon by variable force system	
34	KINETICS- D'Alembert's principle	
35	KINETICS- Concept of dynamic equilibrium	
36	KINETICS- Rectilinear motion of several interconnected particles	
37	KINETICS- Kinetics of rigid body rectilinear translation	
38	KINETICS- Rotation about a fixed axis of rigid body	
39	WORK, POWER and ENERGY- Work-energy equation for motion of a particle	
40	WORK, POWER and ENERGY- Problems on motion of a particle	
41	WORK, POWER and ENERGY- System of particles	
42	WORK, POWER and ENERGY- Work energy equation for rigid bodies rectilinear translation	
43	LINEAR IMPULSE- Linear impulse, linear momentum, momentum equation for a particle and a system of particles	
44	LINEAR IMPULSE- Collision of two particles	
45	LINEAR IMPULSE- Coefficient of restitution	

Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of First Year Engineering

AY:- 2019-20 **Lesson Plan**

Name of Faculty :- Prof. J. P. Morey		Semester:- I
Subject: Engg. Graphics	Subject Code:- 1B4	Section:- F

Lecture No.	Topics	Remark
	Unit 1 - Introduction to Engineering Drawing and Projection	
1	Introduction to engineering instruments, concept of dimension and scale, geometric construction	
2	Projection of points by 1st angle method	
3	Projection of points by 3rd angle method	
4	Projection of line by 1st angle method & 3rd angle method	
5	Projection of line by 1st and 3rd angle method(Inclined to one plane)	
6	Projection of line inclined to both plane.	
7	Projection of plane (By using different type of plane)	
8	Projection of plane (By using auxiliary plane method)	
	Unit 2 - Projection of Solids	
9	Introduction	
10	Projection of Prism (By using different resting conditions)	
11	Projection of Prism (By using different resting conditions)	
12	Projection of Pyramid (By using different resting conditions)	
13	Projection of Pyramid (By using different resting conditions)	
14	Projection of Cone (By using different resting conditions)	
15	Projection of Cylinder (By using different resting conditions)	
	Unit 3 - Section of Solids	
16	Introduction	
17	Section of prism by different cutting plane (Using different resting conditions)	
18	Section of prism by different cutting plane (By using different resting conditions)	
19	Section of pyramid by different cutting plane (By using different resting conditions)	
20	Section of pyramid by different cutting plane (By using different resting conditions)	
21	Section of cone by different cutting plane (By using different resting conditions)	
22	Section of cylinder by different cutting plane (By using different resting conditions)	

Lecture No.	Topics	Remark
	Unit 4 - Orthographic Projection	
23	Introduction	
24	Problems on orthographic projection by first angle method	
25	Problems on orthographic projection by first angle method	
26	Problems on orthographic projection by first angle method	
27	Problems on orthographic projection by third angle method	
28	Problems on orthographic projection by third angle method	
29	Problems on orthographic projection by third angle method	
	Unit 5 - Isometric Views and Projection	
30	Introduction	
31	Problems on isometric views	
32	Problems on isometric views	
33	Problems on isometric views	
34	Problems on isometric views	
35	Problems on isometric projection	
36	Problems on isometric projection	
37	Problems on isometric projection	
	Unit 6 - Introduction to CAD software	
38	Introduction	
39	Drafting environment and screen	
40	Coordinate systems	
41	Editing commands	
42	Drafting of basic geometrical shapes	
43	Display commands and dimension command	
44	CAD software customization	

Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of First Year Engineering Department

AY:- 2019-20

Lesson Plan

Name of Faculty :- Prof. D. G. Moore | Semester:- I

Subject: Engg. Mathematics-II | Subject Code:-1B1/11949 | Section :E

Lect.No.	Topics	Remark
1	**Unit I :** Introduction to Syllabus & Uni. Exam Pattern	
2	partitioning method for inverse	
3	Rank of the matrix	
4	Rank and Nulity Theorem	
5	Solution of simultaneous equations by matrix method.	
6	Characteristic equation,eigen values	
7	eigen vectors	
8	Cayley Hamilton theorem to find inverse	
9	**Unit II :** Introduction to Fourier series and it's uses.	
10	Fourier series for periodic function in the range (c,c+2L)	
11	Fourier series in the range (c,c+2L)	
12	Half range fourier sine series.	
13	half range fourier cosine series.	
14	Parsevel's Theorem	
15	Harmonic Analysis: introduction	
16	Problems on Harmonic Analysis	
17	**Unit III :** Introduction to reduction formulae	
18	Reduction formulae	
19	Reduction formulae	
20	Beta and Gamma function introduction	
21	Relation between Beta and Gamma Function	
22	Beta and Gamma function examples	
23	Introduction Evolutes and Involutes	
24	Evolutes and Involutes	
25	**Unit IV :** Rules of Differentiation under Integral sign when limit's are constant	
26	Rules of Differentiation under Integral sign when limit's are Parameter	
27	Tracing of curve in cartesian coordinates.	
28	Tracing of curve in polar coordinates.	
29	Tracing of curve in polar and parametric form	
30	Rectification in cartesian coordinates	
31	Rectification in cartesian coordinates	

32	Rectification in polar coordinate.	
33	**Unit V :** Introduction to Double integration.	
34	Double integration in polar coordinates	
35	Change the order of integration	
36	Change the order of integration	
37	Changing from cartesian to polar coordinates.	
38	Changing from cartesian to polar coordinates.	
39	Evaluation of Area by Double Integration	
40	Evaluation of Area by Double Integration	
41	**Unit VI :** Introduction and meaning of triple integration	
42	Triple integration in cartesian coordinates.	
43	Triple integration in cartesian coordinates.	
44	Triple integration in spherical polar coordinates.	
45	Volume of solid by triple integration.	
46	Volume of solid by triple integration.	
47	Introduction to mean and R.M.S values.	
48	Mean values and R.M.S values.	

Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of First Year Engineering Department

AY:- 2019-20

Lesson Plan

Name of Faculty :- Prof. Mr. R.V. Deshmukh

Subject : Engg. Mathematics - I

Subject Code:-IA1/11945

Semester:- I

Section :- X

Lect. No.	Topics	Remark
1	**Unit 1:**-Introduction of syllabus & university Examination Pattern.	
2	Successive differentiation	
3	Leibnitz's theorem	
4	Roll's Theorem	
5	Mean value theorem	
6	Expansion of a function by using Taylor's theorem.	
7	Expansion of a function by using Maclaurin's theorem.	
8	Indeterminate form 1	
9	**Unit 2:**-Introduction of partial differentiation	
10	Partial differentiation 1.	
11	Total differential coefficients 1.	
12	Exact differential.	
13	Euler's theorem on homogeneous function 1.	
14	Euler's theorem on homogeneous function 2.	
15	Maxima and Minima of a function 1	
16	Maxima and Minima of a function 2	
17	**Unit 3:**-Introduction of Complex Number	
18	Demoiver's theorem.	
19	Application of Demoiver's theorem 1.	
20	Application of Demoiver's theorem 2.	
21	Hyperbolic and Inverse hyperbolic function 1.	
22	Hyperbolic and Inverse hyperbolic function 2.	
23	Separation of real and Imaginary parts 1.	
24	Logarithm of Complex number 1.	
25	**Unit 4:**-Introduction First order and first degree in various forms, Variable separable	
26	Homogeneous differential equation.	
27	Reducible toHomogeneous differential equation.	
28	Exact differential equation.	
29	Reducible to Exact differential equation.	
30	Linear differential equation.	
31	Reducible to Linear differential equation.	
32	Methods of Substitution.	
33	**Unit 5:**-Introduction of differential equation of first order and higher degree.	
34	Solvable for P 1.	
35	Solvable for P 2.	
36	Solvable for Y 1.	

37	Solvable for Y 2	
38	Solvable for X	
39	Application of D.E of first order and higher degree to the Problem on orthogonal trajectories 1.	
40	Application of D.E of first order and higher degree to the Problem on Electrical Engineering 1.	
41	Unit 6:-Introduction of Sequences and Series	
42	Convergence of sequences and series	
43	Test for convergence	
44	Comparision Test	
45	Ratio Test	
46	Root Test	
47	Raabe's Test	
48	Range of Convergence	

AY:- 2019-20

Lesson Plan

Name of Faculty :- Prof. P. P. Thosare		Semester:- II
Subject:	Basic Electrical Engineering	Section : B
Lecture No.	Topics	Remark
1	Importance of subject & Introduction to syllabus	
	Unit – I: Fundamentals	
2	Basic concept of voltage, current, Power and energy.	
3	Resistance, resistivity, conductance, conductivity, Ohm's Law	
3	Temperature effect on resistance , Temperature coefficient of resistance	
4	Numerical on Temperature coefficient of resistance.	
5	Series & Parallel circuits	
6	Numerical on Series & Parallel circuits	
7	Delta – Star & Star-Delta transformation	
8	Numerical on Star Delta transformation	
9	Kirchhoff 's laws (KCL & KVL)	
10	Superposition Theorem	
11	Thevenin's Theorem	
12	Numericals on Superposition & Thevenin's Theorem	
	Unit-II: Magnetic Circuit & Electromagnetism	
13	Basic concepts of Magnetic flux, Flux density, MMF, Reluctance, Magnetic field intensity & their relationship	
14	Magnetic Leakage & Fringing of flux	
15	Series & Parallel magnetic circuit	
16	Series & Parallel magnetic circuit with air gap	
17	Series & Parallel magnetic circuit without air gap	
18	Numerical on series magnetic circuit	
19	Principles of electromagnetic induction, Self and mutual induction	
20	Magnetization curves	
	Unit – III : AC fundamentals	
21	RMS and average values, Form factor, peak factor (for sinusoidal waveform only)	
22	Purely resistive, inductive & capacitive circuit	
23	Single phase AC Series circuit with resistance , inductance & Capacitance	
24	Numericals on RLC series circuit.	

25	Phasor diagrams for series circuit & Series resonance	
26	Impedance triangle, Active & reactive power.	
27	Resonance in Series R-L-C Circuit and Numericals	
	Unit – IV : Polyphase Circuit	
28	Generation of three phase EMF.	
29	3 Phase Balanced Delta and Star connected system,	
30	Voltage and Current relationship between phase and line quantities for star connection	
31	Numerical on three phase star connected system	
32	Voltage and Current relationship between phase and line quantities for Delta connection	
33	Numerical on three phase Delta connected system	
	Unit – V : Electrical Machines	
35	A) Single phase Transformer:	
36	Principle of operation	
37	Construction & Classification	
38	EMF equation, losses, efficiency, Regulation of Transformer	
39	Numericals on efficiency , regulation of transformer	
40	B) Electromechanical Energy Conversion:	
41	Construction & various parts of DC machines	
42	Classification of DC machines, Characteristics & applications of DC machines	
	Unit – VI : Electrical Apparatus & Safety	
43	Measurement of current & voltage (Ammeter & Voltmeter)	
44	Measurement of power & energy (Wattmeter & Energy- meter)	
45	Range extension of Ammeter, Voltmeter, Wattmeter & Energy- meter	
45	Necessity of Earthing, Limiting values for various installation, Types of Earthing (Pipe earthing & plate earthing)	
46	Measurement of current & voltage (Ammeter & Voltmeter)	

Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of First Year Engineering Department

AY:	2019-20 Lession Plan	
Name	Prof. Shailesh S. Dhok	Semester:- IInd
Subject	Computer Programming Subject Code:-1A4	Section : I
Leture No.	Topics	Remark
Unit-I	**Fundamental of the Computer and Computing Concepts**	
Lect1	Generation of computers	
Lect2	Classification of computers	
Lect3	Basic Anatomy of Computer System,Input Devices, Processor, Output Devices, Memory Management	
Lect4	Types of Computer Software, Overview of Operating system,	
Lect5	Networking Concepts, Microsoft Office,	
Lect6	Number systems: Decimal, Binary, Hexadecimal, Octal	
Lect7	Conversion of Numbers,Binary Arithmetic Operations	
Lect8	Programming Languages, Logic Gates	
Unit-II	**C Fundamentals:**	
Lect9	Introduction, Importance of C	
Lect10	Basic Structure of C Programs, Program execution	
Lect11	Basic programs based on C such as Printing Message	
Lect12	Adding two numbers, Interest calculations	
Lect13	Use of subroutines, math function	
Lect14	C tokens, Keywords and Identifiers,	
Lect15	Operators & their precedence, Assignment statement.	
Lect16	Declaration of Variables, Declaration of Storage Class	
Unit-III	**Operators, Expression and Input-Output operation**	
Lect17	Operators, Types of Operators: Arithmetic, Relational	
Lect18	Assignment, Increment-decrement	
Lect19	Logical operator Assignment, Conditional operator	
Lect20	Bitwise operator, Special operator	
Lect21	Evaluation of Expression	
Lect22	Precedence of Arithmetic Operators	
Lect23	Input-Output Operation: Reading and Writing Character	
Lect24	Formatted Input, Formatted Output.	
Unit - IV	**C Control constructs**	
Lect25	Decision-making using if, if-else	
Lect26	Nested if, else if ladder	
Lect27	switch-case statement	
Lect28	Operator, GotoOperator	
Lect29	Loops using for, while, do-while statements	
Lect30	break and continue statements	
Lect31	Jumps in loop	
Lect32	Concise Test Expressions	
Unit - V	**Array, Strings and Structures**	
Lect33	Introduction to array, One Dimensional Array: Declaration & Initialization,	

Lect34	Two Dimensional: Declaration & Initialization, Multi Dimensional,	
Lect35	Strings: Declaration and Initialization, Reading String from terminal, Writing String to Screen	
Lect36	Putting Strings together, Comparison of Two Strings	
Lect37	String-Handling Functions	
Lect38	Table of Strings, Other features of String,	
Lect39	Structures – Define, Declaration	
Lect40	Accessing the members of a structure	
Unit - VI	**User Defined Functions, Pointers and File Management**	
Lect41	Functions, Need for User defined Functions	
Lect42	Multi Function Program, Elements of User Defined Functions	
Lect43	Return Values and their types, Function Calls	
Lect44	Function Declaration, and Categories of Functions	
Lect45	Definition and uses of pointers, Accessing the address of a variable,	
Lect46	Introduction to File Management	
Lect47	Defining and Opening File, Closing File, Input/output Operations on File.	
Lect48	Input/output Operations on File.	

2019-20
(I & II)

Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of First Year Engineering Department

AY:-

Lesson Plan

Name of Faculty :- Prof. DR. K. D. Umatey		Semester: I & II
Subject:	ENGG-CHEMISTRY (1B21)	Section: 1W
Lecture No.	**Topics**	**Remark**
	Water Treatment and Analysis	
1	Introduction, Hardness of water, Types of hardness - temporary & permenant hardness, Units of Hardness and their inter-conversion	
2	Hardness determination by EDTA method	
3	Disadvantages of hard of water, Boiler troubles: Scale and Sludge formation, Caustic embritlement,	
4	Priming & Foaming, Boiler corrosion	
5	Zeolite process and Reverse Osmosis (RO)	
6	Softening of hard water by Ion exchange process & its regeneration	
7	Numerical Problem based on Hardness of water	
8	Numerical Problem based on Zeolite process	
	UNIT No. 2	
	Corrosion and Energy storage system	
9	Introduction of corrosion, Dry and its mechanism	
10	Wet corrosion and its mechanism	
11	Pitting, waterline and inter-granular corrosion	
12	Galvonic and stress corrosion	
13	Role of design and material selection in corrosion control	
14	Anodic and cathodic protection, Hot dipping(Galvanizing and tinning processes)	
15	Basic principles of batteries & their types,	
16	Construction, working and application of lithium- ion battery, Ni-Cd battery.	
	UNIT No. 3	
	Engineering Materials	
17	Introduction of Portland cement, Raw materials for the manufacturing of portland cement.	
18	Manufacturing of portland cement by wet Process	
19	Properties of cement- Setting and hardening	
20	Heat of hydration and soudness of cement	
21	Introductuion of Lubricants and its classification, Machanism of Lubrication	
22	Testing of lubricants for viscosity and viscosity index, flash and fire point	
23	Industrial Material: Definition, properties and Applications of ceramics & refractories.	
24	Industrial Material: Definition, properties and Applications of thermal insulating material and Nanomaterial	
	UNIT No. 4	
	Energy Science	

	Energy Science	
25	Introduction of Fuels and its classification, Calorific value and its type- net and gross calorific value	
26	Proxiamte and its significance	
27	Ultimate analysis and its significance	
28	Cracking of petroleum fractions, Use of gasoline and diesel in internal combusion engines	
29	Knocking, chemical constitution and knoking properties, octane and cetane number	
30	Numerical based on combustion	
31	Numerical based on combustion	
32	Numerical based on combustion	
	UNIT No. 5	
	Polymer chemistry	
33	Introduction, Classification of polymer on the basis of their structure	
34	Method of polymerization	
35	Cationic and Anionic mechanism of polymerization	
36	Thermosetting and thermoplastic resin	
37	Preparation, properties and uses of PVC, Teflon,	
38	Preparation, properties and uses Bakelite, Introduction of Natural rubber, vulcanization of rubber	
39	Preparation, properties and uses of synthetic rubber-styrene, nitrile and butyl rubber	
40	Biodegradable polymers: properties and applications, Conducting polymers: Introduction, types of conducting polymer and their examples	
	UNIT No. 6	
41	Phase rule, Explanation of the terms: Phase, Components and Degree of Freedom	
42	Application of Phase rule to One Component System (Water System),	
43	Condensed phase rule and its application to two component system (Bi-Cd).	
44	Principles and instrumentation of spectrophotometry	
45	U.V and.IR spectroscopy	
46	Principle & instrumentation of NMR spectroscopy	
47	Surface characterization technique: X-ray diffraction	

Department of Management Studies
Semester –I
Teaching Plan-2019-2020
Subject: Accounting for Managers
Subject Teacher: Prof. G.D. Pachaghare

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	01	Introduction to Accounting and Book Keeping, Single Entry System	Accounting for Mgt., Dr. Jawaharlal, Himalaya Pub. House. Accounting for Mgt., S.K. Bhattacharya and Dearden J., New Delhi, Vikas, 1996 Accounting for Mgt., Khan and Jain.	01	
	02	Double Entry System, Basic Accounting Terms		01	
	03	Financial Accounting, Management Accounting & Cost Accounting		01	
	04	Accounting Standards: Introduction, GAAP		01	
	05	IFRS, GAAP Vs IFRS		01	
	06	Case Study and Situation		01	
Total Lecture				**06**	
II	01	Preparation of Accounting Books: 3 Golden Rules of Accounting	Accounting for Mgt., Dr. Jawaharlal, Himalaya Pub. House. Accounting for Mgt., S.K. Bhattacharya and Dearden J., New Delhi, Vikas, 1996 Accounting for Mgt., Khan and Jain.	01	
	02	Journal Entries		01	
	03	Ledger Preparation		01	
	04	Trial Balance		02	
	05	Preparation of Trading Account, Manufacturing Account: Part 1		01	
	06	Profit and Loss Account		01	
	07	Understanding Balance Sheet		01	
	08	Numerical on Balance Sheet			
	09	Final Account Problems: Part 1			
	10	Final Account Problems: Part 2			
	11	Comparative Analytical Techniques (CAT)			
	12	Relative Analytical Techniques (RAT)			
Total Lecture				**12**	
III	01	Depreciation Methods: Part - I	Accounting for Mgt., Dr. Jawaharlal, Himalaya Pub.	01	
	02	Depreciation Methods: Part		01	

		- II	House. Accounting for Mgt., S.K. Bhattacharya and Dearden J., New		
	03	Inventory Valuation Methods – Part I		01	
	04	Inventory Valuation Methods – Part II		01	
	05	Inventory Valuation Methods – Part III		01	
	06	Case Study and Situation		01	
Total Lecture				**06**	
IV	01	Management Accounting Concept, Need, Importance & Scope	Accounting for Mgt., Dr. Jawaharlal, Himalaya Pub. House. Accounting for Mgt., S.K. Bhattacharya and Dearden J., New Delhi, Vikas, 1996 Accounting for Mgt., Khan and Jain.	01	
	02	Budget & Budgetary control: Part I		01	
	03	Budget & Budgetary control: Part II		01	
	04	Budget & Budgetary control: Part III		01	
	05	Performance & zero Based Budgeting		01	
	06	Case Study and Situation		01	
Total Lecture				**06**	
V	01	Cost Sheet: Introduction, Elements of Cost Sheets	Accounting for Mgt., Dr. Jawaharlal, Himalaya Pub. House. Accounting for Mgt., S.K. Bhattacharya and Dearden J., New Delhi, Vikas, 1996 Accounting for Mgt., Khan and Jain.	01	
	02	Types of Costing, Costing for Decision Making		01	
	03	Marginal Costing: Part I		01	
	04	Marginal Costing: Part I		01	
	05	Absorption Costing: Part I		01	
	06	Absorption Costing: Part II		01	
	07	Case Study and Situation		01	
Total Lecture				**07**	

.

HEAD
Department of Management Studies
P.R.M.I.T. & R. Badnera

PRMITR-Department of Management Studies
MBA-Semester –I
Teaching Plan-2019-2020

Subject: Business Ethics **Subject Teacher: Prof. R. K. Dhanuka**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	DATE
I		***INDIAN MANAGEMENT**			
	1.1	Indian Management – Principles	*Business Ethics, CSV Murthy, Himalaya Publications. *Indian Ethos and Values ,N.M.Khandelwal, Himalaya Publications	02	
	1.2	Models & Theory of Karma,		02	
	1.3	Theory and Practices of Holistic Management and its relevance		02	
	1.4	Case Problem		01	
	1.5	Case Study		01	
		TOTAL LECTURES		**08**	
II		***ETHICS**			
	2.1.	Ethics – Meaning & Objectives Sources of Ethics	*Business Ethics, CSV Murthy, Himalaya Publications. *Indian Ethos and Values ,N.M.Khandelwal, Himalaya Publications	02	
	2.2.	Types of Business Ethics		01	
	2.3.	Factors influencing Business Ethics		01	
	2.4.	Ethics V/s Morals and Values		01	
	2.5.	Case Problem		01	
	2.6	Case Study		01	
		TOTAL LECTURES		**07**	
III		***MANAGING ETHICS**			
	3.1.	Managing Ethics – Theories of Ethics	*Business Ethics, CSV Murthy, Himalaya Publications. *Indian Ethos and Values ,N.M.Khandelwal, Himalaya Publications	01	
	3.2.	Ethical Dilemma		01	
	3.3.	Codes of Ethics		01	
	3.4.	Normative Ethics in Management		01	
	3.5.	Need and Values of Ethics in Global Change		01	
	3.6.	Behavioral Aspects of Ethics and Values		01	
	3.7	Case Problem		01	
	3.8	Case Study		01	
		TOTAL LECTURES		**08**	

IV	4.1. 4.2. 4.3. 4.4 4.5	***INDIAN VALUES IN MANAGEMENT** Indian Values in Management – Secular and Spiritual Values Science and Human Values Lessons from Ancient Indian Educational System Case Problem Case Study **TOTAL LECTURES**	*Business Ethics, CSV Murthy, Himalaya Publications. *Indian Ethos and Values ,N.M.Khandelwal, Himalaya Publications	01 01 02 01 01 **06**	
V	5.1. 5.2. 5.3. 5.4. 5.5 5.6	***STRESS MANAGEMENT** Stress Eustress & distress Indian Perspective of Stress Management, Reasons for stress at workplace Coping with a stress **Case Problem** **Case Study** **TOTAL LECTURES**	*Business Ethics, CSV Murthy, Himalaya Publications. *Indian Ethos and Values ,N.M.Khandelwal, Himalaya Publications	01 01 01 01 01 01 **06**	

Note: No of available session are 35 & include at least one case study in each unit

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Department of Management Studies
P.R.M.I.T. & R, Badnera

Department of Management Studies					
Semester – I (Session 2019-2020)					
Subject: Managerial Economics					
SUBJECT TEACHER: Prof. P. A. Kalmegh					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Introduction to Managerial Economics	Managerial Economics- Dr. D.M. Mithani HP Managerial Economics- Geetika	1	Total Lectures for Unit I: 6
	2	Concept & Need of Managerial Economics		1	
	3	Scope of Managerial Economics		1	
	4	Techniques and Applications of Managerial Economics		2	
	5	Case Study		1	
II	1	Utility Analysis & Marshal Approach	Managerial Economics- Dr. D.M. Mithani HP Managerial Economics- Geetika Managerial Economics- H. L. Ahuja	1	Total Lectures for Unit II: 8
	2	Law of diminishing marginal utility & problems		1	
	2	Demand Analysis, Determinants of demand		1	
	3	Demand Function, Law of Demand-problems		1	
	4	Elasticity of Demand and demand forecasting.		1	
	5	Law of Supply and Supply Analysis		1	
	6	Case Study/ Problems		2	
III	1	Intro. To production, Production & Cost function,	Managerial Economics- Dr. D.M. Mithani HP Managerial Economics- Geetika Managerial Economics- Ahuja	1	Total Lectures for Unit III: 8
	2	Law of diminishing marginal returns		1	
	3	Production Iso-quant, Iso-cost, Expansion path		1	
	4	Problems on Production Iso-quant, Iso-cost		1	
	5	Economies and Diseconomies of scale		1	
	6	short run and long run cost behavior		1	
	7	Case Study/ Problems		2	
IV	1	Theories of firm	Managerial Economics- Dr. D.M. Mithani HP Managerial Economics- Grrtika Managerial Economics- Ahuja	1	Total Lectures for Unit IV: 8
	2	Profit Maximization		2	
	3	Sales Maximization		1	
	4	Managerial Utility Model		1	
	5	Simon Satisfying Behaviour Model		1	
	6	Case Study/Problems		2	
V	1	Market Structure-Perfect Competition,	Managerial Economics- Dr. D.M. Mithani HP Managerial Economics- H. L. Ahuja	1	Total Lectures for Unit V: 6
	2	Monopoly, Oligopoly, Monopolistic Competition,		1	
	3	short term pricing in these market structure		2	
	4	Case Study/ Problems		2	
			Total Lectures Required	**36**	

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Department of Management Studies
Semester –I (Session 2019-2020)
Subject: Management Information System
SUBJECT TEACHER: Prof. S. B. Diwan

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Management Information System : An Overview	Jawadekar W.S., Management Information System; D.P.Goyal, Management Information System; Gupta, Management Information System	1	Total Lectures for Unit I: 6
	2	Nature and Scope of MIS		1	
	3	Subsystems of MIS , MIS & Computer		2	
	4	MIS in Academics, MIS in Business		1	
	5	Caselet on Subsystem on MIS & MIS in Business		1	
II	1	Development of MIS: Information Requirement	Jawadekar W.S., Management Information System; D.P.Goyal, Management Information System; Gupta, Management Information System	1	Total Lectures for Unit II: 8
	2	Designing of MIS		1	
	3	Implementation of MIS		1	
	4	System Development Models		2	
	5	Quality in MIS		1	
	6	MIS Life Cycle		1	
	7	Caselet on MIS Designing, Implementation of MIS		1	
III	1	Decision-Making concepts	Jawadekar W.S., Management Information System; D.P.Goyal, Management Information System; Gupta, Management Information System	1	Total Lectures for Unit III: 8
	2	Decision Making : Decision Making Process		1	
	3	Stages in Decision Making ,Individual & Organizational Decision Making		2	
	4	Decision Making Models		1	
	5	Information System support for Decision Making Phase, MIS and Decision-Making		2	
	6	Caselet on Decision Making in MIS		1	
IV	1	Decision Support System : Concept, Constructing a DSS	Jawadekar W.S., Management Information System; D.P.Goyal, Management Information System; Gupta, Management Information System	1	Total Lectures for Unit IV: 8
	2	Executive Information System(EIS)		1	
	3	Artificial Intelligence System(AIS)		1	
	4	Knowledge Based Expert System(KBES)		2	
	5	Enterprise Management System(EMS)		1	
	6	Decision Support Management System(DSMS)		1	
	7	Caselet on Enterprise Management System		1	
V	1	MIS Application: Enterprise Resource Planning(ERP)	Jawadekar W.S., Management Information System; D.P.Goyal, Management Information System; Gupta, Management Information System	1	Total Lectures for Unit V: 6
	2	MIS & ERP		1	
	3	Business Process Re-Engineering(BPR)		1	
	4	MIS & BPR		1	
	6	Case Study on ERP		1	
	7	Case Study on BPR		1	
			Total Lectures Required	**36**	

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Department of Management Studies
P.R.M.I.T. & R, Badnera

Department of Management Studies				
Semester –I (Session 2019-2020)				
Lesson Plan				
Subject: Managerial Skills Development			**Subject Teacher: Yuvaraj Vaidya**	
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**
I	1	Managerial Skills- Nature & Concepts	http://arulmj.tripod.com/mgrlskls.html	2
	2	Objectives, significance	http://www.answers.com/Q/Explain_managerial_roles_and_managerial_skills	1
	3	Employability Skills	http://www.kent.ac.uk/careers/sk/top-ten-skills.htm	1
	4	Soft Skills	https://bemycareercoach.com/soft-skills/list-soft-skills.html	1
	5	Technical Skills.	http://study.com/academy/lesson/what-are-technical-skills-in-management-definition-examples-quiz.html	1
	6	Case Study	Uniersity Question Papers	1
II	7	Importance & Nature of communication,	Business Communication by M Raman & P Singh	1
	8	Verbal and Non Verbal,	Business Communication by U Rai & S Rai	1
	9	Talking and Speaking	Business Communication by M Raman & P Singh	1
	10	Principles of effective communication,	https://www4.uwm.edu/cuts/bench/commun.htm	1
	11	Process of communication,	Business Communication by U Rai & S Rai	1
	12	Barriers of Communication,	Business Communication by U Rai & S Rai	1
	13	Types of Communication.	Business Communication by U Rai & S Rai	1
	14	Case Study	Uniersity Question Papers	1
III	15	Do's and Don'ts of Business Writing	Business Communication by M Raman & P Singh	2
	16	Business correspondence	Business Communication by M Raman & P Singh	1
	17	Report Writing	Business Communication by M Raman & P Singh	1

	18	e-communication	Business Communication by M Raman & P Singh	1
	19	Resume Writing, C.V. Writing,	Business Communication by U Rai & S Rai	1
	20	Case Study	Uniersity Question Papers	1
IV	21	Listening Skills	Business Communication by M Raman & P Singh	1
	22	Body Language	http://www.businessballs.com/body-language.htm	1
	23	Public Speaking	Business Communication by M Raman & P Singh	1
	24	Negotiation Skill.	https://www.ldsjobs.org/ers/ct/articles/effective-negotiation-skills?lang=eng	1
	25	Case Study	Uniersity Question Papers	1
V	26	Interview Techniques	Business Communication by M Raman & P Singh	2
	27	Group Discussions	Business Communication by M Raman & P Singh	1
	28	Presentation Skill.	Business Communication by U Rai & S Rai	1
	29	Meetings	Business Communication by U Rai & S Rai	1
	30	Case Analysis	Uniersity Question Papers	1
	31	Brain Storming	http://www.mindtools.com/brainstm.html	1
	32	Paper Writing and Presentation	http://www.miami.edu/index.php/undergraduate_research_and_community_outreach/research_opportunities_for_um_undergrads/presentations_research_papers/	1
	33	Case Study	Uniersity Question Papers	1

Total lectures required	36

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Department of Management Studies

Semester –I (Session 2019-2020)

Subject: **MBA/ 105 Organizational Behavior and Effectiveness**

SUBJECT TEACHER: Prof. M.M. Nistane

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to Organizational & Individual Behavior	Organizational Behaviour-Aswathappa, K. Organizational Behaviour- Robbins, Judge, Vohra	1	Total Lectures for Unit I: 7
	2	Personality		1	
	3	Activity on personality traits & case study		1	
	4	Learning-concepts and activity		1	
	5	Perception-concept and cases		1	
	6	Attitude & Beliefs		1	
	7	Case Study		1	
II	1	Group Behavior – Meaning	Organizational Behaviour-Aswathappa, K. Organizational Behaviour-Fred Luthans Organizational Behaviour- Robbins, Judge, Vohra	1	Total Lectures for Unit II: 8
	2	Types of Groups-Concept & application		1	
	3	Group Process- concept and activity		1	
	4	Group Dynamics (Videos on group dynamics)		2	
	5	Group Dynamics – factors influencing intergroup behavior and managing intergroup behavior		2	
	6	Case Study		1	
III	1	Organizational Change – Concept & Need	Organizational Behaviour-Aswathappa, K. Organizational Behaviour-Fred Luthans Organizational Behaviour- Robbins, Judge, Vohra	2	Total Lectures for Unit III: 7
	2	Change Process (video on organizational change)		2	
	3	Reasons for Resistance to Change- concept and activity		1	
	4	Measures to Overcome Resistance to Change		1	
	5	Case Study		1	
IV	1	Organizational Processes – Organizational Power	Organizational Behaviour-Aswathappa, K. Organizational Behaviour-Fred Luthans Organizational Behaviour- Robbins, Judge, Vohra	2	Total Lectures for Unit IV: 7
	2	Organizational Politics-concept and video		2	
	3	Empowerment & Conflict –concept and activity		2	
	4	Case Study		1	
V	1	Organizational Effectiveness – Creativity and Innovation- concept and activity	Organizational Behaviour-Aswathappa, K. Organizational Behaviour-Fred Luthans Organizational Behaviour- Robbins, Judge, Vohra	2	Total Lectures for Unit V: 7
	2	Corporate Governance		2	
	3	Management of Gender Issues		2	
	4	Case Study		1	
			Total Lectures Required: 36		

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Department of Management Studies, PRMIT&R, Badnera-Amravati.

Lesson Plan Year 2019-2020

Subject: Principle and Practices of Management (101)
Subject Teacher: Prof. S. A. Pachkhede

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	The Concept of Management	T. Ramasamy, Principles of Management, 9th edition, Himalaya Publishing House, Mumbai, 2009	1	Total Lectures for Unit I: 7
	2	Development of management thought-various, approaches		1	
	3	Mathematical, Behavioral, Scholastic schools of management and systems		1	
	4	Contingency approaches to Management		1	
	5	Contribution of Taylor		1	
	6	Contribution of Fayol & Elton Mayo		1	
	7	Case study		1	
II	1	The Nature and Purpose of Planning, Objectives of Planning,	T. Ramasamy, Principles of Management, 9th edition, Himalaya Publishing House, Mumbai, 2009	2	Total Lectures for Unit II: 8
	2	Planning Premises, Policies, Procedures and Methods;		2	
	3	Forecasting and Planning, Planning Process,		2	
	4	The Process of Decision Making.		1	
	5	Case Study		1	
III	1	Organizing: Nature and Purpose of Internal Organization of Business Enterprise	Singh, Dalip Emotional Intelligence at Work, Response Books, Sage Publications, Delhi 2001. T. Ramasamy, Principles of Management, 9th edition, Himalaya Publishing House, Mumbai, 2009	1	Total Lectures for Unit III: 8
	2	Principles of Organizing; Span of Management		1	
	3	Departmentation Line and Staff Authority relationship; Service departments		2	
	4	Centralization vs. Decentralization of authority; Delegation of Authority		2	
	5	Committees, Staffing		1	
	6	Case Study		1	
IV	1	Directing, Nature of Directing, Leadership Concept and Styles	T. Ramasamy, Principles of Management, 9th edition, Himalaya Publishing House, Mumbai, 2009	2	Total Lectures for Unit IV: 7
	2	Motivation Concept, Theory: Maslow, Hertzberg, Supervision		2	
	3	Concept of Communication, Coordination; Need & Principles.		2	
	4	Case Study		1	
V	1	Control; Process of Control; Techniques and Tools	T. Ramasamy, Principles of Management, 9th edition, Himalaya Publishing House, Mumbai, 2009	2	Total Lectures for Unit V: 6
	2	Management by objectives		1	
	3	Participative Management		1	
	4	Management by exception		1	
	5	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Department of Management Studies(M.B.A.)

Semester – (Session 2019-2020)

Subject: Quantitative Methods

SUBJECT TEACHER: Prof. K. S. Bijawe

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to Mathematical Derivatives	Business Statistics by S.P. Gupta and M.P.Gupta , Fundamentals of Operations Research Macmillan By Sharma.	1	Total Lectures for Unit I: 7
	2	Introduction to Quantitative Methods applications		2	
	3	importance, scope, limitations		2	
	4	Types		1	
	5	Revision		1	
II	1	Arithmetic Progression	Business Statistics by S.P. Gupta and M.P.Gupta , Fundamentals of Operations Research Macmillan By Sharma.	2	Total Lectures for Unit II: 8
	2	Geometric Progression		2	
	3	Harmonic Progression & their managerial application.		2	
	4	Determinants & Matrices		1	
	5	Revision		1	
III	1	Frequency Distribution & their analysis	Business Statistics by S.P. Gupta and M.P.Gupta , Fundamentals of Operations Research Macmillan By Sharma.	2	Total Lectures for Unit III: 7
	2	Measures of Central tendency		2	
	3	Measures of Dispersion.		2	
	4	Revision		1	
IV	1	Correlation & Regression analysis	Business Statistics by S.P. Gupta and M.P.Gupta , Fundamentals of Operations Research Macmillan By Sharma.	3	Total Lectures for Unit IV: 6
	2	Time series Analysis & forecasting		2	
	3	Revision		1	
V	1	Linear Programming: Formulation & Graphical solution method	Linear Programming and Decision Making By Narag, Business Statistics by S.P. Gupta and M.P.Gupta ,	2	Total Lectures for Unit V: 8
	2	Probability theory		2	
	3	types, distributions		2	
	4	Bi-nomial, Poisson & Normal		1	
	5	Revision		1	
			Total Lectures Required:	**36**	

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Department of Management Studies

Even-Semester – I (Session 2019-20)-Teaching Plan

Subject Teacher: Prof.Gauri S.Kalmegh **Subject: BE (201)**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1 2 3 4 5 6	Introduction to subject & syllabus Concept & nature of Business Scope of Business, business organization Concept of Industry, its types Economic-Industry-Company interface Case study on relevant environment for business	**"Essentials of Business Environment" by K. Ashwathhapa**	1 1 1 1 1 1	
		Total		**06**	
II	1. 2. 3. 4. 5.	Business Environment Types of Environment External & Internal Environment Controllable & Non-Controllable Environment Case study on business environment Case lets	**"Essentials of Business Environment" by K. Ashwathhapa**	1 1 2 1 1	
		Total		**06**	
III	1. 2. 3. 4. 5. 6.	Introduction to Business & Society Concept of Social Audit of Business Concept of Foreign Direct Investments Concept of Economic Zones Case Study on Business & Society Caselet on Social Audit of Business	**"International Business" by Bhalla V.K. and S Shivaramu**	1 2 1 2 1 1 1	
		Total		**08**	
IV 1. 2. 3. 4. 5. 6.	1. 2. 3. 4. 5. 6.	Introduction to LPG Business in post LPG Scenario Case let on Business in post LPG Concept of Disinvestment WTO Agreements Concept of Business & Regional Blocks	**"International Economy";Liberalization Process by Bhalla V.K.**	1 1 1 1 1 2	
		Total		**07**	
V	1. 2. 3. 4. 5.	Concept of Financial Sector reforms Fiscal & Monetary Sector reforms Economic Reforms Concept of Social Justice Business Environment Issues of Tourism & Hospitality Industry Healthcare & Knowledge Industry	**"International Business" by Bhalla V.K. and S Shivaramu**	1 2 2 1 2 1	
		Total		**09**	**36**

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Department of Management Studies
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Department of Management Studies

Even-Semester – I (Session 2019-20)-Teaching Plan

Subject Teacher: Prof.Gauri S.Kalmegh **Subject: FM (204)**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1 2 3 4 5	Introduction to syllabus & Objectives of Subject Concept of Financial Management-definition & Objectives Financial Analysis & Control(Numerical) Cost-Volume Profit Analysis-Concept & Numerical Operating & Financial Leverage (Numerical)	**"Financial Management-Theory & Practices" by Prasanna Chandra**	1 1 2 2 2	
		Total		**08**	
II	**1.** **2.** **3.**	Time Value of Money-Introduction, Concept(Numerical) Investment & Capital Structure Decisions-Concept & Numerical Optimum Capital Structure-Concept & Numerical.	**"Financial Management" by M.Y.Khan & P.K.Jain**	**2** **3** **2**	
		Total		**07**	
III	**1.** **2.** **3.**	Introduction to Sources of Financing-Log term & Short term Financing Cost of different sources of raising capital (numerical) Weighted Average cost of capital (numerical)	**"Financial Management" by M.Y.Khan & P.K.Jain**	**2** **2** **3**	
		Total		**07**	
1. **2.** **3.** **4.** IV **5.** **6.**	**1.** **2.** **3.** **4.** **5.**	Concept of Valuation of Bonds & Stock Problems on valuation of Bonds & Stock Rates of Return (Numerical) Methods of Capital Budgeting Numerical on capital budgeting	**"Financial Management" by M.Y.Khan & P.K.Jain**	**1** **2** **1** **1** **2**	
		Total		**07**	
V	**1.** **2.** **3.** **4.**	Introduction to working capital Management of working capital Estimation of working capital Financing & Dividend Policy	**"Financial Management" by M.Y.Khan & P.K.Jain**	**1** **2** **2** **2**	
		Total		**07**	**36**

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Department of Management Studies
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Department of Management Studies

Even-Semester – II (Session 2019-20)-Teaching Plan

Subject Teacher: Prof.Gauri S.Kalmegh **Subject: MS (208)**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1 2 3 4	Introduction to syllabus & objective of this course Concept of Management Science Role of Management science in decision making Decision Theory Decision Tree	**"Introduction to Management Science" by Gould, F.J.**	1 2 2 2	
		Total		**07**	
II	**1.** **2.** **3.**	Integer Linear Programming Branch & Bound Algorithm Sensitivity Analysis	**"Linear Programming & Decision Making" by Narag A.S.**	**2** **3** **2**	
		Total		**07**	
III	**1.** **2.** **3.**	Introduction to transportation & Assignment Models Numerical on Transportation problem Numerical-other	**"Operations Research" by Sharma J.K.**	1 3 3	
		Total		**07**	
IV	**1.** **1.** **2.** **2.** **3.** **3.** **4.** **4.**	Network Analysis-Introduction, Concept PERT CPM Numerical-extra	**"Operations Research" by Sharma J.K.**	1 2 2 2	
		Total		**07**	
V	**1.** **2.** **3**	Markov Chain Analysis Game Theory Simulation	**"Operations Research" by Sharma J.K.**	**2** **3** **3**	
		Total		**08**	**36**

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Department of Management Studies
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Department of Management Studies

Semester –II (Session 2019-2020)

Subject: Human Resource Management

Subject Teacher: Prof. Y. R. Vaidya

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	**1**	HRM Scenario and Acquisition of Human Resources	Human Resource Management:P.Subba Rao	**2**	
	2	HRM the global and Indian Scenario, excellence		**1**	
	3	Human resource planning.		1	
	4	Human resource information system..		1	
	5	Recruitment and selection strategies		1	
	6	Case Let		1	
		Total		7	
II	1	Developing Human Resources- HRD-Concept, Multiple Goals	Human Resource Management:P.Subba Rao	2	Page. No: 23-25, 115-121, 131-137, 180-186, 152-168,
	2	Functions And Organizational Effectiveness		1	
	3	Performance Appraisal System		1	
	4	Potential Appraisal System And Succession Planning		1	
	5	Career Planning And Development		1	
	6	Assessment And Development Centers , Training And Development.		1	
	7	Videos, Case Lets		1	
		Total		**8**	
III	1	Motivating Human Resources: Motivation At Work-Concept,	Human Resource Management:P.Subba Rao,	2	256-264, 393-397, 63-65,
	2	Objectives, Types And Applications		1	
	3	Participative Management-Approaches And Applications		1	
	4	Employee Empowerment-Concept, Nature,		2	
	5	Objectives, Schemes And Applications.		1	
	6	Case Lets		1	
		Total		**8**	
IV	**1**	Maintenance of Human Resources	Human Resource Management:P.Subba Rao,	**2**	**201-208**
	2	Reward System		**1**	
	3	Quality of Work Life		**1**	
	4	Organisation Development		**1**	
	5	Case Let		1	
				6	
IV	**1**	Human Resources and Knowledge Era	Human Resource Management:P.Subba Rao,	**1**	
	2	Knowledge Creation and Management		**1**	**201-208**
	3	Virtual Organizations and HR Trends		**1**	
	4	Learning Organizations		**1**	
	5	Strategic Human Resource Management		**1**	
	6	International HRM-some Key issues.		1	
	7	Case Let		1	
		Total		7	
		Schedule Lecture		**36**	

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Department of Management Studies
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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Management Studies(M.B.A.)

Lesson Plan
Subject: Logistic Management
Semester –II (Session 2019-2020)
Subject Teacher: Prof. G.D. Pachaghare

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to logistics	Christopher M, Logistics and Supply Chain Management: Strategies for Reducing Costs and Improving Services, London, Pitsman, 1992.	1	Total Lectures for Unit I: 6
	2	Logistics interface with Production and Marketing		1	
	3	Performance Measures of Logistics		2	
	4	Reverse Logistics		1	
	5	Case study		1	
II	1	Logistics and Distribution System	Shridhar Bhat, Logistics & Supply Chain Management, Pearson Education, 2009	1	Total Lectures for Unit II: 8
	2	Logistics System Analysis and Design		2	
	3	Warehousing and Distributing Centers		2	
	4	Channels Management-Policies		1	
	5	Information Systems		1	
	6	Case Study		1	
III	1	Location; Transportation Systems	Ballon Ronald, Business Logistics/ Supply Chain Management, Pearson Education	1	Total Lectures for Unit III: 9
	2	Transportation Management		3	
	3	Transportation Infrastructure Facilities and Services		2	
	4	Dispatch and Routing Decisions and Models		2	
	5	Case Study		1	
IV	1	Inventory Management Decisions	Shapiro, R., Logistics Strategy: Cases and Concepts, St. Paul, West, 1995.	2	Total Lectures for Unit IV: 5
	2	Logistics Audit and Control		1	
	3	Packaging and Logistical Materials Handling		1	
	4	Case Study		1	
V	1	International Logistic Management	Christopher M, Logistics and Supply Chain Management: Strategies for Reducing Costs and Improving Services, London, Pitsman, 1992.	2	Total Lectures for Unit V: 8
	2	Global Logistics: Barriers, Drivers		1	
	3	Global Logistics: Export & Import Documentation		2	
	4	Regional Integration		1	
	5	Logistic Outsourcing		1	
	6	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Department of Management Studies Semester –II (Session 2019-2020)

Teaching Plan

Subject: Marketing Management.

Subject Teacher: Prof. S.B. Diwan

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Nature & Scope of Marketing	**Marketing Management- Kotler, Koshy & Jha; Marketing Management-Text & Cases- Dr.K. Karunakaran**	1	
	2	Functions of Marketing Management		2	
	3	Marketing organisation		2	
	4	Corporate Orientation towards the Market Place		1	
	5	Marketing Environment & Environment Scanning		1	
	6	Case Study		1	
		Total Lectures		**8**	
II	1	Meaning & Significance of Marketing Planning	**Marketing Management- Kotler, Koshy & Jha; Marketing Management-Text & Cases- Dr.K. Karunakaran**	1	
	2	Strategic Planning		2	
	3	Planning of Marketing Mix Elements		2	
	4	Market Segmentation		1	
	5	Positioning		1	
	6	Case Study		1	
		Total Lectures		**8**	
III	1	Product Decisions, Product Mix	**Marketing Management- Kotler, Koshy & Jha; Marketing Management-Text & Cases- Dr.K. Karunakaran**	1	
	2	Product Life Cycle		2	
	3	New Product Development		1	
	4	Branding & Packaging Decisions		2	
	5	Pricing Model & Strategies		1	
	6	Case Study		1	
		Total Lectures		**8**	
IV	1	Physical Distribution Decisions & Targetting	**Marketing Management- Kotler, Koshy & Jha; Marketing Management-Text & Cases- Dr.K. Karunakaran**	2	
	2	Major Channels		1	
	3	Channels of Consume Product		1	
	4	Channels of Industrial Product		1	
	5	Case Study		1	
		Total Lectures		**6**	
V	1	Promotion Mix	**Marketing Management- Kotler, Koshy & Jha; Marketing Management-Text & Cases- Dr.K. Karunakaran**	1	
	2	Advertising		1	
	3	Sales Promotions		1	
	4	Publicity & Personal Selling		1	
	5	Introduction to Marketing Research & its Signficance		1	
	6	Case Study		1	
		Total Lectures		**6**	
				36	

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Department of Management Studies
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Department of Management Studies

Semester –II (Session 2019-2020)

Teaching Plan

Subject: Production & Operations Management **Subject Teacher:Prof.K. S. Bijawe**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1.	Nature & scope of Production & Operations Management.	Chary S.N. , Adam & Ebert R.S. Goel Scholarly articles;	2	
	2.	Facility Location, Types of Manufacturing Systems		2	
	3.	Plant Layout; Types, Planning & Analysis		2	
	4.	Case Study		1	
II	1.	Production Planning & Control; Objectives, Functions, Production Planning, Production Control, Role of PPC.	M. Mahajan R.S Goel Chary S.N. ; Scholarly articles;	3	
	2.			2	
	3.	Production Scheduling		1	
	4.	Industrial Safety			
	5.	Case Study		1	
III	1.	Capacity planning- Measures, strategies, Aggregate Planning, Quality assurance, Quality control,	Martand Telsang Chary S.N.; Mahajan	3	
	2.	Statistical quality control- concept & types of control charts.		2	
	3.	TQM- ISO 9000, Quality circles.		2	
	4	Case Study		1	
IV	1.	Work Study: Importance, scope, work content, method study- steps, data recording techniques, motion economy.	Martand Telsang M. Mahajan	2	
	2.	Work measurement- Scope, computation of standard time, work sampling.		2	
	3.	Maintenance management- Objectives, scope, types of maintenance, maintenance organization		2	
	4.	Case Study		1	
V	1.	Materials Handling- Principles, types of material handling equipment & their applications, Purchase management, Stores management.	Chunawalla R.S. Goel Adam & Ebert	3	
	2.	Inventory control- objectives, scope, inventory models & their applications.		3	
	3.	Case Study		1	

Note: No of available session are 36 & include at least one case study in each unit

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Department of Management Studies
Semester –II (Session 2019-2020)
Subject: Research Methodology
SUBJECT TEACHER: Prof. P. A. Kalmegh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to research methodology	Research Methodology By Dr. S.L. Gupta & Hitesh Gupta Business Research Methodology J.K. Sachdeva	1	7
	2	Research and Scientific Method		1	
	3	Nature and Scope of research methodology		1	
	4	Problem & Hypothesis formulation		1	
	5	Research objectives		1	
	6	Value & cost of information		1	
	7	Case study/Numerical		1	
II	1	Organisation structure for research	Research Methodology By Dr. S.L. Gupta & Hitesh Gupta Research Methodology By C.R. Kothari	1	7
	2	Research process		2	
	3	exploratory research, descriptive & experimental research design		2	
	4	Research Agencies- Government and Non Government		1	
	5	Case study/Numerical		1	
III	1	Data-Types of Data	Research Methodology By C.R. Kothari Business Research Methodology J.K. Sachdeva	1	7
	2	Methods of primary data collection, observation, questionnaire, interview, survey method		1	
	3	Modern tools of data collection		1	
	4	Schedules, tabulation, analysis and interpretation of primary data		2	
	5	Case study/Numerical		2	
IV	1	Attitude measurement Techniques	Research Methodology By Dr. S.L. Gupta & Hitesh Gupta Business Research Methodology J.K. Sachdeva	1	6
	2	Motivational Research Techniques.		1	
	3	Sample Design		1	
	4	Selection of Appropriate Statistical Techniques.		1	
	5	Case study/Numerical		2	
V	1	Testing of Hypothesis	Business Research Methods By Naval Bajpai Research Methodology By C.R. Kothari	2	8
	2	Use of Statistical software		1	
	3	Factor analysis		1	
	4	conjoint analysis		1	
	5	Regression analysis,		1	
	6	Qualities of optimally viable research report		1	
	7	Case study/Numerical		1	
			TOTAL:36		

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Department of Management Studies

Odd-Semester – III (Session 19-20)-Teaching Plan

Subject Teacher**:**Prof.S. A. Pachkhede **Subject: BS (108)**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted
I	1 2 3 4	Banking system in India-Indigenous Bankers, Commercial Banks, Co-operative Banks, Regional Rural Banks-Private Sector Banks, Foreign Banks, Merchant Banking, Banking Sector Reforms, Primary, Secondary and Subsidiary Functions of Banks, Banking Innovation, Globalization of Indian Banking Sector, Banking in New Millennium.	Gordon-Natrajan, Banking Theory, Law and Practice, Himalaya Publishing House	1 1 2 2 1
		Total		**07**
II	**1.** **2.** **3.**	Banking Regulation-Banking business, Capital requirement, management, licensing, new branches, loans and advances, NPA'S, Acquisition of Business, Winding up andAmalgamation, major issues of banking, Bank Management.	Vasant Desai, Bank Management, Himalaya Publishing House.	3 2 2
		Total		**07**
III	**1.** **2.** **3.** **4.**	Central Banking: Concept and Meaning, Major CentralBanks, Reserve Bank of India, it's role and functions, Banking Regulation by RBI,RBI & Agricultural Credit, Industrial Finance and Bill Market System.	S. Gurusamy, "Banking Theory: Law and Practices," Tata McGraw Hill 2nd Ed., 2009.	2 1 1 2
		Total		**07**
IV	**1.** **2.** **3.** **4.**	Commercial Banking: Concept and Scope, Commercial Banking Risk Management Functions and Services of Commercial Banks, Credit Management,Installation and Significance of Sound Credit Culture	Gordon-Natrajan, Banking Theory, Law and Practice, Himalaya Publishing House	2 2 1 3
		Total		**08**
V	**1.** **2.** **3.** **4.**	Upcoming Issues in Banking, Customer Services, CRM, Human Resource Management, Financial Management, Marketing Management of banking services, New Trend in Banking	Vasant Desai, Bank Management, Himalaya Publishing House.	3 1 1 2
		Total		**06**

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Department of Management Studies

Semester –III (Session 2019-2020)

Subject: MBA/301 BUSINESS LAW

SUBJECT TEACHER: Prof. P. A. Kalmegh

Unit No.	Topic No.	Date	Topic with detail course outlines	Text and References	Study Material & cases Link	No. of Periods Allotted	Remark
I	1	16-09-21	The Indian Contracts Act 1872-Introduction	Business Law- S S Gulshan Business Law- S. N. Maheshwari Mercantile Law- N. D. Kapoor	https://drive.google.com/drive/folders/1sp1oqwozftj0jbESk6CRzjJfqCDYasTQ?usp=sharing	1	Total Lectures for Unit I: 8
	2	22-09-21	Essentials of a valid contract-offer,acceptance,consideration,competence			1	
	3	23-09-21	Essentials of a valid contract-Free consents, writing and registration			1	
	4	24-09-21	Void agreements & wager and contingennt contracts			1	
	5	29-09-21	Discharge ofcontract,Performance of contract			1	
	6	30-09-21	Breach and its remedies			1	
	7	01-10-21	Quasi contracts, special types of contracts			1	
	8	07-10-21	Cases-Carlil vs. smoke ball co,Lalman shukla vs. Gauridutt, Babul vs. R.A.Singh: and other			1	
II	1	08-10-21	The sale of Goods Act 1930	Business Law- S S Gulshan Business Law- S. N. Maheshwari Mercantile Law- N. D. Kapoor	https://drive.google.com/drive/folders/1tqAM1S2q0n8SrC68QaTVevW0ome9T5fv?usp=sharing	1	Total Lectures for Unit II: 7
	2	13-10-21	Formation of Contract-Goods and their classification			1	
	3	14-10-21	Price,condition and warranties			1	
	4	20-10-21	Performace of contract			1	
	5	21-10-21	Passing of properties			1	
	6	22-10-21	Rights of an unpaid seller			1	
	7	27-10-21	Case Study-“nemo dat quod non habet”, cases link is given			1	
III	1	28-10-21	The Negotiable Instruments Act 1881: Nature and type of Negotaible inst.	Business Law- S S Gulshan Business Law- S. N. Maheshwari Mercantile Law- N. D. Kapoor	https://drive.google.com/drive/folders/14xQBvmje8a3vKhpTABbdu4Zwfy0K_gcb?usp=sharing	1	Total Lectures for Unit III: 7
	2	29-10-21	Types of negotiable instruments- PN & BOE			1	
	3	12-11-21	Types of negotiable instruments-Cheque			1	
	4	17-11-21	Negotiation and assignment, Holder in due course			1	
	5	18-11-21	Dishonor and discharge of negotiable instrument			1	
	6	24-11-21	Noting and protest			1	
	7	25-11-21	Case Study			1	
IV	1	26-11-21	The Companies Act 1956: Nature of companies	Business Law- S S Gulshan Business Law- S. N. Maheshwari	https://drive.google.com/drive/folders/1OKERFGGCAAvu6Atk-3XuU3vpRCzSwJ-5?	1	Total Lectures for Unit IV: 8
	2	01-12-21	Clssification of Companies			1	
	3	02-12-21	Formation of a Company			1	

	4	03-12-21	Memorandum and Article of Association	Mercantile Law- N. D. Kapoor	usp=sharing	1	
	5	08-12-21	Winding up of companies			1	
	6	09-12-21	Winding up of companies			1	
	7	10-12-21	Key points of Companies Act 2013			1	
	8	15-12-21	Case Study			1	
V	1	16-12-21	An overview of Consumer Protection Act 1986	Business Law- S S Gulshan Business Law- S. N. Maheshwari Mercantile Law- N. D. Kapoor	https://drive.google.com/file/d/19f_jhvrW4P2cDMayLlb4tMCB6ZvkK4Gj/view?usp=sharing https://drive.google.com/file/d/1t-1n3P8iCiCETTZJeAnOyRTsOJjdDVER/view?usp=sharing	1	Total Lectures for Unit V: 8
	2	17-12-21	Remedies for consumers			1	
	3	22-12-21	IT Act 2000			1	
	4	23-12-21	Penalties,compensation and adjudication under IT ACT			1	
	5	24-12-21	Cyber laws with specific reference to e-commerce			1	
	6	29-12-21	Intellectual Property Law			1	
	7	30-12-21	Patents and copyright.			1	
	8	31-12-21	Case Study			1	
							Total Lectures : 38
					CASE STUDY LINK		
					https://docs.google.com/document/d/1QBH76vSYsPrTUwF7T4nEKzExH6KWOoyV/edit?usp=sharing&ouid=100135622136334923480&rtpof=true&sd=true		

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Department of Management Studies
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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Management Studies

Lesson Plan

Subject: International Financial Management

Semester –III (Session 2019-2020)
Subject Teacher: Prof. G.D. Pachaghare

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Multinational Financial Management - An overview	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol 2001.	2	Total Lectures for Unit I: 5
	2	Evolution of the International Monetary and Financial System.		2	
	3	Case study		1	
II	1	Managing short-term assets and liabilities	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol 2001.	2	Total Lectures for Unit II: 8
	2	Long-term Financing		1	
	3	Long-run Investment Decisions		2	
	4	The foreign Investment Decision.		2	
	5	Case Study		1	
III	1	Cost of Debt, Cost of Capital,	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol 2001.	3	Total Lectures for Unit III: 7
	2	Weighted Average Cost of Capital		1	
	3	Capital Structure of the Multinational Firm.		2	
	4	Case Study		1	
IV	1	Multinational Capital Budgeting Application and Interpretation	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol 2001.	2	Total Lectures for Unit IV: 8
	2	Dividend Policy of the Multinational Firm		2	
	3	Taxation of the Multinational Firm		2	
	4	Case Study		2	
V	1	Analysis of Country Level Risk	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol 2001.	2	Total Lectures for Unit V: 8
	2	Political Risk Management		2	
	3	Foreign Exchange Operating Exposure		1	
	4	Debt and Foreign Exchange Exposure		2	
	5	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies
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Department of Management Studies

Semester –III (Session 2019-2020)

Teaching Plan

Subject: Indian Financial System

Subject Teacher: Prof. N. M. Gawande

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Structure of Indian financial system	Vasant Desai.:- Fundamentals Indian financial system HPH	02	
	2	Functions of Indian financial system		01	
	3	Economic development and major issues in IFS		01	
	4	Saving Investment and capital accumulation		01	
	5	Case study		01	
Total Lecture				**06**	
II	1	Working of financial Markets	Bharti V Pathak:- Indian financial system Markets, Institutions and Services Pearson Education M Vora :- Indian financial system Anmol Publications	01	
	2	Trends of Money Market		01	
	3	Capital Market		02	
	4	Debt Market		01	
	5	Bill Market		01	
	6	Foreign Exchange Market		01	
	7	Case study		01	
Total Lecture				**08**	
III	01	Role and significance of stock exchanges	Bharti V Pathak:- Indian financial	01	

	02	NSE	system Markets, Institutions and Services Pearson Education M Vora :- Indian financial system Anmol Publications.	02	
	03	BSE		02	
	04	Discount and finance house of India and OTC		01	
	05	SEBI		01	
	06	Case study		01	
Total Lecture				**08**	
IV	01	Working and function of RBI	Bharti V Pathak:- Indian financial system Markets, Institutions and Services Pearson Education M Y Khan:- Indian financial system Tata McGraw Hill.	01	
	02	Commercial banking		01	
	03	Non –banking financial institutions and companies		01	
	04	Development bank		01	
	05	Life insurance		02	
	06	General insurance		01	
	07	Case Study		01	
Total Lecture				**08**	
V	01	Features and importance of treasury bills	Bharti V Pathak:- Indian financial system Markets, Institutions and Services Pearson Education Vasant Desai.:- Fundamentals Indian financial system HPH	01	
	02	Certificates of deposits		01	
	03	Commercial paper		01	
	04	Hawala		01	
	05	Case study		01	
Total Lecture				**05**	

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Department of Management Studies

Semester –III (Session 2019-2020)

Teaching Plan

Subject: Investment Science

Subject Teacher: Prof. K. S. Bijawe

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	01	Investment - Introduction , Significance	Preeti Singh, Investment Management, Himalaya Publishing House.	01	
	02	Saving , Investment , Gambling		01	
	03	Meaning , Objectives, and significance & Mechanism of Investment		01	
	04	Issue and dilemmas of investment		01	
	05	Investment option and opportunities		01	
	06	Investment risk and return		01	
	07	Indian Investment Scenario		01	
	08	Case Study and Situation		01	
Total Lecture				08	
II	01	Financial Market	Preeti Singh, Investment Management, Himalaya Publishing House.	01	
	02	Financial Market and Intermediaries		01	
	03	Money Market		01	
	04	Stock Market Function		01	
	05	Stock Market Indices		01	
	06	Stock Market and Economic Scenario		01	
	07	Case Study , Situation		01	
Total Lecture				07	
III	01	Theory of Interest	Preeti Singh, Investment Management,	01	
	02	Time Value Consideration		01	

	03	Evaluation of Investment of opportunities	Himalaya Publishing House.	01	
	04	NPV		01	
	05	IRR		01	
	06	NPV Vs IRR		01	
Total Lecture				06	
IV	01	Investment Valuation	Preeti Singh, Investment Management, Himalaya Publishing House.	01	
	02	Valuation of Debt securities		01	
	03	Bond Valuation		01	
	04	YTM		02	
	05	Valuation of Debenture		01	
	06	Tax Consideration in Investment		01	
Total Lecture				07	
V	01	Valuation of Share Investment	David G. Luenberger, Investment Science, Oxford University Press.	01	
	02	Valuation of Preference Share		01	
	03	Valuation of Equity Share		02	
	04	Dividend Valuation Model		02	
	05	Case Study		01	
Total Lecture				07	

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Department of Management Studies

Semester –III (Session 2019-2020)

Teaching Plan

Subject: Risk Management

Subject Teacher: Prof. S. A. Pachkhede

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	01	Risk - Meaning, Definition and Significance	Anthony Sounders, Merica Cornett, "Financial Institutions Management:- A Risk Management Approach"' Tata McGraw Hill.	01	
	02	Risk Management		01	
	03	Impact of Risk on Organization		01	
	04	Types of Risk		01	
	05	Development of Risk Management		01	
	06	Risk Management , Principal , objectives and standards and policy		01	
	07	Risk Management Documentation and responsibility		01	
	08	Case study		01	
Total Lecture				**08**	
II	01	Risk Assessment	Anthony Sounders, Merica Cornett, "Financial Institutions Management:- A Risk Management Approach"' Tata McGraw Hill.	01	
	02	Risk architecture and structure		01	
	03	Risk-aware culture , risk training and communication		01	
	04	Risk assessment consideration		01	
	05	Risk classification system		01	
	06	Risk likelihood and impact, upside of risk		01	
	07	Case study		01	
Total Lecture				**07**	
III	01	Risk and organization		01	
	02	Corporate Governance Model	Anthony	01	

	03	Stakeholder expectations, analysis of the business model	Sounders, Merica Cornett, "Financial Institutions Management:- A Risk Management Approach"' Tata McGraw Hill.	01	
	04	Project and operational risk Management		01	
	05	Supply Chain Management		01	
	06	Case study		01	
Total Lecture				**06**	
IV	01	Risk response, enterprise risk management	Anthony Sounders, Merica Cornett, "Financial Institutions Management:- A Risk Management Approach"' Tata McGraw Hill.	01	
	02	Importance of risk appetitive		01	
	03	Tolerate, Treat, Transfer and Terminate		01	
	04	Risk control Techniques		01	
	05	Control of selected hazard risks,		01	
	06	Insurance and risk transfer		01	
	07	Case Study , situation		01	
Total Lecture				**07**	
V	01	Risk assurance and reporting	Anthony Sounders, Merica Cornett, "Financial Institutions Management:- A Risk Management Approach"' Tata McGraw Hill.	01	
	02	Evaluation of the control environment		01	
	03	Activities of the internal audit function		01	
	04	Risk assurance techniques		01	
	05	Reporting of risk management		01	
	06	Corporate social responsibility and Future of Risk Management		01	
	07	Case study		01	
Total Lecture				**07**	

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Management Studies

Lesson Plan

Subject: Working Capital Management

Semester –IIIrd (Session 2019-2020)
Subject Teacher: Prof. G.S. Kalmegh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Concept of Working Capital Management	Bhalla, V.K., Working Capital Management: Text and Cases, 4th ed., Delhi, Anmol, 2001.	1	Total Lectures for Unit I: 8
	2	Importance of Working Capital, Kinds of Working Capital		1	
	3	Factors Determining Working Capital, Estimating Working Capital Requirements		3	
	4	Operating Cycle		1	
	5	Case study		2	
II	1	Management of Cash-Motives for Holding Cash and marketable securities	Bhalla, V.K., Working Capital Management: Text and Cases, 4th ed., Delhi, Anmol, 2001.	2	Total Lectures for Unit II: 6
	2	Cash System		1	
	3	Managing the Cash Flows		2	
	4	Case Study		1	
III	1	Managing Corporate Liquidity and Financial Flexibility	Bhalla, V.K., Working Capital Management: Text and Cases, 4th ed., Delhi, Anmol, 2001.	2	Total Lectures for Unit III: 7
	2	Measures of Liquidity		1	
	3	Determining the Optimum Level of Cash Balances - Baumol Model		2	
	4	Benanek Model		1	
	5	Case Study		1	
IV	1	Inventory Management-Kinds of Inventories	Bhalla, V.K., Working Capital Management: Text and Cases, 4th ed., Delhi, Anmol, 2001.	1	Total Lectures for Unit IV: 8
	2	Benefits and Cost of holding Inventories		2	
	3	Inventory Management and Valuation		2	
	4	Inventory Control Models		2	
	5	Case Study		1	
V	1	Receivables Management, Objectives	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol 2001.	2	Total Lectures for Unit V: 7
	2	Credit Policies		2	
	3	Credit Terms and Collection Policies		2	
	4	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies				
Semester –III (Session 2019-2020)				
Lesson Plan				
Subject: Compensation Management			Teacher: Yuvaraj Vaidya	
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**
I	1	Compensation Management: Concept	Compensation Management by Dr Kanchan Bhatia	2
	2	Components	Compensation by G. Milkovich, J. Newman & C Ratnam	1
	3	Theories	Compensation Management by Dr Kanchan Bhatia	1
	4	Reward Management	Compensation Management by Dr Kanchan Bhatia	2
	5	Case Study	University Question Papers	1
II	6	Diagnosis of compensation problem	Compensation Management by Dr Kanchan Bhatia	2
	7	Meaning and necessity of Benchmarking	Compensation Management by Dr Kanchan Bhatia	2
	8	commitments	Salary and wages Administration	1
	9	Internal & external equity in compensation system	Compensation by G. Milkovich, J. Newman & C Ratnam	2
	10	Case study	University Question Papers	1
III	11	Compensation Packages	Compensation by G. Milkovich, J. Newman & C Ratnam	2
	12	Tools in Designing Compensation Packages	Compensation by G. Milkovich, J. Newman & C Ratnam	1
	13	Implementing Compensation Packages	http://www.busgurus.ca/media/pdf/ Compensation-Plans-en.pdf	1
	14	Improving Compensation Packages	http://businessfinancemag.com/hr/6-ways-improve-compensation-management	
	15	Designing	Compensation by G. Milkovich, J. Newman	2

		Compensations Packages	& C Ratnam	
	16	Case Study	University Question Papers	1
IV	17	Components of compensation	Compensation by G. Milkovich, J. Newman & C Ratnam	2
	18	Fringe Benefits	Compensation by G. Milkovich, J. Newman & C Ratnam	2
	19	Incentives	Compensation by G. Milkovich, J. Newman & C Ratnam	1
	20	Retirement Benefits	Compensation Management by Dr Kanchan Bhatia	1
	21	Case Study	University Question Papers	1
V	22	Strategic Compensation System	Compensation by G. Milkovich, J. Newman & C Ratnam	2
	23	compensation practices of public limited	Compensation by G. Milkovich, J. Newman & C Ratnam	1
	24	compensation practices of institutional	Salary and wages Administration	1
	25	corporate & public sector companies.	Compensation by G. Milkovich, J. Newman & C Ratnam	2
	26	Case Study	University Question Papers	1

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Department of Management Studies - Semester –III (Session 2019-2020) - Teaching Plan

Subject: HR-3304/ Human Resource Development

Subject Teacher: Prof. Minal M.Nistane.

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1. 2. 3. 4. 5. 6.	HRD- Concept & Goals Challenges (A Case of video Challenges) Climate (Videocon) Practices in India (Practical Ex.of Patanajali) Learning and HRD Case Study	1. HRD - BY Rao T.V. 2. HRD –Dr.Lalitha Balakrishnan,S Srividhya 3. HRD – By P. Subba Rao	01 01 01 01 01 02	
		Total		**07**	
II	1. 2. 3. 4. 5. 6. 7. 8.	HRD System Design Assessing HRD Needs Designing & Implementing HRD Programs Case Let Evaluating HRD Program (Ex. Wipro co.) Case Let Staffing & HRD Function Case Let	1. HRD - BY Rao T.V. 2. HRD –Dr.Lalitha Balakrishnan,S Srividhya 3. HRD – By P. Subba Rao	01 01 01 01 01 01 01 01	
		Total		**08**	
IV	1. 2. 3. 4. 5. 6. 7.	Career Management Development Concept, Objectives Relevance & Process Case Let Career & Succession Planning (Ex.**Google**) Case Let Post Retirement Planning	1. HRD - BY Rao T.V. 2. HRD – By Werner Desimone 3. HRD – By P. Subba Rao	01 01 01 01 01 01 01	
		Total		**07**	
III	1. 2. 3. 4. 5.	HRD Strategies for Employee (Introduction) Case Let Employee Socialization & Orientation Case Let HRD Intervention	1. HRD – By Werner Desimone 2. HRD – By P. Subba Rao	02 01 01 01 01	
		Total		**06**	
V	1. 2. 3. 4. 5. 6. 7.	Counseling Coaching Mentoring & Performance Mgt. HRD & Organizational Change HRD & Diversity in Work Force HRD Audit & Accounting Case Study - 2	1. HRD - BY Rao T.V. 2. HRD –Dr.Lalitha Balakrishnan,S Srividhya 3. HRD – By P. Subba Rao	01 01 01 01 01 01 **02**	
		Total		**08**	
		Total Lectures		**36**	

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Department of Management Studies				
Semester – III (Session 2019-2020)				
Lesson Plan				
Subject – Human Relations & Legal Framework Teacher: Y R Vaidya				
Unit No.	**Topic No**	**Topic**	**Text and References**	**No. of Periods Allotted**
I	1	Labour Laws Introduction	http://www.lawyersclubindia.com/articles/Brief-Overview-of-Labour-Laws-in-India-6040.asp#.Vad9S19Viko	2
	2	Objectives & Importance of Labour Laws	http://www.yourarticlelibrary.com/law/necessity-and-importance-of-labour-law-and-principles/34381/	2
	3	Socio Economic Environment of Labor Laws	http://dyuthi.cusat.ac.in/xmlui/bitstream/handle/purl/2788/Dyuthi-T0809.pdf?sequence=1	1
	4	(Case Study)	University Question Papers	1
II	5	Laws Relating to Industrial Disputes	Legal Aspectes of Business, R S Pillai & Bhagvathi	1
	6	Trade Union	Legal Aspectes of Business, R S Pillai & Bhagvathi	2
	7	Standing Orders	Legal Aspectes of Business, R S Pillai & Bhagvathi	2
	8	Law Relating to Discharge	http://www.lawteacher.net/free-law-essays/employment-law/misconduct-as-a-ground-for-ermination-of-employment-law-essay.php	1
	9	Misconduct	http://www.lawteacher.net/free-law-essays/employment-law/misconduct-as-a-ground-for-ermination-of-employment-law-essay.php	1
	10	Domestic Enquiry – Disciplinary Action	http://www.lawyersclubindia.com/articles/Disciplinary-Actions-4743.asp#.Vad_bF9Viko	2
	11	(Case Study)	University Question Papers	1
III	12	Laws Relating to	Legal Aspectes of Business, R S Pillai & Bhagvathi	2

		Workmen Compensation		
	13	Employee State Insurance Act	Legal Aspectes of Business, R S Pillai & Bhagvathi	1
	14	Provident Fund	http://www.legalissuesforngos.org/main/other/EPF.pdf	1
	15	The Payment of Gratuity Act	Legal Aspectes of Business, R S Pillai & Bhagvathi	1
	16	Maternity Benefits Act	Legal Aspectes of Business, R S Pillai & Bhagvathi	1
	17	(Case Study)	University Question Papers	1
IV	18	The Law of Minimum Wages	Legal Aspectes of Business, R S Pillai & Bhagvathi	2
	19	Payment of Wages	Legal Aspectes of Business, R S Pillai & Bhagvathi	2
	20	Paymentof Bonus.	Legal Aspectes of Business, R S Pillai & Bhagvathi	1
	21	(Case study)	University Question Papers	1
V	22	The Laws Relating to Factories	Legal Aspectes of Business, R S Pillai & Bhagvathi	5
	23	Contract Labor Act. 1970	http://ncw.nic.in/frmReportLaws33.aspx	1
	24	(Case Study)	University Question Papers	1

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Department of Management Studies - Semester –III (Session 2019-2020)

Teaching Plan

Subject: HR-3301/ Management of Industrial Relations

Subject Teacher: Prof. Minal M.Nistane.

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1. 2. 3. 4. 5. 6. 7.	IR Introduction (Durga Steel Plant) Industrial Relations Perspectives Importance of IR Socio Economic Conditions IR & Socio Economic Scenario –I IR & Socio Economic Scenario –II IR & State, Case Study	1. Industrial Relation- By C.S.Venkata Ratnam 2. Ind Relation,Trade Unions & Labour Legislation - By P.R.N. Sinha,Indu bala Sinha, Seema P.Shekhar	01 01 01 01 01 01 01	
		Total		**07**	
II	1. 2. 3. 4. 5. 6. 7. 8.	Role of Trade Union Future of Trade Unions Employee Perspectives Trade Union & Employees (Maruti Suzuki) Trade Union & Management Role Of Management Trade Union in MNC's. Case Let (Video on strike)	1. Industrial Relation- By C.S.Venkata Ratnam 2. Ind Relation,Trade Unions & Labour Legislation - By P.R.N. Sinha,Indu bala Sinha, Seema P.Shekhar	01 01 01 01 01 01 01 01	
		Total		**08**	
III	1. 2. 3. 4. 5. 6. 7.	Grievance Discipline Grievance Conflicts, Grievance Dispute Grievance Management, Negotiation Collective Settlements. Case Let	1. Industrial Relation- By C.S.Venkata Ratnam 2. Ind Relation,Trade Unions & Labour Legislation - By P.R.N. Sinha,Indu bala Sinha, Seema P.Shekhar	01 01 01 01 01 01	
		Total		**07**	
IV	1. 2. 3. 4. 5. 6.	Participative Management Techniques Scope And Importance Co-Ownership Productive Bargaining – I Productive Bargaining - II Case Study	1. Industrial Relation- By C.S.Venkata Ratnam 2. Ind Relation,Trade Unions & Labour Legislation - By P.R.N. Sinha,Indu bala Sinha, Seema P.Shekhar	01 02 01 01 01 01	
		Total		**07**	
V	1. 2. 3. 4. 5. 6. 7.	IR , Employees Empowerment - I Employee Empowerment - II Quality Circles, IR & Technological Change, Conciliation arbitrations adjudication Role of labour administration. Case Study	1. Industrial Relation- By C.S.Venkata Ratnam 2. Ind Relation,Trade Unions & Labour Legislation - By P.R.N. Sinha,Indu bala Sinha, Seema P.Shekhar	01 01 01 01 01 01 **01**	
		Total		**07**	
		Total Lectures		**36**	

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Odd-Semester – III (Session 2019-2020)-Teaching Plan

Subject Teacher**:** Prof.Minal M.Nistane **Subject: MTD**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1 2 3 4 5 6 7	Training – a change agent, Video Training Environment Pre – T raining module-Formats Counseling for Training, Training Costs Training Investment Case Study	**"Training & Development Methods" by Dr. Rishipal & Scholary Articles**	2 1 1 1 1 1 1	
		Total		**08**	
II	1. 2. 3. 4.	Training Functions, Training Needs Assessment Action Research-Module Organizational Objectives and Training Case Study	**"Training & Development Methods" by Dr. Rishipal & Lynton and Pareek**	2 2 2 1	
		Total		**07**	
III	1. 2. 3. 4. 5	Introduction of Learning & Learning Process Organizational Training Climate Development and Designing Training Modules Formats of training Sheet, Case Study	**"Training & Development Methods" by Dr. Rishipal**	2 2 2 1	
		Total		**07**	
IV	1. 2. 3. 4. 5	Training Methods Techniques & Pedagogy Training aids & Tools Facilities for Training Case Let's	"Training & Development Methods" by Dr. Rishipal & Scholary Articles	2 2 1 1 1	
		Total		**07**	
V	1. 2. 3. 4.	Training Feedback Evaluation Training Audit Training as Continuous Process Case Study	"Training & Development Methods" by Dr. Rishipal & Journals	2 2 2 1	
		Total		**07**	**36**

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Semester –III (Session 2019-2020)

Subject: MBA/3306/H Performance Management

SUBJECT TEACHER: Prof. P. A. Kalmegh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Overview of HRM Capital and performance appraisal,	Performance Management- A.S. Kohli, T. Deb Human Resource Management – P Subba Rao	2	Total Lectures for Unit I: 7
	2	Evolution of concept of performance management		1	
	3	Concept and perspectives of performance management		2	
	4	Meaning, Nature and scope of Performance Management.		1	
	5	Case Study		1	
II	1	Principles and Models of Performance Management,	Performance Management- A.S. Kohli, T. Deb Performance Management-A M Sharma	2	Total Lectures for Unit II: 7
	2	Imperatives, Antecedents, determinants and elements of performance management		2	
	3	Challenges to performance management		1	
	4	Case Study		2	
III	1	Performance Management System: Concept, Nature, Objectives, Functions	Performance Management- A.S. Kohli, T. Deb Performance Management-A M Sharma	2	Total Lectures for Unit III: 7
	2	Effective performance management system		2	
	3	Competency based performance management System and recent developments		1	
	4	Performance Counseling-Concept, Principles and Skills.		1	
	5	Case Study		1	
IV	1	Performance Management Process: Performance Planning-Definition, Objectives, characteristics and process.	Performance Management- A.S. Kohli, T. Deb Performance Management-A M Sharma	1	Total Lectures for Unit IV: 8
	2	Performance Management Plan		1	
	3	Competency Mapping- Methods and Applications, Linkages to performance planning. Process of performance managing		2	
	4	Performance Appraisal-Meaning, Principles, Process, Effective Design		1	
	5	Performance Monitoring: Definition, Characteristics, Objectives, Process and Practices.		1	
	6	Mentoring-Concepts and Applications & Performance Management Audit.		1	
	7	Case Study		1	
V	1	Performance Management Implementation: Bottlenecks, Strategies, Operationalization.	Performance Management- A.S. Kohli, T. Deb Performance Management-A M Sharma	1	Total Lectures for Unit V: 7
	2	Performance Management Link Reward System- Objectives, components, job performance with job satisfaction		2	
	3	High performance teams. HR, Ethics and Performance Management		1	
	4	Role of HR in Performance Management		1	
	5	Ethics and Performance Management.		1	
	6	Case Study		1	
				Total Lectures Required: 36	

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Semester –III (Session 2019-2020)

Subject: Advertising Management (MBA/3204/M)

SUBJECT TEACHER: Prof. R. K. Dhanuka

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
	1	Nature, Type & Functions of Advertising -I	Batra, Advertising Management, Pearson Education, 5th ed., 2003.	1	
	2	Nature, Type & Functions of Advertising -II		1	
	3	Scope and Role of Advertising in Market place		1	
	4	Economic Aspects of Advertising		1	
	5	Ethical Aspects of Advertising		1	
	6	Social Aspects of Advertising		1	
I	7	Case Study on Unit I		1	
	1	Marketing Communication,	Kulkarani M.V., Advertising Management, 4th ed., 2003	1	
	2	Process of Communication& its flow		1	
	3	Types of Communication Systems		1	
	4	Advertising Effect Models-I		1	
	5	Advertising Effect Models-II		1	
	6	Advertising Effect Models-III		1	
II	7	Case Study on Unit II		1	
	1	Advertising Planning & Objectives	Chunawalla & Others, Advertising Theory and Practice, 7th ed., 2002, Himalaya Publishing House.	1	
	2	DAGMAR Approach		1	
	3	Building of Advertising Program-Message & Headline		1	
	4	Building of Advertising Program-Copy & Logo		1	
	5	Building of Advertising Program-Copy & Logo		1	
	6	Building of Advertising Program-Illustration & Appeals		1	
	7	Building of Advertising Program-Layout		1	
III	8	Case Study on Unit III		1	
IV	1	Media Planning & Strategies	Batra, Advertising Management, Pearson Education, 5th ed., 2003	1	
	2	Media Buying – Broadcast & Print		1	
	3	Advertising Budget – Allocation		1	
	4	Advertising Budget – Approaches		1	
	5	Advertising Budget – Influence factors		1	

	6	Case Study on Unit IV		1	
	1	Advertising Campaign Planning	Batra, Advertising Management, Pearson Education, 5th ed., 2003	1	
	2	Advertising Organization –Selection		1	
	3	Advertising Organization –Comprehension		1	
	4	Appraisal of Advertising Agencies-I		1	
	5	Appraisal of Advertising Agencies-II		1	
	6	Web Advertising		1	
V	7	Case Study on Unit V		1	

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Department of Management Studies
Semester –III (Session 2019-2020)
Teaching Plan

Subject: Agro Business Management **Subject Teacher: Prof. G. D. Pachaghare**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	a) b) c) d) e) **TOTAL LECTURES**	Agricultural, Allied Products. Agro Processed Products. Agro Processed Products status in Indian Market. Emerging Issues in the business Agriculture Produces. CASE STUDY	*Agricultural Marketing in India – S.S. Acharya and N L Agarwal – Oxford & IBH Publishing Co. Pvt. Ltd. Calcutta. *Agribusiness Management in India – Text & Cases – Dr. Subhash Bhave	01 01 02 02 01 **07**	
II	a) b) c) d) e) **TOTAL LECTURES**	Agriculture Marketing: Concept. Definition & Scope. Objectives. Upcoming Practices in Agriculture Marketing. CASE STUDY	*Agricultural Marketing in India – S.S. Acharya and N L Agarwal – Oxford & IBH Publishing Co. Pvt. Ltd. Calcutta. *Agribusiness Management in India – Text & Cases – Dr. Subhash Bhave	02 01 01 02 01 **07**	

III	a) b) c) d) e) **TOTAL LECTURES**	Agribusiness-Emerging Branches. Non Conventional Forms of Agribusiness. Retailing & Merchandising of Agri Produces. Export Potential for farm products-Supporting Services. CASE STUDY	*Agricultural Marketing in India – S.S. Acharya and N L Agarwal – Oxford & IBH Publishing Co. Pvt. Ltd. Calcutta. *Agribusiness Management in India – Text & Cases – Dr. Subhash Bhave	02 02 01 02 01 **08**	
IV	a) b) c) d) e) **TOTAL LECTURES**	Role of Agencies for promotion of Exports of Agri Products. Role of Agencies for marketing of Agri Products. Standards of Agriculture Produces. Organized Retailing in Agri Inputs and Outputs. CASE STUDY	*Agricultural Marketing in India – S.S. Acharya and N L Agarwal – Oxford & IBH Publishing Co. Pvt. Ltd. Calcutta. *Agribusiness Management in India – Text & Cases – Dr. Subhash Bhave	02 02 02 01 01 **08**	

V	a) b) c)	Marketing Mix of Agriculture Products. Role of Information and Communication Technology in Agriculture Marketing. CASE STUDY **TOTAL LECTURES**	*Agricultural Marketing in India – S.S. Acharya and N L Agarwal – Oxford & IBH Publishing Co. Pvt. Ltd. Calcutta. *Agribusiness Management in India – Text & Cases – Dr. Subhash Bhave	02 02 01 **05**	

Note: No of available session are 35 & include at least one case study in each unit

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Department of Management Studies

Semester –III (Session 2019-2020)

Subject:Brand Management

SUBJECT TEACHER: Prof. S. B. Diwan

Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
1	1	Concept of Brand	Chunawala S.A., Brand Management; U.C. Mathur, Brand Management; Harsh Verma- Brand Management	2	Total Lectures for Unit I:9
	2	Brand Evolution		2	
	3	Brand Hierarchy		2	
	4	Brand Identity, Brand Image		2	
	5	Caselet		1	
2	1	Brand Peronsonality	Chunawala S.A., Brand Management; U.C. Mathur, Brand Management; Harsh Verma- Brand Management	1	Total Lectures for Unit II:8
	2	Brand Positioning & Repositioning		2	
	3	Brand Equity		2	
	4	Types of Branding- Product, Line, Range, Umbrella & Endorsement Branding		2	
	5	Caselet		1	
3	1	Brand Creation	Chunawala S.A., Brand Management; U.C. Mathur, Brand Management; Harsh Verma- Brand Management	2	Total Lectures for Unit III:8
	2	Brand product Relationship		2	
	3	Brand Portfolio		1	
	4	Brand Elimination		1	
	5	Brand Revitalisation		1	
	6	Caselet		1	
4	1	Managing Brands	Chunawala S.A., Brand Management; U.C. Mathur, Brand Management; Harsh Verma- Brand Management	2	Total Lectures for Unit IV:6
	2	Brand Extensions		2	
	3	Financial Aspects of Brands		1	
	4	Caselet		1	
5	1	Branding in Retailers	Chunawala S.A., Brand Management; U.C. Mathur, Brand Management; Harsh Verma- Brand Management	1	Total Lectures for Unit V:5
	2	Branding in Services		1	
	3	Branding in High-tech Products		1	
	4	Caselet		2	

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Department of Management Studies

Semester –III (Session 2019-2020)

Subject: Consumer Behaviour (MBA/3203/M)

SUBJECT TEACHER: Prof. A. V. Deshmukh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Introduction to consumer behaviour	1. Consumer Behaviour Engel, Blackwell, Thompson Publications 2. Consumer Behaviour Schiffman & Kanuk, Pearson Education	1	Total No. of Hours= 07
	2	Acivities/ elements of consumer behaviour		1	
	3	Evolution of consumer behaviour		1	
	4	Marketing strategy & consumer behaviour		1	
	5	Marketing strategy & consumer behaviour		1	
	6	Concept of consumer involvement & decision making		1	
	7	Case Study		1	
II	1	Concept of consumer decision making process	1. Consumer Behaviour Batra 2. Consumer Behaviour- Text & Cases, Nair, Suja, Himalaya Publishing	1	Total No. of Hours= 08
	2	Information search & it's evaluation		1	
	3	Decision rules, purchase & post purchase evaluation		1	
	4	Concept of consumer motivation		1	
	5	Theories of motivation		1	
	6	Concept of consumer perception		1	
	7	Theories of consumer perception		1	
	8	Case Study		1	
III	1	Consumer attitude formation & change	1. Consumer Behaviour- Text & Cases, Nair, Suja, Himalaya Publishing 2. Consumer Behaviour Schiffman & Kanuk, Pearson Education	1	Total No. of Hours= 07
	2	Models of attitude formation		1	
	3	Personality- Meaning, characteristics & factors		1	
	4	Theories of personality		1	
	5	Psychographics- it's impact on buying behavior		1	
	6	Lifestyle- it's influence on buying behavior		1	
	7	Case Study		1	

IV	1 2 3 4 5 6	Diffusion of Innovation- factors & process Opinion Leadership- Characteristics, promotional strategy Role of family in consumer decision making Family life cycle stage, strategies adopted by spouses Reference groups- types & it's influence Case Study	1 Consumer Behaviour Schiffman & Kanuk, Pearson Education 2. Consumer Behaviour- Text & Cases, Nair, Suja, Himalaya Publishing	1 1 1 1 1 1 1	Total No. of Hours= 06
V	1 2 3 4 5 6 7	Industrial buying- Meaning & participants Buying decisions & characteristics of industrial buying Stages in industrial buying process. Consumer behavior models- Howard Sheth Nicosia & EBM models of consumer behaviour Sheth model of industrial buying Consumer behavior studies in India	1. Consumer Behaviour- Text & Cases, Nair, Suja, Himalaya Publishing 2. Consumer Behaviour Engel, Blackwell, Thompson Publications	1 1 1 1 1 1 1	Total No. of Hours= 07

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Department of Management Studies
Semester –III (Session 2019-2020)
Subject:International Marketing Strategy
SUBJECT TEACHER: Prof. S. B. Diwan

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to International Markets	International Marketing – Francis Cherunilam Rungman A.M. &Hodgettts R.M., International Business	1	Total Lectures for Unit I: 7
	2	Expansion of International Markets, Motives for International Marketing		1	
	3	International Marketing Decisions		1	
	4	Scope of Marketing ,Indian Products Abroad		1	
	5	Multinational Enterprises ,International Culture & International Trade		2	
	6	Caselet		1	
II	1	Global Strategy Planning	International Marketing – Francis Cherunilam Rungman A.M. &Hodgettts R.M., International Business	2	Total Lectures for Unit II: 8
	2	Political Risk & Negotiation Strategy		2	
	3	Market Selection		1	
	4	Market Entry Strategies		1	
	5	Market Coverage Strategies		1	
	6	Caselet on Market Entry & Coverage Strategy		1	
III	1	International Product Decisions- Product , Product Mix, Product Life Cycle	International Marketing – Francis Cherunilam Rungman A.M. &Hodgettts R.M., International Business	1	Total Lectures for Unit III: 7
	2	International Product Decisions- New Product Development, Business Environment & Strategies		1	
	3	International Pricing Decisions – Pricing Objectives, Factors affecting Pricing		1	
	4	International Pricing Decisions- Pricing Methods, Information required for Pricing		1	
	5	International Distribution Decisions- International Channel System, Types of Intermediaries		2	
	6	Caselet on Product & Pricing Decisions		1	
IV	1	International Marketing Intelligence- Information requirement, Market Research	International Marketing – Francis Cherunilam Rungman A.M. &Hodgettts R.M., International Business	1	Total Lectures for Unit IV: 7
	2	International Marketing Intelligence- Methods of Data Collection, Problems in International Research		1	
	3	International Promotion- Promotion Strategies, Major Decisions in International Communications		2	
	3	Export Procedures & Documents		2	
	4	Caselet on International Marketing Intelligence		1	
V	1	Quality Control & Pre-Shipment Inspection	International Marketing – Francis Cherunilam Rungman A.M. &Hodgettts R.M., International Business	1	Total Lectures for Unit V: 7
	2	Issues in International Business		1	
	3	Business Ethics, Social Responsibility Of Business		2	
	4	Environmental Issues		2	
	5	Labour Issues		1	
			Total Lectures Required	**36**	

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Semester –III (Session 2019-2020)

Subject: Sales and Distribution Management

SUBJECT TEACHER: Prof. S.R. Deshmukh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction to Sales Management & Sales Organization	"Sales Management" by Pradip Kumar Malik	1	Total Lectures for Unit I: 8
	2	Determining Sales Related Marketing Policies - I		1	
	3	Determining Sales Related Marketing Policies - II		1	
	4	Sales Functions and Policies		1	
	5	International Sales Management		1	
	6	Personal Selling- I		1	
	7	Personal Selling- II		1	
	8	Case Study		1	
II	1	Sales Planning	"Sales Management" by Pradip Kumar Malik and Chunawala S.A.	1	Total Lectures for Unit II: 6
	2	Sales Budgets - Estimating Market Potential		1	
	3	Forecasting Sales		1	
	4	Sales Quotes		1	
	5	Sales and Cost Analysis		1	
	6	Case Study		1	
III	1	Sales Force Management; Hiring and Training Sales Personnel	"Sales Management" by Pradip Kumar Malik and Chunawala S.A.	1	Total Lectures for Unit III: 8
	2	Time and Territory Management		1	
	3	Compensating Sales Personnel		1	
	4	Motivating Sales Force - I		1	
	5	Motivating Sales Force - II		1	
	6	Leading the Sales Force		1	
	7	Evaluating Sales Force Performance		1	
	8	Case Study		1	
IV	1	Marketing Logistics; Distribution as Marketing Mix Element	"Distribution Management" by Tapan K Panda	1	Total Lectures for Unit IV: 7
	2	Distribution Resource Planning		1	
	3	Marketing Channel Integration		1	
	4	Channel Management; Nature of Marketing Channels		1	
	5	Evaluating Channel Performance		1	
	6	Tele Marketing and Web Marketing		1	

	7	Case Study		1	
V	1	Managing Channel Conflicts	"Distribution Management" by Tapan K Panda	1	Total Lectures for Unit V: 6
	2	Channel Information Systems - I		1	
	3	Channel Information Systems - II		1	
	4	Wholesaling and Retailing		1	
	5	Ethical and Social Issues in SDM		1	
	6	Case Study		1	
			Total Lectures Required: 35		

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Department of Management Studies

Odd-Semester – III (Session 2019-20)-Teaching Plan

Subject Teacher: Prof.Gauri S.Kalmegh **Subject: FD (4103)**

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1 2 3 4	Introduction to syllabus & Importance of subject Financial Derivatives- Introduction, Participants, its products, Feature. History of Derivative Market Myth about derivative market & its regulation in India	**"Financial Derivatives" by S.Chand**	1 2 1 2	
		Total		**06**	
II	**1.** **2.** **3.** **4.**	Forward Contract-Concept, & meaning Mechanism of Forward contract Concept of pricing of forwards Hedging in forward Contracts	**"Financial Derivatives" by S.Chand**	**1** **2** **2** **2**	
		Total		**07**	
III	**1.** **2.** **3.** **4.**	Future Contract-Introduction, Concept Mechanism of Future Contract Types of Future-Pricing & Hedging Types o Future- Stock Index future	**"Futures & Options" by Gardener**	**1** **2** **2** **2**	
		Total		**07**	
IV	**1.** **2.** **3.** **4.**	Options-Concept & Meaning Types of options Pricing of Options Black & Scholes Binomial Model Trading strategies involving options	**"Futures & Options" by Gardener**	**2** **2** **1** **2**	
		Total		**07**	
V	**1.** **2.** **3.** **4.** **5.**	Swaps-Concept & meaning Mechanism of Interest rate swaps Mechanism of currency swaps Valuation of interest rate swaps Valuation of currency swaps	**"Financial Derivatives" by S.Chand**	**1** **2** **2** **2** **2**	
		Total		**09**	**36**

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Prof. Ram Meghe Institute of Technology & Research, Badnera

Department of Management Studies

Semester – IV (A.Y. 2019-2020)

Teaching Plan

Subject: Financial Decision Analysis (FDA) Prof. N. M. Gawande

Subject Code: - MBA/4101/CGF

Day	Topic No.	Topic	Text & Refernces	Unit
1	1.2	Introduction To Financial Decsion Analysis	Fundamentals of Investments, by William F, Alexander, Gordon, J. and Sharpe, Englewood Cliffs,New Jersey.,Prentice Hall Inc.,3rd ed., 2003	1
2		Ratio Analysis		1
3		Ratio Analysis -2		1
4	1.3	Fund Flow Analysis		1
5		Fund Flow Analysis -2		1
6		Fund Flow Analysis -3		1
7	1.4	Cash Flow Analysis		1
8		Cash Flow Analysis -2		1
9		Revision - Unit 01		2
10	2.1	Capital Expenditure	Financial Management by Prasanna Chandra,McGraw Hill Education, Ninth edition	2
11	2.2	Capital Expenditure - Risk Decisions		2
12		Capital Expenditure - Risk Decisions		2
13	2.3 & 2.4	Cvp Analysis		2
14		Cvp Analysis		2
15		Cvp Analysis		2
16		Revision Unit-2		2
17	3.2	Leasing Vs. Buying	Financial Management and Policy by Van Horne James & Dr. Sanjay Dhamija, Pearson Education India; 12 edition (2011)	3
18		Leasing Vs. Buying		3
19	3.3	Replacement Decisions		3
20		Replacement Decisions		3
21	3.5	Sequencing Decisions		3
22		Sequencing Decisions		3
23		Revision Unit - 3		3
24	4.1	Business Failure And Reorganisation	Practical Cost Accounting written by Khanna B.S. published	4
25	4.2	Merger / Acquisitions		4

26		**Merger / Acquisitions**	**by S.Chand & Co**	4
27		**Merger / Acquisitions**		4
28	**4.4**	**Capital Structure Decisions**		4
29		**Capital Structure Decisions**		4
30		Revision Unit-4		4
31	**5.1, 5.2**	**Dividend Decision Models**	**Khan and Jain, Financial Management, Tata Mcgrawhill, 5th ed**	5
32		**Dividend Decision Models**		5
33		**Dividend Decision Models**		5
34	**5.3 & 5.4**	**Present Value Models**		5
35		**Present Value Models**		5
36		Revision Unit - 5		5

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Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Management Studies

Lesson Plan
Subject: Foreign Exchange Markets
Semester –IV (Session 2019-2020)
Subject Teacher: Prof. G.D. Pachaghare

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	The rise and fall of Bretton Woods	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol, 2001. P.G.Apte, "International Financial Management", Tata McGraw Hill	2	Total Lectures for Unit I: 7
	2	Present International Financial Systems		1	
	3	International Monetary System		2	
	4	Working of IMF		1	
	5	Case study		1	
II	1	Foreign Exchange Markets: Organization, Structure and types	P.G.Apte, "International Financial Management", Tata McGraw Hill Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol, 2001.	1	Total Lectures for Unit II: 8
	2	Exchange rate determination and equilibrium		2	
	3	Factors affecting exchange rate determination		2	
	4	Direct and Indirect Quotes		1	
	5	Spot and Forward Rate		1	
	6	Case Study		1	
III	1	Exposure management: Organization, function, parameter	Bhalla, V.K., International Financial Management, 2nd ed., New Delhi, Anmol, 2001.	2	Total Lectures for Unit III: 8
	2	Exposure management: constraints and techniques		1	
	3	Exposure Information System		1	
	4	Corporate Exposure Management		2	
	5	Case Study		2	
IV	1	Currency futures and options	Maheshwari, S. N., International Financial Management	1	Total Lectures for Unit IV: 6
	2	Interest rate swaps		2	
	3	Currency Swaps working and valuation		2	
	4	Case Study		1	
V	1	Euro-currency market	Bhalla, V. K., Managing International Investment and Finance, New Delhi, Anmol, 1997	1	Total Lectures for Unit V: 7
	2	Euro banking and Euro-currency centers		2	
	3	Eurobond and its valuation		1	
	4	International Bond market- Introduction and features		2	
	5	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies(M.B.A.)
Semester – (Session 2019-2020)
Subject: Insurance Management
SUBJECT TEACHER: Prof. S. A. Pachakhede

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Introduction to Insurance, Concept and Definition, Nature of Insurable Risk	Insurance &Risk Management : P.K.Gupta, Insurance Management :S.C.Sahu & S.C.Das, Principle and Practics Insurance: Dr.P.Periasamy	2	Total Lectures for Unit I: 7
	2	Importance and Classification of Insurance		2	
	3	Essentials and Principles of an Insurance Contract		2	
	4	Insurance Contract v/s. Wagering Contract		1	
II	1	Introduction to Life Insurance, Concept, Definition	Insurance &Risk Management : P.K.Gupta, Insurance Management :S.C.Sahu & S.C.Das, Principle and Practics Insurance: Dr.P.Periasamy	2	Total Lectures for Unit II: 7
	2	Essential Features and Principles of Life Insurance, Characteristics		2	
	3	Need and Importance of Mortality Table, Construction of Mortality Tables		2	
	4	Types of Mortality Table, Computation of Premium.		1	
III	1	Life Insurance Products, Term Assurance Plan, Endowment Policies	Insurance &Risk Management : P.K.Gupta, Insurance Management :S.C.Sahu & S.C.Das, Principle and Practics Insurance: Dr.P.Periasamy	2	Total Lectures for Unit III:8
	2	Whole Life Policies. Definition and Nature of Annuity		1	
	3	Life Insurance V/s Annuity, Types of AnnuityProducts		1	
	4	ULIP and Pension Plans, Meaning and Types, Selecting a Pension Plan		1	
	5	Comparison of different Insurance Plan		1	
	6	Life Insurance Corporation of India-Functions, Organization and Management		1	
	7	Case Let		1	
IV	1	Introduction to General Insurance ,Concept and Types	Insurance &Risk Management : P.K.Gupta, Insurance Management :S.C.Sahu & S.C.Das, Principle and Practics Insurance: Dr.P.Periasamy	1	Total Lectures for Unit IV: 8
	2	Fire Insurance , Concept, Definition, Nature and Functions		1	
	3	Procedure of taking out, Renewal, Cancellation and Assignment of Fire Insurance Policy		2	
	4	Principles of Fire Insurance-Utmost Good Faith,		1	
	5	Insurable Interest, Indemnity, Subrogation, Causa Proxima		2	
	6	Case Let		1	
V	1	Health Insurance, Automobile Insurance,	Insurance &Risk Management : P.K.Gupta, Insurance Management :S.C.Sahu & S.C.Das,	1	Total Lectures for Unit V: 6
	2	Agriculture Insurance, Property Insurance		2	
	3	Property Insurance ,Concept, Features, Functioning and Prospects		2	
	4	Case Let		1	
			Total Lectures Required:		**36**

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Department of Management Studies
P.R.M.I.T. & R, Badnera

Department of Management Studies

Semester –IV (Session 2019-2020)

Teaching Plan

Subject: Management and Financial Services

Subject Teacher: Prof. N. M. Gawande

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	01	Financial Services : Meaning , Importance and role	Gordan, E. and K. Natrajan, *Emerging Scenario of Financial Services*, Himalaya Publishing House, 1997	01	
	02	Indian Financial Market : Primary & Secondary	Avadhani, V.A., *Investment Analysis Portfolio Management*, 2nd ed., 1999.	01	
	03	Nature and Scope of Financial Services	Gordan, E. and K. Natrajan, *Emerging Scenario of Financial Services*, Himalaya Publishing House, 1997	01	
	04	Regulatory Framework of Financial Services		01	
	05	Financial System and Market		01	
	06	Case Study / Application Base		01	
		Total Lecture for Unit No 1st		**06**	
II	01	Risk and Return	Kevin, *Portfolio Management*.	01	
	02	Risk management		01	
	03	Stock Exchange in India	Bhalla, V.K., *Investment Management : Security Analysis and Portfolio Management*, 8th ed., Delhi, S.Chand, 2001	01	
	04	Stock Exchange operation		01	
	05	Managing of Issue of Share and Bonds		01	
	06	Fixed Deposit and Inter-Corporate Loans	Gordan, E. and K. Natrajan, *Emerging Scenario of Financial Services*, Himalaya Publishing House, 1997	01	
	07	Case Study		01	
		Total Lecture for Unit No 2nd		**07**	
III	**01**	Leasing	Gordan, E. and K. Natrajan, *Emerging Scenario of Financial Services*, Himalaya Publishing House, 1997	02	This Unit is based on Numerical
	02	Hire Purchase		02	
	03	Debt Securitization		02	
	04	Housing Finance		02	
		Total Lecture for Unit No 3rd		**08**	
IV	01	Credit Rating & Credit Rating Agencies	Bhalla, V.K., *Investment Management : Security analysis and Portfolio Management*, New	01	
	02	Credit Card and their Types		01	

			Delhi, S.Chand, 2001		
	03	Mutual Fund	Gordan, E. and K. Natrajan, *Emerging Scenario of Financial Services*, Himalaya Publishing House, 1997	01	
	04	Advance banking	Vasant Desai, Development Banking and Financial Intermediaries, Economy, Himalaya Publishing House Pvt. Ltd. India 2008	01	
	05	Insurance and their types	O.P. Agrawal, Banking and Insurance, Economy, Himalaya Publishing House Pvt. Ltd. India 2010	01	
	06	Merchant Banking services		01	
	07	Case study		01	
		Total Lecture for Unit No 4th		**07**	
V	01	Venture Capital`	Khan and Jain, Financial Management, Tata Mcgrawhill, 5th ed.	02	
		Factors for failing		01	
	02	Bill Discounting		01	
	03	Case Study		01	
		Total Lecture for Unit No 5th		**05**	

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Department of Management Studies(M.B.A.)
Semester – (Session 2019-2020)
Subject: Security Analysis & Portfolio Management
SUBJECT TEACHER: Prof. K. S. Bijawe

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Security Analysis- Defination, Objectives	Bhalla,V.K.,Investment Management:Secutity Anaysis and Portfolio Management.& Avadhani, V.A., Investment Analysis Portfolio Manageme	1	Total Lectures for Unit I: 7
	2	Operations of Indian Stock Market		1	
	3	Types & Its Recent Developments		1	
	4	Listing & Indexing of Securities Rules & Regulations		2	
	5	SEBI- Roles, Functions		1	
	6	Case Study		1	
II	1	Fundamental Analysis	Bhalla,V.K.,Investment Management:Secutity Anaysis and Portfolio Management.& Avadhani, V.A., Investment Analysis Portfolio Manageme	1	Total Lectures for Unit II: 7
	2	Economy-Industry & Company (EIC Analysis)		2	
	3	Technical Analysis		2	
	4	Tools & Techniques		1	
	5	Case Study		1	
III	1	Portfolio Management Concept & Meaning	Bhalla,V.K.,Investment Management:Secutity Anaysis and Portfolio Management.& Avadhani, V.A., Investment Analysis Portfolio Manageme .	1	Total Lectures for Unit III:8
	2	Risk-Return Tradeoff		1	
	3	The Mean -Variance Criterion (MVC)		1	
	4	Markowitz Portfolio Theory		1	
	5	MVC & Portfolio Selection		1	
	6	Portfolio of Two Risky Securities		1	
	7	A Three Security Portfolio		1	
	8	Case Study		1	
IV	1	The Efficient Frontier- Tracing & Constructing	Bhalla,V.K.,Investment Management:Secutity Anaysis and Portfolio Management.& Avadhani, V.A., Investment Analysis Portfolio Manageme .	1	Total Lectures for Unit IV: 7
	2	Sharpe: Single Index Model		1	
	3	Capital Asset Pricing Model		1	
	4	Characterisitics Lines		1	
	5	Factor Models and Arbitrage Pricing Theory.		2	
	6	Case Study		1	
V	1	Portfolio Investment Process	Bhalla,V.K.,Investment Management:Secutity Anaysis and Portfolio Management.& Avadhani, V.A., Investment Analysis Portfolio Manageme	1	Total Lectures for Unit V: 7
	2	Bond Portfolio Management Strategies		1	
	3	Investment Timing		1	
	4	Portfolio Performance Evaluation		2	
	5	Revision Models		1	
	6	Case Study		1	
			Total Lectures Required:		**36**

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Department of Management Studies					
Semester –IV (Session 2019-2020)					
Subject: Strategic Management (MBA/401)					
SUBJECT TEACHER: S. B. Diwan					
Unit No.	**Topic No.**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark**
I	1	Concept of strategy	Business Policy and Strategic Management – Acharya and Govekar	1	Total =08
	2	Evolution of Corporate Policy in India		1	
	3	Strategic Management		1	
	4	Strategic management Process		1	
	5	Models and Phases of Strategic Management Process-I		1	
	6	Models and Phases of Strategic Management Process-II		1	
	7	7-S Framework		1	
	8	Case study		1	
II	1	SWOT Analysis	*Strategic Management-Francis Cherunilam*	1	Total =07
	2	Environmental Analysis-I		1	
	3	Environmental Analysis-II		1	
	4	Competitive Analysis		1	
	5	In Internal corporate Analysis-I		1	
	6	Internal corporate Analysis-II		1	
	7	Case Study		1	
III	1	Strategic Analysis	*Strategic Management-John Pearce-* TMH	1	Total =07
	2	Cost Analysis		1	
	3	Portfolio Analysis		1	
	4	Display Matrices		1	
	5	Operating and Financial Analysis-I		1	
	6	Operating and Financial Analysis-II		1	
	7	Case Study		1	
IV	1	Strategic Alternatives	Corporate Strategy and Business Policy - Azhar Kazmi, TMH Publications	1	Total =07
	2	Diversification		1	
	3	Mergers and Acquisition-I		1	
	4	Mergers and Acquisition-II		1	
	5	Turn-Around Management		1	
	6	Turn-Around Management		1	
	7	Case Study		1	
V	1	Strategic Choice	*Strategic Management-John Pearce-* TMH	1	Total =07
	2	Implementation of Strategy-I		1	
	3	Implementation of Strategy-II		1	
	4	Evaluation of Strategy		1	
	5	Control Of Strategy-I		1	
	6	Control Of Strategy-II		1	
	7	Case Study		1	

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Semester –IV (Session 2019-2020)

Subject: CLM

SUBJECT TEACHER: PROF. S. A. Pachkhede

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Leadership – Meaning, Concepts and Myths,	Principles of Management 10th ed- Koontz, H and Wechrich,H	2	**Total=07**
	2	Components of Leadership- Leader, Followers and situation		2	
	3	Assessing Leadership & Measuring Its effects,.		2	
	4	Case Study		1	
II	1	Focus on the Leader – Power and Influence	Leadership & Management Development	1	**Total=08**
	2	Leadership and Values		1	
	3	Leadership Behaviour		2	
	4	Attributes of Leaders and Managers		2	
	5	Leadership and Management		1	
	6	Case Study		1	
III	1	Contingency Theories of Leadership	Leadership & Management Development	2	**Total=07**
	2	Styles of Leadership		2	
	3	Leadership Dimensions		1	
	4	Leadership Development		1	
	5	Case Study		1	
IV	1	Leadership Skills – Basic Leadership Skills	Human Resource Management -VSP Rao	1	**Total=06**
	2	Building Technical Competency		2	
	3	Advanced Leadership Skills		2	
	4	Case Study		1	
V	1	Groups, Teams and Their Leadership	West Michael - Effective Team Work Leadership & Management Development	1	**Total=08**
	2	Leadership and Change		2	
	3	Leadership Model		2	
	4	Brief Biographies of some great western and Indian Business Leaders-Henry Ford-II, Victor Trumph, Bill Gates		1	
	5	J.R.D. Tata, Dhirubhai Ambani, Ratan Tata		1	
	6	Case Study		1	

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MBA Teaching Plan 2019-20 Winter Session (Even SEM) Sem-IV Subject : HBWP (MBA/4301/OB) SUBJECT TEACHER- PROF. Y. R. VAIDYA					
Unit No.	**Topic No**	**Topic with detail course outlines**	**Text and References**	**No. of Periods Allotted**	**Remark if Any**
1	1	OB: Definition, Objectives, Key Elements and nature.Organizational Behaviour Process,models	Management & Organistional Behaviour- Dr JS Reddy Himalaya Publications & Orgational Behaviour - K Ashwatthapa Himalaya Publications	2	
	2	Organizational Behaviour systems and its elements.Overview of evolution of Organizational Behaviour.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	3	Contributing disciplines to Organizational Behaviour.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	4	Individual and Individual Difference,	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	5	Human Behaviour and its causation, models of man,	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	6	whole person approach including physical, psychological, mental, emotional and spiritual level.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	7	Case Study	A Tale of Twist & Turn A Case Study	1	
2	1	Intellignece, Emotions and moods,Abilities,competencies and skills	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	2	Personality, perception, attitudes,Values, motivation and learning.	Management & Organistional Behaviour- Dr JS Reddy Himalaya Publications	1	
	3	Personality: concepts, Theories and determinants,applications in Organizational Behaviour.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	

	4	Perception:Defination, Difference between perception and sensation, factors affecting perception, improving perceptions and applications in Organizational Behaviour.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	5	Attitudes and Values: Attitudes- concepts, formation, types, measurement and attitude change. Overview of values and its application in Organizational Behaviour	Orgational Behaviour - K Ashwatthapa Himalaya Publications	2	
	6	Case Study	Prijudices in Workplace Real or Perceived? Case Study	1	
3	1	Job Satisfaction, Organizational commitment and loyalty:Overview, Concept and Applications in Organizational Behaviour	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	2	Emotions and moods-types, sources and theories with applications in Organizational Behaviour	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	3	Emotional Intelligence, Transactional Analysis	Organiztional Behaviour- Margie Parikh Ranjen Gupta Mc Graw Hill Publications	1	
	4	Overview of Motivation and Morale in Organizational Behaviour,	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	5	Overview of Group Dynamics-Meaning, Types of Groups & Group Processes.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	6	Case Study	Groups Make a Difference at Brazil's Semco	1	
4	1	Learning- Meaning, Definition, Principles and concept of reinforcement,punishment.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	

	2	Learning Behaviour-Concept, Models and its applications. sources, types, aspects of conflicts	Management & Organistional Behaviour- Dr JS Reddy Himalaya Publications	1	
	3	Conflict and Conflict Resolution-Definition,	Management & Organistional Behaviour- Dr JS Reddy Himalaya Publications	1	
	4	Conflict resolution and management,	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	5	Negotiation strategies, Counseling, Participative management.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	2	
	6	Case Study	When CEO of a Family Firm Gets into a Role Conflict	1	
5	1	Organizational culture and climate-Organizational culture its definition, types, functions, managing culture.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	2	
	2	Creating Sustaining and changing culture.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	3	Organizational Climate-Concept, Dimensions, Determinants and comparison with organizational culture	Orgational Behaviour - K Ashwatthapa Himalaya Publications	2	
	4	Quality of Work life- Concept, Meaning and Applications.	Orgational Behaviour - K Ashwatthapa Himalaya Publications	1	
	5	Case Study	P & G - The Epitome of Organizational Culture	2	

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MBA Teaching Plan 2019-20 Winter Session (Even SEM) SEM-IV Subject : IHRM (MBA/4306/OB

SUBJECT TEACHER-PROF. Y. R. VAIDYA

Unit No.	Topic No	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
1	1	International HRM: Concept and Issues	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	2	Barriers in Global HRM	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	3	Culture, Society and Nations	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	4	Cultural Change and Universals	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	5	Cultural Sensitivity and Global Business	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	6	Cross Cultural Theories.	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	7	Case Study	IHRM Challenges- A Case Study	1	
2	1	International Business	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	2	Employee Behaviour and Cross Culture	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	3	Cross Cultural Negotiations	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	4	Organizational Culture.	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	5	Case Study	Cultural Clash- A Case Study	1	
3	1	Culture and Organisational Performance	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	

	2	International Business and International HRM Approaches	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	3	Organizing Multinational Structures	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	4	Case Study	NIIT Case Study	1	
4	1	International HRM Functions: Recruitment and Selection	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	2	Training and Development	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	3	Compensation,	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	4	Employee Performance	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	1	
	5	Case Study	JAMBA Juice- Case Study	1	
5	1	International Projects and HR	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	2	Organizational Ethics	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	3	Ethics across culture	International HRM Text & Cases -S.C. Gupta, MacMillan Publication	2	
	4	Case Study	Coca Cola Case Study	2	

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Department of Management Studies
Semester –IV (Session 2019-2020)
Subject: Knowledge Management
SUBJECT TEACHER: Prof. P. A. Kalmegh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Knowledge and Knowledge Management: Concept and Meaning	Donald Hislop, Knowledge Management in Organization, Oxford University Press Knowledge Human Resource Management-Ganesh Shermon	1	Total Lectures for Unit I: 8
	2	Contemporary Significance, Aims, Philosophy and Structure		1	
	3	Knowledge Society Concept, post industrial concept		1	
	4	Types of Knowledge, Conduit model of knowledge sharing		1	
	5	Knowledge management processes.		1	
	6	Knowledge-features, perspectives of knowledge		1	
	7	Organizational knowledge base		1	
	8	Case Study		1	
II	1	Managing knowledge, knowledge management and business strategy	Knowledge Management in theory & practice-Kimiz Dalkir & Donald Hislop, Knowledge Management in Organization	1	Total Lectures for Unit II: 7
	2	Knowledge management strategies-Hansen Codification versus personalization framework		1	
	3	Earl's Seven School of knowledge management		1	
	4	Alvesson and Karreman's four knowledge management approaches.		1	
	5	Knowledge worker, knowledge intensive firms, knowledge work and ambiguity		1	
	6	Workers participation in knowledge processes.		1	
	7	Case Study		1	
III	1	Learning and Knowledge Management: The Heterogeneity of learning,	Knowledge Management in theory & practice-Kimiz Dalkir & Donald Hislop, Knowledge Management in Organization	1	Total Lectures for Unit III: 8
	2	Dynamics of organizational learning, The learning organisation		1	
	3	Knowledge creations and loss-Innovation		1	
	4	Dynamics and knowledge processes		1	
	5	Knowledge creation theory, social dynamics of innovation networking processes.		1	
	6	Forgetting and Unlearning Knowledge-Typology of forgetting		1	
	7	Barriers and facilitation of unlearning.		1	
	8	Case Study		1	
IV	1	Managing and sharing knowledge: Socio Cultural Issues, Interpersonal Trust, Group Identity, Personality.	Knowledge Management in theory & practice-Kimiz Dalkir & Donald Hislop, Knowledge Management in Organization	1	Total Lectures for Unit IV: 7
	2	Communities of practice-basic characteristics, origins, features, dynamics, knowledge base, intra community		2	
	3	knowledge processes and managing communities of practices		1	
	4	Cross Community, boundary spanning and knowledge process-significance, identity, knowledge, trust and social relations, relationship management.		2	
	5	Case Study		1	
V	1	Power, politics, conflict and knowledge processes.	Knowledge Management in theory & practice-Kimiz Dalkir & Donald Hislop, Knowledge Management in Organization	1	Total Lectures for Unit V: 6
	2	Information, Communication Technology and Knowledge Management		1	
	3	Knowledge management-culture management and HRM practices		1	
	4	Leadership and knowledge management		1	
	5	Knowledge management as a fashion		1	
	6	Case Study		1	
			Total Lectures Required	**36**	

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P.R.M.I.T. & R., Badnera

Department of Management StudiesSemester –IV (Session 2019-2020)

Teaching Plan

Subject: Management Of Group Process

Subject Teacher : Prof. Minal M. Nistane.

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Nature &Characteristics of Group, Types of Group, Theories	P.Subba Rao,K.Aswatathapa .	2	
	2	Group formation, Stages of Group, Development,		2	
	3	Usefulness & Pitfalls of Group, Size and Name of Group,		1	
	4	Group Decision Making & problem solving Processes		1	
	5	Models of Decision Making		1	
	6	Case Study		1	
		Total Lectures		**8**	
II	1	Group as a medium of learning, Determinants of Group	K.Aswatathapa	2	
	2	Behavior, Group for Development and Change		2	
	3	Conflicts and Negotiation in groups		2	
	4	Case Lets		1	
		Total Lectures		**7**	
III	1	Group Dynamics, Group Cohesiveness	P.Subba Rao,K.Aswatathapa .	2	
	2	Inter Group Processes		1	
	3	Group Change Influence Process		2	
	4	Case Study		1	
		Total Lectures		**6**	
IV	1	Interpersonal Relationship &Interpersonal Communication	K.Aswatathapa	2	
	2	Interpersonal Awareness,		1	
	3	Group Communication		1	
	4	Its process, Feedback Process.		2	
	5	Case Lets		1	
		Total Lectures		**7**	
V	1	Group Effects: Group Synergy,	P.Subba Rao,K.Aswatathapa	2	
	2	Inter Group Relationship,		1	
	3	Team Building, Group Leadership, Power and Politics in Group		2	
	4	Stress and Frustration and its management in organization.		2	
	5	Case Study		**1**	
		Total Lectures		**8**	
				36	

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Department of Management Studies
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Department of Management Studies

Semester –III (Session 2019-2020)

Subject: Organizational Development and intervention strategies

Subject Teacher: Miss. M. M. Nistane

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	01	Introduction	• Theory of OD & Change by Cummings & Worley • OD & Transformation By French, Bell& Zawacki • HRM by P. Subba Rao • HRD by Werner Destmone	01	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	Develop insight into emerging trends and scope of the subject		01	
	03	Meaning, Concept and myth		01	
	04	Theory of OD		01	
	05	Approaches to problem Diagnosis		01	
	06	Case study		01	
Total Lecture				**06**	
II	01	Techniques- steps in OD	• Theory of OD & Change by Cummings & Worley • OD & Transformation By French, Bell& Zawacki • HRM by P. Subba Rao • HRD by Werner Destmone	02	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	General OD competencies		01	
	03	OD skills		01	
	04	Technical training		01	
	05	Case Study		01	
Total Lecture				**06**	
III	01	OD Evaluation	• Theory of OD & Change by Cummings & Worley • OD & Transformation By French, Bell& Zawacki • HRM by P. Subba Rao • HRD by Werner Destmone	02	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	OD Ethics of professional		01	
	03	Future of OD		01	
	04	Introduction to Organizational Effectiveness		01	
	05	Concept and objectives		01	
	06	Nature and need of OEC		01	
	07	Case study		01	
Total Lecture				**08**	
IV	01	Organizational change	• Theory of OD & Change by Cummings & Worley • OD & Transformation By French, Bell& Zawacki	01	Many other books & internet will be referred for Diagrams, Data ,Case studies &
	02	Concept and objectives		01	
	03	Nature and types		01	
	04	Models and implementation		02	
	05	Change strategies		02	

			• HRM by P. Subba Rao • HRD by Werner Destmone		Details
	06	Change agent			
	06	Case Study		01	
Total Lecture				**08**	
V	01	Organizational Intervention	• Theory of OD & Change by Cummings & Worley • OD & Transformation By French, Bell& Zawacki • HRM by P. Subba Rao • HRD by Werner Destmone	01	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	Organizational Intervention- Major techniques		01	
	03	Designing intervention		01	
	04	Interpersonal Interventions		01	
	05	Team Interventions		01	
	06	Inter- group Interventions		01	
	07	Development interventions Some important final issues concerning OD		01	
	08	Case Study		01	
Total Lecture				**08**	

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Department of Management Studies
P.R.M.I.T. & R, Badnera

Department of Management Studies
Semester –IV (Session 2019-2020)
Subject: International Marketing Environment
SUBJECT TEACHER: Prof. S. B. Diwan

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Introduction- Distinction between International Marketing and Domestic Marketing	International Marketing : Rakesh Joshi, Oxford International Marketing Mgt: U.C.Mathur, SAGE	1	Total Lectures for Unit I: 8
	2	International Institutions – UNCTAD, WTO		2	
	3	Economic Environment of International Marketing		1	
	4	Trade Agreement – Free Trade Area, Customs Union, Common Market		2	
	5	Evolution of International Business Theories		1	
	6	Case Study		1	
II	1	Overview of India & World Trade – EXIM Policy	International Marketing : Rakesh Joshi, Oxford International Marketing Mgt: U.C.Mathur, SAGE	2	Total Lectures for Unit II: 8
	2	Foreign Trade Policy and Regulation		1	
	3	Trading Partners- Bilateral & Multilateral Trade Agreement		2	
	4	International Market Place & Space, Barriers, International Politics & Economic Integration , Trade Blocks		2	
	5	Case Study		1	
III	1	Institutional Infrastructure for Export Promotion – Export Promotion Councils (EPC)	International Marketing : Rakesh Joshi, Oxford International Marketing Mgt: U.C.Mathur, SAGE	2	Total Lectures for Unit III: 7
	2	Public Sector Trading Agencies – ECGC		1	
	3	Commodity Board		1	
	4	Export – Import Management – Registration of Exporters, Procedure & Documents		1	
	5	Export Quotations		1	
	6	Case Study		1	
IV	1	Shipping and Transportation.	International Marketing : Rakesh Joshi, Oxford International Marketing Mgt: U.C.Mathur, SAGE	1	Total Lectures for Unit IV: 8
	2	Insurance, Negotiations of Documents		2	
	3	Instruments of Payments – Open Account, Bills of Exchange		2	
	4	Instruments of Payments – Letter of Credit, Expert Finance		2	
	5	Case Study		1	
V	1	Trade and BOP of India	International Marketing : Rakesh Joshi, Oxford International Marketing Mgt: U.C.Mathur, SAGE	2	Total Lectures for Unit V: 5
	2	Technological Developments and International Marketing		2	
	3	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies
P.R.M.I.T. & R., Badnera

Department of Management Studies

Semester –III (Session 2019-2020)

Subject: Marketing for Non-Profit Organizations and Social Services

Subject Teacher: Miss. R. K. Dhanuka

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	01	Introduction	• Marketing Non Profit Organizations by S.M. Jha • Kotler, Philip and Roberto Eduardo L., Social Marketing	01	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	Scope of Marketing in the context of NPO: Hospitals, Police, Public Services, etc.		01	
	03	Scope of Marketing in the context of NPO: Hospitals, Police, Public Services, etc		01	
	04	Scope of Marketing in the context of social services, e.g. health and family welfare, adult literacy Programme.		01	
	05	Application of Marketing in the context of social services, e.g. health and family welfare, adult literacy Programme		01	
	06	Case study		01	
Total Lecture				**06**	
II	01	Setting Marketing Objective	• Marketing Non Profit Organizations by S.M. Jha • Kotler, Philip and Roberto Eduardo L., • Social Marketing	01	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	Analyzing internal & external Environment influencing NPO's		02	
	03	Analyzing internal & external Environment influencing Social Services		02	
	04	Case Study		01	
Total Lecture				**06**	
III	01	Market Segmentation	• Marketing Non	02	Many other

	02	Customer Targeting	Profit Organizations by S.M. Jha • Kotler, Philip and Roberto Eduardo L., Social Marketing	01	books & internet will be referred for Diagrams, Data ,Case studies & Details
	03	Marketing Mix Strategies		02	
	04	Product-Service life cycle for NPO's		01	
	05	Product-Service life cycle for social services		01	
	06	Case study		01	
Total Lecture				**08**	
IV	01	Beneficiary Contact Programme	• Marketing Non Profit Organizations by S.M. Jha • Kotler, Philip and Roberto Eduardo L., Social Marketing	01	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	Use of print and electronic media in mass communication		01	
	03	Diffusion of innovative ideas		01	
	04	Marketing Tools		02	
	05	Distribution & Delivery Strategy for NPOs and Social Services		02	
	06	Case Study		01	
Total Lecture				**08**	
V	01	Marketing Strategies for social services	• Marketing Non Profit Organizations by S.M. Jha • Kotler, Philip and Roberto Eduardo L., Social Marketing	02	Many other books & internet will be referred for Diagrams, Data ,Case studies & Details
	02	Marketing Strategies for NPOs		02	
	03	Relevance of CST (Corporate Social Responsibility)		01	
	04	Review and monitoring of marketing strategies of socially relevant programmes.		02	
	05	Case Study		01	
Total Lecture				**08**	

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P.R.M.I.T. & R, Badnera

Department of Management Studies

Semester –IV (Session 2019-2020)

Subject: Marketing Of Services (MBA/4202/SM)

SUBJECT TEACHER: Prof. A. V. Deshmukh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark if Any
I	1	Understanding Services	Services Marketing – Concepts, application and cases- Shajahan S.	1	**Total=07**
	2	The nature of services marketing		2	
	3	Classification of Services		1	
	4	Classification of Services		1	
	5	Importance of Service Marketing		1	
	6	Case Study		1	
II	1	Services Experience, Consumer Behavior in Services	Services Marketing Text & Readings, Indian Perspective – Ravi Shankar	2	**Total=08**
	2	Customer Expectations and Perceptions,		1	
	3	Listening to Customers		1	
	4	Monitoring and Measuring Customer Satisfaction		1	
	5	Monitoring and Measuring Customer Satisfaction		1	
	6	Complaints Handling		1	
	7	Case Study		1	
III	1	Strategic Issues in Service Marketing	Services Marketing Text & Cases – Rajendra Nargandkar	2	**Total=07**
	2	Market Segmentation and Targeting		1	
	3	Positioning and Differentiation of Services		1	
	4	Managing Demand and Capacity		1	
	5	Managing Demand and Capacity		1	
	6	Case Study		1	
IV	1	The Marketing Mix Elements	Services Marketing Text & Readings,	2	**Total=07**
	2	Maximizing Services Marketing Potential Relationship marketing		1	

	3	Maximizing Services Marketing Potential Relationship marketing	Indian Perspective – Ravi Shankar Services Marketing – Concepts, application and cases- Shajahan S.	1	
	4	Internal Marketing		1	
	5	Supplementary Services		1	
	6	Case Study & Practices		1	
V	1	Tourism and Travel Services Marketing		1	**Total=07**
	2	Marketing of Financial Services		1	
	3	Communication Services		1	
	4	Information Services		1	
	5	Media Services Marketing-Advertising (Professional Services)		1	
	6	Media Service Marketing –Brand (Professional Services)		1	
	7	Case Study		1	
				Total Session	36

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Department of Management Studies
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Department of Management Studies

Semester –IV (Session 2019-2020)

Subject: Retail Marketing

SUBJECT TEACHER: Prof. S.R.Deshmukh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	0.1	Retailing, An Introduction	Retailing Management – Swapna Pradhan	1	Total Lectures for Unit I: 7
	0.2	Retailing, Indian Vs Global Scenario		2	
	0.3	Types of Retailing		1	
	0.4	Types of Retail formats		2	
	0.5	Franchising in retailing		1	
II	1	Retail Marketing Mix	Channel Management & Retail Management – Meenal Dhotre	2	Total Lectures for Unit II: 8
	1.1	Consumer buying behavior in Retailing		2	
	1.2	Segmentation & Positioning in Retail		1	
	1.3	Structure of Retail Organization		1	
	1.4	Careers in retailing		1	
	1.5	Case Study		1	
III	2	Factors affecting retail location decision	Retail Management – Gibson Vedamani	2	Total Lectures for Unit III: 8
	2.1	Stratigies based on Retail location		2	
	2.2	Store Design		1	
	2.3	Store layout and Factors affecting Store layouts		1	
	2.4	Retailing image mix , Store façade		1	
	2.5	Case Study		1	
IV	3	Retail Communication Mix	The Art of Retailing – A.J. Lamba	1	Total Lectures for Unit IV: 7
	3.1	Sales Promotion in Retailing		1	
	3.2	Advertising in Retailing		1	
	3.3	Public Relations in Retailing		1	
	3.4	Personal Selling in Retailing		1	
	3.5	Steps in planning retail communication		1	
	3.6	Case Study		1	
V	4	Retail Strategies : Differentiation Strategies	Retail Management – W. Steward	1	Total Lectures for Unit V: 7
	4.1	Growth Strategies		1	
	4.2	Expansion Strategies		1	
	4.3	Pricing Stratigies in Retail		1	
	4.4	Role of IT in retailing		1	
	4.5	Case Study		1	
			Total Lectures Required: 36		

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Department of Management Studies
P.R.M.I.T. & R. Badnera

Prof. Ram Meghe Institute of Technology & Research, Badnera
Department of Management Studies(M.B.A.)

Lesson Plan
Subject: Rural Marketing
Semester –IV (Session 2019-2020)
Subject Teacher: Prof. G.D. Pachaghare

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Remark
I	1	Rural Marketing Management Perspectives	C.S.G. Krishnamacharyulu & Lalitha Ramakrishnan, "Rural Marketing" – Text and Cases, Pearson Education	1	Total Lectures for Unit I: 6
	2	Rural – Urban Disparities, Challenges to Indian Marketer		2	
	3	Rural Marketing – Concept, Scope, Nature, Taxonomy Attractiveness		1	
	4	Urban Vs. Rural Marketing		1	
	5	Case study		1	
II	1	Rural consumer behavior – buyer characteristics	C.S.G. Krishnamacharyulu & Lalitha Ramakrishnan, "Rural Marketing" – Text and Cases, Pearson Education	1	Total Lectures for Unit II: 7
	2	Decision process and behavior patterns, evaluation procedure		2	
	3	Brand loyalty in rural markets		1	
	4	Rural Marketing-Innovation adoption		2	
	5	Case Study		1	
III	1	Information System for Rural Marketing – Concepts, Significance	C.S.G. Krishnamacharyulu & Lalitha Ramakrishnan, "Rural Marketing" – Text and Cases, Pearson Education C.S.G. Krishnamacharyulu & Lalitha Ramakrishnan, "Cases in rural marketing and integrated approach". Pearson education.	1	Total Lectures for Unit III: 8
	2	Internal Reporting System		1	
	3	Marketing Research System, Decision Support System		2	
	4	Selecting and Attracting Markets – Concepts and Process, Segmentation, Degrees, Bases, Segmentation guidelines		2	
	5	Targeting and Positioning		1	
	6	Case Study		1	
IV	1	Product Strategy for rural Markets, Concept and Significance	C.S.G. Krishnamacharyulu & Lalitha Ramakrishnan, "Rural Marketing" – Text and Cases, Pearson Education	2	Total Lectures for Unit IV: 9
	2	Product Mix and Product Item Decisions		2	
	3	Competitive Product Strategies		1	
	4	Pricing Strategy in Rural Marketing – Concept, Significance, Objectives, Pricing Strategy		2	
	5	Case Study		1	
V	1	Promotion towards rural audience	Robert Chambers, "Rural Development: Putting the last first", Pearson Education.	2	Total Lectures for Unit V: 7
	2	Exploring media, profiling target audience, designing right promotion strategy and campaign		2	
	3	Rural Distribution – Channels, old setup		1	
	4	New players, new approaches, coverage strategy		1	
	5	Case Study		1	
			Total Lectures Required	**36**	

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Department of Management Studies
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Department of Management Studies
Semester –III (Session 2019-2020)
Subject: Sales Promotion Management
Subject Teacher: Miss. Pratiksha A. Kalmegh

Unit No.	Topic No.	Topic with detail course outlines	Text and References	No. of Periods Allotted	Total
I	01	Introduction	Sales Promotion & Advertising Management by M.N. Mishra Advertising, sales and promotion Management by S.A Chunawala Sales Promotion Management by Bir Singh	01	7
	02	Sales Promotion & Marketing Mix		02	
	03	Nature and Scope of Sales Promotion		01	
	04	Types of Sales Promotion		02	
	05	Case Study		01	
II	01	Consumer Behavior & sales Promotion	Sales Promotion & Advertising Management by M.N. Mishra Advertising, sales and promotion Management by S.A Chunawala Sales Promotion Management by Bir Singh	02	7
	02	Deal Prone consumer		02	
	03	Economic Theories of promotion		02	
	04	Case Study		01	
III	01	Sales Promotion's Impact on Sales	Sales Promotion & Advertising Management by M.N. Mishra Advertising, sales and promotion Management by S.A Chunawala Sales Promotion Management by Bir Singh	01	8
	02	Sales promotion experiments		02	
	03	Evaluation of Sales promotion experiments		02	
	04	Choice & purchase timing models		02	
	05	Case study		01	
IV	01	Introduction to Sales promotion planning	Sales Promotion & Advertising Management by M.N. Mishra Advertising, sales and promotion Management by S.A Chunawala Sales Promotion Management by Bir Singh	01	7
	02	Process of Sales promotion planning		02	
	03	Introduction to sales promotion budget		01	
	04	Process of sales promotion budget		01	
	05	Approaches to sales promotion budget		01	
	06	Case Study		01	
V	01	Designing Promotional strategies	Sales Promotion & Advertising Management by M.N. Mishra Advertising, sales and promotion Management by S.A Chunawala Sales Promotion Management by Bir Singh	02	7
	02	Strategic issues in designing promotional strategies		01	
	03	Substantive Findings Coupons		01	
	04	Issues on Coupons		01	
	05	Trade dealings		01	
	06	Case study		01	
			Total Lectures Required: 36		

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Department of Management Studies
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Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd Semester AY: 2019-2020)

Session/Teaching Plan

me of Faculty: Prof. A. P. Kinhikar Year: FYMCA

bject Name:PSUC++ Sem: I Subject Code:

28	UNIT V	Friend functions			4
29		Static functions		Week 5	1
30		Assignment and copy initialization	October	Week 1	1
31		the this pointer			2
32		Dynamic type information.		Week 2	1
33	UNIT V	Stream classes, stream errors			2
34		disk file I/O with streams			3
35		File pointers		Week 3	1
36		Error handling in file I/O			2
37		File I/O with members functions			3
38		overloading the extractions & insertion operato			4
39		Memory as a stream object		Week 4	1
40		command- line arguments. Multifile programs			2
41	UNIT VI	Function Template	November	Week 2	1
42		Class templates			2
43		Exception syntax			3
44		Multiple exceptions			4
45		exception with arguments		Week 3	1
46		Introduction to the Standard Template Library			2
47		Algorithms, Sequential Containers			3
48		Iterates, Specialized iterates		Week 4	1
49		Associative containers			2
50		Function objects			3

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application

(Odd Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Prof. D. R. Bandbuche **Year:** MCA 1st Year Sem I

Subject Name: Computer Oriented Statistical Methods(Theory) **Subject Code:** 1MCA3

Sr.No	Unit No.	Topics to be Covered	Month	Week	Day
1	Unit I	Introduction, Definitions : Websters, secrists, Gronton and Cowden definitions of statistics	Augest	Week 1	1
2		Importance of statistics			2
3		Scope of statistics : Industry, Economy, Planning,		Week 2	1
4		medical science, Computer Science etc.			2
5		Frequency distribution, cumulative frequency distribution			3
6		Graphical representation of frequency distribution			4
7		Relative frequency distribution. Graphical representation of frequency distribution		Week 3	1
8	Unit II	Concept of central tendency, criteria for good measures of central tendency.			2
9		G.M., H.M. for grouped & ungrouped data with its merits & demerits		Week 4	1
10		Partition values : quartiles, deciles, percentiles Numerical problems on central tendency			2
11		Dispersion criteria for good measures of dispersion.			3
12		Numerical problems on quartile deviation			4
13		Numerical problems on mean deviation		Week 5	1
14		Numerical problems on Standard Deviation.			2
15		variance, co-efficient of Dispersion,			3
16		coefficient of variation			4
17		Concept of central tendency, criteria for good measures of central tendency.	September	Week 1	1
18	Unit III	Definition of Skewness			2
19		Raw & Central moments : for grouped & ungrouped data		Week 2	1
20		their relationshipsRaw & Central moments			2
21		Pearson's co-efficient of Skewness			3
22		Bowley's co-efficient of Skewness			4
23		Numerical problems on moments, co-efficient of skenmen & co-efficient of Kurtosis.		Week 3	1
24		co-efficient at Kurtosis based on moments			2
25		Correlation, Concept of correlation.			3
26		correlation for bivariate data.			4

27	Unit V	scatter diagram positive, negative & no correlation		Week 4	1
28		Karl pearson's co-efficient of correlation			2
29		Spearman's Rank correlation			3
30		Numerical problems on Rank correlation			4
31		Repeated rank correlation.		Week 5	1
32		Assumption on Karl pearson's	October	Week 1	1
33	Unit V	Concept of regression			2
34		Derivation of regression lines by method of least squares.		Week 2	1
35		Linear and Non-linear regression			2
36		Numerical problem on least squares			3
37		Fitting of second degree curve & curve y=abx			4
38		Multiple correlation and its Numerical problems		Week 3	1
39		partial correlation and its Numerical problems			2
40		Equation of Non-linear regression			3
41	Unit VI	Time series Definition			4
42		Time series & uses of time series		Week 4	1
43		Components of Time series,			2
44		Additive & multiplicative models	November	Week 1	1
45		Methods of estimating trend		Week 2	1
46		moving average method			2
47		Least square methods			3
48		Semi-average method			4

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd/Even Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Prof. Vinit A. Sinha **Year:** MCA II **Section:** A/B/DSE
Subject Name: Operating System **Sem:** I **Subject Code** 3 MCA 1

Sr. No	Unit No.	Topics to be Covered	Month	Week	Day
1	Unit I	General Introduction of the subject	August	Week 1	1
2		Operating System Definition			
3		OS Evolution, OS Components and Services.			2
4		Process Concept.		Week 2	1
5		Process Scheduling.			
6					3
4		Operations on Processes.			4
5				Week 3	1
6		Cooperating Processes.			2
7				Week 4	1
8		Inter process Communication.			2
9		Threads Overview,			3
10		Threading Issue			4
11		Java Threads		Week 5	1
12		Multithreading Models.			2
13	Unit II	CPU Scheduling Concepts.			3
14		Scheduling Criteria and Algorithms.			4
15		The Critical-Section Problem.	September	Week1	1
16		Synchronization Hardware.			2
17		Semaphores, Monitors.			3
18		Deadlocks-Definition & Characterization.		Week 2	1
19		Deadlocks Prevention.			
20		Avoidance, Detection and Recovery from Deadlock.			

Sr. No	Unit No.	Topics to be Covered	Month	Week	Day
21	Unit III	Introduction of Memory Management.	September	Week 2	2
22		Swapping, Contiguous Memory Allocation Schemes,		Week3	1
23		Paging Process, need of Segmentation .			2
24		: Background, Demand Paging scheme,			3
25		Process Creation,		Week4	1
26		Page Replacement Policies,			2
27		Allocation of Frames, Thrashing			3
				Week 5	1
28	Unit IV	Directory Structure	October	Week1	1
29		File-System Mounting,			2
30		File Sharing & Protection.		Week 2	1
31		File-System Structure			2
32		File-System Implementation.			3
33		Directory Implementation, Allocation Methods		Week3	1
34		Free-Space Management. File Recovery			2
					3
					4
35	Unit V	Overview, I/O Hardware,		Week4	1
36		Application I/O Interface	November	Week2	1
37		Kernel I/O Subsystem.			2
38		Transforming I/O to Hardware Operations.			3
39		Disk Scheduling			4
40		Disk Management		Week3	1
41		Swap-Space Management			2
42		RAID Structure.			3
43	Unit VI	History, Design Principles,			4
44		Kernel Modules,		Week 4	1
45		Process Management,			2
46		Scheduling, Memory Management			3
47		File Systems, Input and Output			4
48		Interprocess Communication , Security issues in Linux.			

Prof .Ram Meghe Institute of Technology & Research, Badnera

Department of Master in Computer Application

Subject: (3MCA2) FILE STRUCTURES & DATA PROCESSING

Class: 2nd Year (I Semester) Session: W-2019

Day Wise Teaching Plan

Sr. No.	Unit No.	Topics to be Covered	Month	Week	Lecture
1		Practical	July	I	1
2		Practical			2
3		Practical			3
4		Practical		II	1
5		Practical			2
6		Practical			3
7		Aptitude Session and Soft Skills Session		III	1
8		Aptitude Session			2
9		Aptitude Session			3
10		Aptitude Session		IV	1
11		Aptitude Session			2
12		Aptitude Session			3
13		Practical		V	1
14		Practical			2
15	UNIT I	General Introduction to the subject, File Structure design, File processing operations	August	I	1
16		Read, Write and Seek operations,Unix Directory structure			2
17		Secondary storage devices: disks(HDD, Floppy), Secondary storage devices: tapes		II	1
18		Secondary storage devices: CD-ROM			2
19		a journey of a byte, Buffer management. move, locate,scatter,gather operations, I/O in Unix			3
20	UNIT II	File Structure Concepts : Field & record organization			4
21		record structures & its methods, record structures with length indicator		IV	1
22		writing, representing, reading, variable length records			2
23		classes fixed length buffer			3
24		fixed text buffers and record access			4
25		Using classes to manipulate buffers		V	1
26		Sequential record access & Unix tools, Record structures.			2
27		File access & file organization			3
28		Abstract data models for file access			4
29		Metadata. Extensibility		I	1
30		Portability & standardization			2
31		Sequential record access & Unix tools		II	1
32		Data Compression			2

33	UNIT III	compact Notation suppressing repeating sequences	September	II	3
34		Variable length codes			4
35		Irreversible Technique		III	1
36		compression in Unix, Reclaiming spaces in files			2
37		Deletening fixed length records for reclaiming space dynamically			3
38		external memory fragmentation & placement strategies			4
39		Introduction to internal sorting and Binary searching		IV	1
40		Key sorting, Indexing concepts, Multiple keys indexing			2
41		Object I/O, Inverted lists			3
42		Selective indexes, Binding			4
43	UNIT IV	Cosequential processing : Object-Oriented model		V	1
44		Object-Oriented model: its application & match lists	October	I	1
45		Internal sorting : a second look,Merging lists			2
46		summary of conseqential match, applications of conseqential match		II	1
47		File Merging : Sorting of large files on disks			2
48		File Merge & heapsort			3
49		sorting while writing, merging as a way of sorting large files			4
50		Balanced Merge, Two Way		III	1
51		K-way merge, Sortmerge packages			2
52		sorting and Cosequential processing in Unix			3
53	UNIT V	Multilevel indexing with B-trees			4
54		Indexing using Binary Search trees		IV	1
55		Linked Structure, OOP based B-trees			2
56		AVL trees, Paged Binary trees, & Problems			3
57		B-tree methods Search	November	II	1
58		Insert and others, Deletion			2
59		Deletion, merging & redistribution			3
60		B*trees, Virtual B-trees, VL records & keys			4
61		Indexed sequential file access and Prefix B+trees		III	1
62	UNIT VI	Hashing : Introduction, a simple hashing algorithm			2
63		Hashing functions and record distributions			3
64		Collision resolution, Buckets, External hashing.			4
65		Making deletions, Pattern of record access		IV	1
66		Implementation, Deletion, Performance, Alternative approaches.			2

Submitted By

Preeti Deshmukh

P. G. Department of Computer Applications

(Odd Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Rupali Sherekar | Year: II

Subject Name: Java Programming | Sem: I | Subject Code: 3MCA3

Sr. No	Unit No.	Topics to be Covered	Month	Week	Day
		Practice Programs	July	Week1	1
		Practice Programs			2
		Practice Programs			3
		Practice Programs			4
		Practice Programs			5
		Practice Programs			6
		Practice Programs		Week 2	1
		Practice Programs			2
		Practice Programs			3
		Practice Programs			4
		Practice Programs			5
		Practice Programs			6
		Aptitude and Comunication Skills Sessions		Week3	1
		Aptitude and Comunication Skills Sessions			2
		Aptitude and Comunication Skills Sessions			3
		Aptitude and Comunication Skills Sessions			4
		Aptitude and Comunication Skills Sessions			5
		Aptitude and Comunication Skills Sessions			6
		Aptitude Sessions		Week 4	1
		Aptitude Sessions			2
		Aptitude Sessions			3
		Aptitude Sessions			4
		Aptitude Sessions			5
		Aptitude Sessions			6
1	Unit I	Introduction to the subject		Week 5	1
2		Java Basics, Prog Components			2
3		Compilation cycle,Data Types, Operators,Intro to Arrays			3
4		Operators,Intro to Arrays, Control Statements	August	Week 1	1
5		Switch Case Example, Looping Constructs			2
6		Logical Examples, break, continue			3
7		javadoc, javac, jdb, University paper questions		Week2	1
8	Unit II	Introducing classes, class fundamentals, declaring classes,objects,methods, class data, & instance data			2
9		constructor, this keyword, access control,			3
10		Packages introduction, Creating , excecuting prg with packages			4
11		Creating and importing			5
12		Inheritance, method overloading		Week 3	1
13		Polymorphism (Overriding)			2
14		Dynamic Method Dispatch			3
15		Abstract classes		Week 4	1
16		Interfaces			2
17		Interfaces			

18		Passing array to methods			3
19		String and String Buffer classes,			4
20		Math class			5
21		Arrays: Multi-dimensional, Array of Objects			1
22	Unit III	Exception handling: Introduction, Exception types, uncaught Exceptions, using try and catch			2
23		throw, throws, finally clauses			3
24		multiple catch clauses, Built-in Exceptions		Week 6	4
25		Creating your own exceptions			5
26		Multithreaded programming: Java thread model, creating a thread,	September		1
27		creating thread, Examples		Week 1	2
28		Creating multiple threads			1
29		thread priorities			2
30		synchronization		Week 2	3
31		Examples			1
32	Unit IV	Java I/O: Stream classes, Byte Stream & Character Streams			2
33		Input stream,Output stream			3
34		File Input stream,			4
35		File Outputstream,		Week 3	5
36		Data Input stream, Data Output stream,			1
37		PrintWriter,			2
38		Applet, Applet Lifecycle,The Applet class and its various methods			3
39		Writing and executing an Applet,The Applet tag			4
40		Passing parameters to applets.		Week 4	5
41		Applet Examples		Week 5	1
42		transient & volatile modifiers, using instanceof, using assert	October		1
43	Unit V	Event handling: Event handling mechanisms,		Week 1	1
44		Delegation Event model			2
45		Delegation Event model			3
46		Event sources & Event Listeners,		Week 2	1
47		EventClasses, Event Listener Interfaces			2
48		Using delegation Event model: Handling mouse events,			3
49		handling Keyboard events			4
50		Adapter classes			5
51		Inner classes, anonymous inner classes.		Week 3	1
52	Unit VI	Introduction to AWT	November		2
53		AWT classes ,Window fundamentals			3
54		working with frame windows, Button,TextField, Label			4
55		Adding and removing controls,			5
56		Working with Graphics ,Working with colors		Week 2	1
57		Layout managers		Week 3	2

Deepali

Faculty Incharge

Prof. Ram Meghe Institute of Technology & Research, Badnera
P.G. Department of Computer Applications
(Odd Semester AY: 2019-20)

Session/Teaching Plan

Name of Faculty: Prof. D.S.Deshmukh **Year:** SYMCA

Subject Name: Computer Networks **Sem:** I **Subject Code:** 3MCA4

S. N	Unit No.	Topics to be Covered	Month	Week	Day
1	Unit I	Introduction: Brief history of computer networks & Internet	AUGUST 2019	Week1	1
2		Layered architecture			2
3		Principles of Protocols,		Week2	1
4		Application Layer			2
5		HTTP			3
6		FTP			4
7		SMTP		Week3	1
8		DNS protocols			2
9	Unit II	Transport layer: services & principles			3
11		multiplexing & demultiplexing applications		Week4	1
12		UDP			2
13		principles of reliable data transfer			3
14		TCP details			4
15		Internet protocol stack		Week5	1
16		network service model			2
17		Principles of Congestion Control			3
18		TCP congestion control	September 2019	Week1	1
19	UNIT III	Network layer:			2
20		routing principles			3
		DNS protocols			4
21		hierarchical routing		Week2	1
22		Internet Protocol (IP)			2
23		ICMP details			3
S.					

		Topics to be Covered		Week	Day
24		IPV6	Sep 2019	Week 3	1
25	UNIT IV	Link layer: Introduction			2
26		Services of link layer			3
27		LAN addresses			4
28		Address Resolution Protocol		Week 4	1
29		Carrier Sense Multiple Access / CD			2
30		Token Passing Protocol			3
31		Go-Back N Protocol			4
32		Selective Repeat		Week 5	1
33		principles of cryptography	Oct 2019	Week 1	1
34		Network security issues			2
35		authentication & authentication protocol		Week 2	1
35		version of protocols,			2
36		key distribution & certification, Point-to - Point Protocol details			3
37	Unit VI	Network Management: Basic principles		Week 3	1
38		infrastructure for network management			2
39		The Internet Network management framework: SMI			3
40		MIB, message digests, integrity			4
41		SNMP details		Week 4	1
42		security and administration			2
43		ASN 1			3
44		Firewalls:			4
				Week 5	Dewali vacation
45		Packet filtering	NOV 2019	Week 1	1
46		Application gateway		Week 2	1
47		secure e- mail			2
48		digital signatures			3
49		Revision on full syllabus			4
50			NOV	Week 3	1
51		Sample Unit test			2

Prof. Ram Meghe Institute of Technology & Research Badnera
P.G.Department of Computer Applications
(Odd Semester AY: 2019-2020)
Session/Teaching Plan

Name of Faculty: Prof. Nililma D. Bobade
Subject Name: Computer Oriented Optimization Techniques **Year: SYMCA** **Sem: I** **Section: A/B/DSE** **Subject Code:3MCA5**

Sr.No	Unit No.	Topics to be Covered	Month	Week	Day
1		Pract 1 Program to find optimum sequence for M job 2 Machine Problem	JULY	Week1	1,2,3
2		Pract 2 Program to find total elapsed time and idle time of machines for M job 2 Machine Problem		Week2	1,2,3
3		Pract 3 Program to find total elapsed time and idle time of machines for M job 3 Machine Problem		Week3	1,2,3
4		Pract 4 Program to find initial basic feasible solution to the transportation problem.		Week4 Week5	1,2,3 1
5	Unit IV	Introduction to sequencing problem	AUGUST	Week 1	1
6		N job Two machine problem		Week 2	1
7		Cases of Tie			2,
8		Practice Problems on N job Two machine problem			3
9		N job three machine sequencing problem,			4
10		Practice Problems on N job Three machine Problem		Week 3	1
11		Practice problem set on unit IV			2
12	Unit III	Introduction to transportation problem and Mathematical model		Week 4	1
13		North West Corner Rule Method			2
14		Least Cost Method			3
15		Vogel Approximation method			4
16		Practice Problems on NW,LCM &Vogel Approximation method	SEPTEMBER	Week 1	1
17		optimizing the basic feasible solution using U-V method			2
18		UV Method Practice Problem			3
19		Degeneracy in UV Method		Week 2	1
20		Prohibited and Maximization Transportation Problem.		Week 3	1
21		Alternative optimal solution			2
22		Assignment Problem: Introduction, zero one programming model			3
23		Hungerian Method			4
24		Practice on Hungerian Method		Week 4	1
25		Unbalanced assignment problems,Restricted assignment problems.			2

26	Unit II	Linear Programming: Introduction, concept of LP model,			3
27		development of LP model			4
28		Conversion of general LPP into standard LPP		Week 5	1
29		Graphical method to solve LPP.	OCTOBER	Week 1	1
30		Simplex method			3
31		Big M method,		Week2	1
32		Two phase method.			2
33		Types of linear programming solution infeasible solution			3
34		Alternative Optimal Solution			4
35		dual simplex method		Week 3	1
36	UNIT IV	Introduction to Game Theory: minimax, maximum, pure strategies, mixed strategies & expected payoff			2
37		2X2 game			3
38		solution of 2xn games, mx2 games			4
39		Dominance Principle		Week 4	1
40		Brown's Algorithm			2
41		Network scheduling			3
42		CPM Problems	NOVEMBER	Week1	1
43		PERT PROBLEMS		Week2	1
44		probability of completing events on schedule.			2
45	UNIT V	Probability OR Model ,Basic probability statistical concepts			3
46		Introduction to decision theory			4
47		minimax decision procedure,		Week3	1
48		Bayes decision procedure with & without data			2
49		Regret function versus loss function			3
50	Unit I	Classification of problems,OR mathematical modeling		Week 4	1
51		Dynamic programming			2
52		Investment problem,		Extra 1	
53		Equipment replacement problem		Extra 2	
54		Stage coach Problem		Extra 3	

N.D.Bobade

In-Charge Faculty

Prof.N.D.Bobade

Prof .Ram Meghe Institute of Technology & Research, Badnera

P. G. Department of Computer Applications

Subject: (3MCA6) FILE STRUCTURES & DATA PROCESSING LAB

Class: 2nd Year (I Semester) Session: W-2019

Sr. No	Name of Practical
1	Basic input and output operations using file in C++
2	Write a C++ program to read series of names, one per line, from standard input and write these names spelled in reverse order to the standard output using I/O redirection and pipes. Repeat the exercise using an input file specified by the user instead of the standard input and using an output file specified by the user instead of the standard output.
3	Write a C++ program to read and write student objects with variable-length records and the fields delimited by "|". Implement pack(), unpack() methods.
4	Write a C++ program to read and write student objects with variable-length records and the fields delimited by "|". Implement modify() and search() methods.
5	Write a C++ program to read and write student objects with fixed-length records using any suitable record structure. Implement pack( )/insert( )and search() methods.
6	Write a C++ program to read two lists of names and then match the names in the two lists using Consequential Match based on a single loop. Output the names common to both the lists.
7	Write a program to perform merging two files and store the result in another third file.
8	Write a C++ program to implement simple index on primary key for a file of student objects; index of record has to be stored in another file, Implement add(), search() methods using the index.
9	Write a program creates a file (entered by user)and store some content (entered by user).Then display those content (if user want)on the output screen
10	Write a program to ENCRYPT the contents of a file.
11	Write a program to DECRYPT the contents of encrypted file.
12	Write a C++ program to read k Lists of names and merge them using kway merge algorithm with k = 8.

In-charge
Preeti Deshmukh

P.G. department of Computer Applications

Practical Execution Plan for Java Programming Lab MCA Year II Sem II Winter 2019

Faculty : Rupali Sherekar W 2019

Sr. No	Name of Program	Execution Date		
		B1	B2	B3
1	Write Java applications to print the given patterns a. 10101 0101 101 01 1 b. 1 2 3 2 3 4 5 4 3 4 5 6 7 6 5 4 5 6 7 8 9 8 7 6 5	01/08/2019	06/08/2019	07/08/2019
2	Each year the CR is elected from every class. Candidates from each class can contest the elections. Also total number of students from a class is the voter list for the class. Any candidate who gets more than half of registered votes is the winner. An array of votes with each element representing registration id of candidates is provided to the vote counter. 4 4 2 5 4 2 2 4 4 4 In above example, Total number of votes = 10 Candidate having registration id 4 receives = 6 votes Candidate having registration id 2 receives = 3 votes Candidate having registration id 5 receives = 1 vote Since Candidate having registration id 4 gets more than half of total votes, he or she is the CR for the year. Write a function: **int solution(int votes[])** This function accepts one parameter which is an array of votes This function must return registration id of the candidate who is the CR for the year. If no candidate receives more than half of total registered votes, your program must return -1. **Assume** 5 candidates stand for the elections. Assume that the id's of candidates are 1,2,3,4,5.Number voters in class are 10(size of array). **Input** 4 4 2 5 4 2 2 4 4 4 Where, • Values above are an array with each element, separated by space, representing id of candidate receiving the vote. **Output** 4	08/08/2019	09/08/2019	10/08/2019
3	Write a program that accepts integer input and convert the given integer number to Binary or Hexadecimal. The program should accept a value of 0 or 1 from the command line. If 0 is passed from the command line then convert the given integer number to binary and if 1 is passed from the command line then convert the given integer to hexadecimal. Command Line Input: 1 Input : 90 Output: 5A Here, is 1 passed from the command line and 90 is given as input to the program since command line input is 1 the given number 90 is converted to hexadecimal 5A	13/08/2019	14/08/2019	22/08/2019
4	Write an application in Java which reads a string from user as a command line argument and checks the string for vowels and prints the string without the vowels. Ex:Input: **Program** Output: **Prgrm.** *Note:Use your name as input*	13/08/2019	14/08/2019	22/08/2019

Prof. Ram Meghe Institute of Technology and Research, Badnera

P.G.Department of Computer Applications

Practical List

Subject : 3MCA5 Computer Oriented Optimization Techniques

Session: Winter 2019

Sr. No.	Name of Practical	Date			Sign of Faculty	Sign of HOD
		Batch B1	Batch B2	Batch B3		
1	Write a program in C++ to find optimum sequence for 2 Machine Problem.	02/08/2019 09/08/2019	01/08/2019 08/08/2019	5/08/2019 19/08/2019	5/08/2019 A1 Batches B2	
2	Write a program in C++ to find total elapsed time for 2 Machine Problem and Idle time of Machine M1 and M2.	23/08/2019 30/08/2019	22/08/2019 29/08/2019	26/08/2019 2/09/2019		
3	Write a program in C++ to find total elapsed time for 3 Machine Problem and Idle time of Machine M1,M2 and M3.	9/6/2019	9/5/2019	9/9/2019		
4	Write a Program in C++ to solve balanced transportation problem using NORTH WEST	20/09/2019 27/09/2019	12/09/2019 19/09/2019	16/09/20192 3/09/2019		
5	Write a program in C++ to solve 2*2 game without saddle point.	10/4/2019	9/26/2019	9/30/2019		
6	Write a program in C++ to check saddle pt in M*N game.	10/11/2019	10/3/2019	10/7/2019		
7	Write a program in C++ for PERT to find critical path and total duration of the project.	10/18/2019	10/10/2019	10/14/2019		
8	Write a program in C++ to find optimum decision for given Profit table.	11/8/2019	10/17/2019	10/21/2019		
9	Write a program in C++ to obtain regret table from profit table and Loss Table.	11/15/2019	10/24/2019	11/4/2019		
10	Write a program in C++ to solve equipment replacement problem.	EXTRA1	11/7/2019	11/11/2019		

Bobade

In-Charge Faculty
Prof. N. D. Bobade

Prof.Ram Meghe Institute of Technology & Research,Badnera

P.G.Department of Computer Applications

Practical List

Subject : 3MCA6 Computer Lab III

Session: Winter 2019

Sr. No.	Name of Practical	Date			Sign of Faculty	Sign of HOD
		Batch B1	Batch B2	Batch B3		
1	Write a program in C++ for SJF Scheduling . 1) Calculate average waiting time. 2) Calculate turnaround time	7/8/2019 21/8/2019	6/8/2019 13/8/2019	1/8/2019 8/8/2019		
2	Write a program in C++ for priority scheduling algorithm 1) Calculate average waiting time. 2) Calculate turnaround time	8/28/2019	8/20/2019	8/22/2019		
3	Write a program in C++ for Round Robin Scheduling 1) Calculate average waiting time. 2) Calculate turnaround time.	28/08/2019 04/09/2019	27/08/2019 03/09/2019	29/08/2019 05/09/2019		
4	Write a program in C++ for implementation of segmentation scheme.	9/11/2019	9/17/2019	9/12/2019		
5	Program for implementation paging scheme.	9/18/2019	9/24/2019	9/26/2019		
6	Write a program to implement first fit algorithm for memory management.	25/09/2019 9/10/2019	15/10/2019 22/10/2019	3/10/2019 10/10/2019		
7	Write a program in C++ for FIFO Page Replacement algorithm.	16/10/2019 23/10/2019	5//11/2019 19//11/2019	17/10/2019 24/10/2019		
8	Write a program in C++ for Shortest Seek Time First disk scheduling algorithm.	11/6/2019	Extra 1	11/7/2019		

Bobade

In-Charge Faculty
Prof.N.D.Bobade

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Prof. A. P. Kinhikar **Year: TYMCA**

Subject Name: Artificial Intelligence **Sem: I** **Subject Code:** 5 MCA 1

Sr.No	Unit No.	Topics to be Covered	Month	Week	Day
1	UNIT I	Introduction of AI and its importance etc.	July	Week 1	1
2		Knowledge : General concept			2
3		Introduction to LISP : Syntax			3
4		LISP and numerical functions			4
5		LISP list manupulation functions		Week 2	1
6		predicates and conditional I/O			2
7		iteration and recursion and local variables,			3
8		Property list and arrays.			4
9	UNIT II	Knowledge representation		Week 5	1
10		Syntax and symantics for PL	August	Week 1	1
11		Syntax and symantics for FOPL			2
12		WFF		Week 2	1
13		Conversion to clausal form			2
14		Inference fuels. rules			3
15		The resolution principle			4
16		Nondeductive inference methods		Week 3	1
17	UNIT III	Truth maintenance system		Week 4	1
18		Default reasoning			2
19		closed world assumption			3
20		Predicate completion and circumscription		Week 5	1
21		model and temporal logics			2
22		Overview of object oriented systems			3
23		Object classes messages and methods			4
24		simulation examples using OOS program	er	Week1	1
25	V	Knowledge organization and manipulation			2
26		Examples of search problems		Week2	1
27		Uniformed and blind search.			2

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd Semester AY: 2019-2020)
Session/Teaching Plan

Name of Faculty: Prof. A. P. Kinhikar **Year: TYMCA**

Subject Name: Artificial Intelligence **Sem: I** **Subject Code:** 5 MCA 1

28	UNIT I	Searching AND-OR graphs	Septemb		3
29		structure used in matching		Week3	1
30		Measures for matching: distance matrices			2
31		qualitative measures, similarity measures			3
32		Partial matching, Indexing		Week4	1
33	UNIT V	General concept of knowledge acquisition			2
34		Learning by induction			3
35		System Learning		Week5	1
36		Analogical and explanation based learning	October	Week 1	1
37		Analogical learning			2
38		Analogicalreasoning		Week2	1
39		Explanation and learning			2
40		General concept of knowledge acquisition			3
41	UNIT VI	Expert system Importance & applications			4
42		Expert system architectures		Week 3	1
43		Rules based system architecture			2
44		Nonproductive system architecture			3
45		Dealing with uncertainty			4
46		Knowledge acquisition and validation		Week 4	1
47		Knowledge system building tools			2
48		Virtual Reality Systems	Nov	week 2	1
49		Different logics in AI			2
50		Game creation in AI			3

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Prof. A. J. Pimprikar **Year: TYMCA** **Section: ____**

Subject Name: Software Project Management **Sem: I** **Subject Code:** 5MCA2

Sr. No	Unit No.	Topics to be Covered	Month	Week	Day
1	UNIT I	Introduction: Software Project Management	July	Week1	1,2
2		Evolving role of Software			3
3		Software crises & myths. Software Engineering			4
4		Software process & Process Models : Linear Sequential , RAD		Week2	1
5		Evolutionary Process Models : Incremental, Spiral,			2
6		Process Models : Prototyping Models			3
7		Project management concepts : People, Product, Process, Project			4
8		W5HH principle, Critical Practice.		Week4	1
9	UNIT II	Measures, Metrics & Indicators.			2
10		Metrics in Process & Project Domains- Software Measurement.			3
11		Metrics for Software Quality, Small Organization		Week5	1
12		Software Projects Planning : Scope	August	Week1	1
13		Resources Estimation.		Week2	1
14		Decomposition Technique, Tools.			2
15		Software Risks : Identification, Risk Projection			3
16		Refinement & RMMM Plan.			4
17	UNIT III	Project Scheduling : Concepts, Peoples Efforts.		Week3	1
18		Task set, Task Network			2
19		Scheduling. EV Analysis, Project Plan		Week4	1
20		Software Quality Concepts			2
21		SQ Assurance			3

22		Software Reviews, Technical Reviews, Software reliability	August	Week4	4
23		ISO 900 L, SQA Plan.		Week5	1
24		SCM Process. Version control. SCM standard.			2
25	UNIT VI	Software testing fundamentals			3
26		Test Case Design.			4
27		Whitebox Testing. Basis path	September	Week1	1
28		Control Structure, Blackbox-Testing for Specialized Environments.			2
29		Strategic Approach to S/W Testing,		Week2	1
30		Unit testing, Integration testing,			2
31		validation testing , system testing			3
32		Debugging, Technical metrics for software.		Week3	1
33	UNIT IV	System engineering : Hierarchy			2
34		Business Process & Product Engineering : Overviews.			3
35		Requirement engineering		Week4	1
36		System Modeling, Requirement Analysis			2
37		Analysis Principles, Software prototyping, Specification			3
38		Design Process, Design Principles & Concepts		Week5	1
39		Effective modular design. Design Model & Documentation.	October	Week 1	1
40		System engineering : Hierarchy		Week2	1
41	UNIT V	Software architecture, Data Design.			2
42		Architectural styles, Requirement mapping			3
43		Transform & Transaction mappings			4
44		User-interface design : Golden Rule.		Week 3	1
45		UTD, Task Analysis & Modeling			2
46		ID activities, Tools, design evaluation			3
47		Component Level Design: Structure Programming.			4
48		Comparison of Design Notation.	Nov	Week2	1
49		Revision 1			2
50		Revision 2			3

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd/Even Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Prof. Vinit A. Sinha **Year:** MCA II **Section:** A/B/DSE 5MCA3

Subject Name: System Administration & Security **Sem:** I **Subject Code:**

Sr.No	Unit No.	Topics to be Covered	Month	Weeks	Day
1	Unit I	Introduction to network security	July	Week I	1
2		Authentication,			2
3		The model of internetwork security			3
4		internet standards			4
5		RFC publications		Week II	1
6		Access control			2
7		Integrity of security			3
8		Security Mechanism			4
9	Unit II	Cryptography		Week IV	1
10		Encryption principles and various algorithms			2
11					3
12		Standardization process			4
13		key distribution		Week V	1
14		Public key cryptography			2
15		Message authentication	August	Week I	1
16		Digital signature			2
17		SECURITY MEASURES		Week II	1
18	Unit III	Network security applications			2
19		Kerberos			3
20		X.509 directory authentication services			4
21		E-mail security PGP		Week III	1
22		MIME (Multipurpose Internet Mail Extensions),			2
23		S MIME (Security/Multipurpose internet mail extensions)			3
24		Network Protocols		Week IV	1

Sr No	Unit No.	Topics to be Covered	Month		Day
25	Unit IV	IP Security	August	Week IV	2
26		IP security architecture			3
27		Authentication header,		Week V	1
28		Web Security			2
					3
29		Web security requirements			4
30		Secure socket layer SSL	September	Week I	1
31		Transport layer security TLS			2
32		Secure electronic transactions TES.			3
33	Unit V	Network Management Security		Week II	1
34		Basic concepts of SNMP			2
35		Network management architecture and protocol architectures			3
				Week III	1
36		proxies, services			2
37		SNMPv1 authentication service			3
38		Access policy and proxy service			4
39		SNMPv2 architecture, message processing		Week IV	1
40		Security model, view based access control.			2
41	Unit VI	System Security			3
42		Intruders, Intrusion technologies	October		4
43		password protection, password selection strategies		Week I	1
44		Intrusion detection, viruses and related threats			2
45		Nature of viruses, types, micro viruses			3
46		Firewall		Week II	1
47		Firewall configuration, Trusted systems			2
48		Data access control			3
49		Concept of the trusted systems. Various antivirus approaches		Week III	1
					2

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application

(Odd Semester AY: 2019-2020)

Session/Teaching Plan

Name of Faculty: Prof. D. R. Bandbuche **Year:** MCA 3rd Year Sem I

Subject Name: Management Information System (Theory) **Subject Code:** 5MCA4

Sr.No	Unit No.	Topics to be Covered	Month	Week	Day
1	Unit I	General Introduction of the subject, syllabus, importance etc.	July	Week 1	1
2		Definition and Role of MIS			2
3		Impact of MIS			3
4		MIS and computers			4
5		MIS support to Management		Week 2	1
6		Types of business			2
7		Role and importance of management			3
8		MIS and process of management MIS in orign structure			4
9		Decision making, .		Week 4	1
10		Decision methods			2
11		Behavioral concepts	August	Week 1	1
12		Concepts and classification of information			2
13		Methods ,value of information		Week 2	1
14		Organization and information			2
15		Development of MIS			3
16		Organizational decision making			4
17	Unit III	Applications of MIS		Week 3	1
18		Applications in manufacturing sector			2
19		applications in service sector			3
20		Introduction to service, sector		Week 4	1
21		Creating a destructive services			2

22		role of MIS in source industrie		Week 4	3
23		DSS: Concepts and philosophy			4
24		Applications of MIS		Week 5	1
25	Unit IV	Technology in MIS in detail.			2
26		Data processing concept			3
27		Intruduction DBMS			4
28		Object Oriented Technologies.	September	Week 1	1
29		Client Server Arch. And MIS.			2
30		TQM of IS			3
31	Unit V	Network Topology			4
32		Selective indexes, Binding		Week 2	1
33		ATM Technology.			2
34		Introduction Business Process.			3
35		Process Model of Organization.		Week 3	1
36		Value stream model, .			2
37		R1elevance of IT			3
38		MIS and BPR.			4
39	Unit VI	MIS and Datawarehouse		Week 4	1
40		Datawarehouse Architecture.			2
41		Design and Justification of Datawarehouse, Organization.			3
42		Management of data-warehousing.	October	Week 1	1
43		Management and implementation of data-warehousing.			2
44		E-Business - Models.			3
45		security in E-business		Week 2	1
46		ATM Technology.			2

Prof. Ram Meghe Institute of Technology & Research Badnera
P.G Department of Computer Applications(MCA)
Session/Teaching Plan

Name of Faculty: Prof.S.A.Ghogare **Year: S-2019**
Subject Name: DATA WAREHOUSING AND DATA MINING

MCA-III,Sem-I **Subject Code: 5MCA5**

Sr. No	Unit No:	Topics to be Covered	Month	Week	Day
1	Unit-I	General Introduction of the subject ,syllabus ,importance etc	July	Week 1	1
2		Introduction, Data mining,			2
3		Data mining functions,			3
4		classification and major issues.			4
5		Data Preprocessing: Data cleaning, data integration and transformation, data reduction, discretisation & concept hierarchy generation.		Week 2	1
6		Data Preprocessing: Data cleaning, data integration and transformation, data reduction, discretisation & concept hierarchy generation			2
7		Data Preprocessing: Data cleaning, data integration and transformation, data reduction, discretisation & concept hierarchy generation			3
8		Data Preprocessing: Data cleaning, data integration and transformation, data reduction, discretisation & concept hierarchy generation			4
9	Unit II	Revision		Week 3	1
10		Data mining primitives			2
11		Data mining primitives			3
12		data mining query language.			4

13		Concept description: concept description,		Week 4	1
14		data generalization,			2
15		Analytical characterization,			3
16		mining class comparison			4
17		Revision		Week 5	1
18		Revision			2
19	Unit-III	Application and trends in data mining			3
20		: data mining applications,.			4
21		data mining systems and research prototypes,	August	Week 6	1
22		additional themes on data mining,			2
23		trends in data mining			3
24		Revision			4
25		Revision		Week 7	1
26	Unit-IV	Data ware house and OLAP Technology for data mining			2
27		Data ware house and OLAP Technology for data mining			3
28		What is data ware house			4
29		multidimensional data model,		Week 8	1
30		data ware house architecture,			2
31		data ware house architecture,		Week 10	1
32		data ware house implementation			2
33					3
34		Revision			4

35	Unit-V	Data Staging: overview	September	Week 11	1
36		, plan effectively			2
37		, dimension table staging			3
38		, fact table loads and ware house operations,		Week 12	1
39		fact table loads and ware house operations,			2
40		data quality and cleansing			3
41		, miscellaneous issues.			4
42	Unit-VI	Building end user applications		Week 13	1
43		: role of end user application			2
44		, application specification,			3
45		end user application development,			4
46		Revision		Week 14	1
47		maintaining and growing data ware house :		Week 15	1
48		manage the existing data ware house environment,	October		2
49		manage the existing data ware house environment,			3
50		manage the existing data ware house environment,			4
51		Prepare for growth and evaluation.		Week 16	1
52		Revision/Question Bank Discuss			2
53		University paper Discuss			3
54		University paper Discuss			4

Prof. Ram Meghe Institute of Technology and Research, Badnera

P.G.Department of Computer Applications

Practical List

Subject : 5 MCA 6 Artificial Intelligence Lab.

Session: Winter 2018

Sr. No.	Name of Practical	Date			Sign of Faculty
		Batch B1	Batch B2	Batch B3	
1	WAP in LISP to execute car, cdr, cons & list functions.	7/1/2019	7/3/2019	7/5/2019	
2	WAP in LISP to execute append, last, member & reverse functions.	7/8/2019	7/10/2019	7/12/2019	
3	WAP for structure in LISP with proper example.	7/15/2019	7/17/2019	7/19/2019	
4	WAP in LISP to check use of different predicates for logic.	7/22/2019	7/24/2019	7/26/2019	
5	WAP in LISP to implement different loop stuructures for number table.	7/29/2019	7/31/2019	8/2/2019	
6	WAP in LISP for property list implementation.	8/5/2019	8/7/2019	8/9/2019	
7	WAP in LISP for adding and processing elements in an array.	8/19/2019	8/14/2019	8/16/2019	
8	WAP in PROLOG for using facts, rules and queries.	26-08-2019 09-09-2019	21-08-2019 28-08-2019	23-08-2019 30-08-2019	
9	WAP in PROLOG for use of predicates & Clauses.	16-09-2019 23-09-2019	04-09-2019 11-09-2019	13-09-2019 20-09-2019	
10	Write & execute Monkey banana problem in PROLOG. Also raise different queries to KB.	30-09-2019 07-10-2019	18-09-2019 25-09-2019	27-09-2019 04-10-2019	

In-Charge Faculty
Prof. A.P.Kinhikar

Prof. Ram Meghe Institute of Technology & Research, Badnera

P. G. Department of Computer Application

Practical List

Subject:- 5MCA7 - Software Project Management

Session: Winter 2019

Sr. No.	Name of Practical	Dates for Batches		
		B1	B2	B3
1	Design a questionare for the requirement analysis of project.Create 3 categories of questionaries for 1] High Level Employees 2] Middle Level Employees 3] Operational Level Employees	03/07/2019 10/07/2019	05/07/2019 12/07/2019	01/07/2019 08/07/2019
2	Write different type of risks for the given project 1] Project Risks 2] Business Risks 3] Technical Risks and prepare a RMMM plan.	17/07/2019 24/07/2019	19/07/2019 26/07/2019	15/07/2019 22/07/2019
3	Study of Incremental Process Model for the given project.	7/31/2019	8/2/2019	7/29/2019
4	Calculate theproject cost using Cost Approximaton Methodfor the project types i. Organic ii.Semi-Detached iii.Embedded	8/7/2019	8/9/2019	8/5/2019
5	Prepare a Gantt Chart for the given project.	8/14/2019	8/16/2019	8/19/2019
6	Implementation of different architecture style on given project.	8/21/2019	8/23/2019	8/26/2019
7	Prepare a Test Document for the given Project (Manual Testing)	28/08/2019 04/09/2019	30/08/2019 13/09/2019	09/09/2019 16/09/2019
8	Write a test script on selenium using web drivers.	11/09/2019 18/09/2019	20/09/2019 27/09/2019	23/09/2019 30/09/2019
9	Write a script selenium to find out errors on given project.	25/09/2019 15/10/2019	04/10/2019 11/10/2019	07/10/2019 14/10/2019
10	Case study of mini project.	10/22/2019	10/18/2019	10/21/2019

Practical Incharge

Prof. A. J. Pimprikar

PROF. RAM MEGHE INSTITUTE OF TECHNOLOGY & RESEARCH, BADNERA

P.G. Department of Computer Applications (MCA)

Practical Subject : 5MCA9 - SAS-Lab.

MCA II – Sem II

Execution Plan

S.No.	Name of Practical	B2	B3	B1
1	Write a program to find IP Address of a machine	5/8/2019	7/8/2019	9/8/2019
2	To study how to create simple virus	12/8/2019	14/8/2019	16/8/2019
3	Perform an experiment for port scanning with NMAP	19/8/2019	21/8/2019	23/8/2019
4	Using **NMAP** 1)Find Open Ports on a system 2) Find the machines which are active 3)Find the version of remote os on other systems	26/8/2019	28/8/2019	30/8/2019
5	USING **NMAP** generate a report comprehensive scan, Quick trace route, all TCP ports	9/9/2019	4/9/2019	6/9/2019
6	Perform an experiment on active and passive finger printing using **NMAP.**	16/9/2019	11/9/2019	13/9/2019
7	Performa an experiment to demonstrate how to sniff for router traffic by using the tool **WIRESHARK.**	23/9/2019	18/9/2019	20/9/2019
8	Performa experiment to demonstrate how to **WIRESHARK** network analyzer.	30/9/2019	25/9/2019	27/9/2019
9	Perform an experiment how to use **DUMPSEC.**	7/10/2019	2/10/2019	4/10/2019
10	Create **DUMPSEC** table view using different parameter(Account Type, Profiles, Workstation, Last login time, RasCallBack, Logon Script)	14/10/2019	9/10/2019	11/10/2019
11	Generate a report for a)File System b)OS Registry c) Shared Directories permission using **DUMPSEC**	21/10/2019	23/10/2019	25/10/2019

Prof. D. R. Bandbuche

Prof. D. S. Deshmukh

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd Semester AY: 2019-2020) Summer 2020
Session/Teaching Plan

Name of Faculty: Prof.Nilima D.Bobade **Year: FYMCA** **Section: A/B/DSE**
Subject Name: Data Structure and Algorithms **Sem: II** **Subject Code:** 2MCA1

Sr.No	Unit No.	Topics to be Covered	Month	Week	Day
1	Unit I	General Introduction of the subject, syllabus, importance etc.	January	Week 3	1
2		Data structures basics			2
3		Mathematical/algorithmic notations & functions,			3
4		Complexity of algorithms, Subalgorithms. String			4,5
5		processing: storing strings, character data type,		Week4	1
6		string operations, word processing,			2
7		first pattern matching algorithm			3
8		second pattern matching algorithms			4,5
9	Unit II	Linear arrays and their representation in memory,		Week 5	1
10		inserting operations,			2
11		deleting operations,			3
12		Bubble sort,			4
13		Linear search and Binary search algorithms.	February	Week 1	1
14		Multidimensional arrays, Pointer arrays.		Week 2	1,2
15		Record structures and their memory representation			3
16		.Matrices and sparse matrices			4
17	UNIT III	Linked lists and their representation in memory,			5
18		traversing a linked list,		Week 3	1
19		searching a linked list.			2,3
20		Memory allocation & garbage collection.			4
21		Insertion Operations			5
22		deletion operations on linked lists.		Week 4	1,2,3
23		Header linked lists, Two-way linked lists.		Week 5	1,2
24	IT IV	Stacks and their array representation.			3
25		Push & Pop operation			4
26		Arithmetic expressions:Polish notation.		Week1	1,2
27		Evaluation of expression			3,4

28	UNI	Quick sort, an application of stacks,			5
29		Recursion.Tower of Hanoi problem.		Week 2	1,2
30		Implementation of recursive procedures by stacks			3
31		Queues. Deques. Priority queues.			4
32	UNIT V	Trees, Binary trees & and their representation in	MARCH		5
33		Traversing binary trees.		Week 3	1,2
34		Traversal algorithms using stacks,			3
35		Headernodes: threads.			4
36		Binary search trees, searching,			5
37		inserting in binary trees		Week 4	1,2
38		deleting in binary trees.			3
39		Heap and heapsort.		Week 5	1,2
40		Path length &Huffman's' algorithm. General trees		Week 1	1,2
41	Unit VI	Graph theory, sequential representation of graphs, Linked representation		Week2	1
42		Warshalls'algorithm			2
43		operations & traversing thegraphs.			3,4
44		Posets & Topological sorting.	APRIL	Week3	1
45		SelectionSort.			2
46		Insertion Sort			3,4
47		Merging & Merge-sort		Week 4	1
48		Radix sort,			2,3
49		Hashing.			4

N.D.Bobade

N.D.Bobade
Faculty Incharge

Prof. Ram Meghe Institute of Technology and Research, Badnera

Department of Master in Computer Application

Practical List

Subject : 2MCA1 DATA STRUCTURES & ALGORITHMS

Session: Summer 2020

Sr. No.	Name of Practical	Date	Sign of Faculty	Sign of HOD
1	Write a program in C++ for inserting and deleting element from array.	03/02/2020	10/02	
2	Write a program in C++ for Linear Search and Binary Search.	10/02/2020	24/02	
3	Write a program in C++ for bubble sort.	17/02/2020		
4	Write a program in C++ to check whether the C++ compiler stores 2 dimensional array elements in Row Major or Column major format.	24/02/2020		
5	Write a program in C++ to implement the first pattern matching Algorithm.	02/03/2020		
6	Write a program in C++ for implementing a linked list using pointers.	09/03/2020		
7	Write a program in C++ for implementing a stack using linked list and pointers.	16/03/2020		
8	Write a program in C++ for evaluation of a postfix expression.	23/03/2020		
9	Write a recursive program in C++ a. to generate nth number of fibinacci series b. to find the factorial of a number.	30/03/2020		
10	Write a recursive program in C++ for solving the Tower of Hanoi Problem.	30/03/2020		
11	Write a program in C++ for implementing a queue using array.	04/04/2020		
12	Write a program for preorder traversal using pointers, linked list and recursion.	11/04/2020		
13	Write a program in C++ for Insertion sort .	18/04/2020		

N Bobade

Prof. N. D. Bobade

Faculty Incharge

Prof. Ram Meghe Institute of Technology & Research Badnera
Department of Master in Computer Application
(Odd Semester AY: 2019-2020) Summer 2020

Session/Teaching Plan

Name of Faculty: Prof.Nilima D.Bobade **Year: FYMCA** **Section: A/B/DSE**

Subject Name: Data Structure and Algorithms **Sem: II** **Subject Code:** 2MCA1

Sr.No	Unit No.	Topics to be Covered	Month	Week	Day
1	Unit I	General Introduction of the subject, syllabus, importance etc.	January	Week 3	1
2		Data structures basics			2
3		Mathematical/algorithmic notations & functions,			3
4		Complexity of algorithms, Subalgorithms. String			4,5
5		processing: storing strings, character data type,		Week4	1
6		string operations, word processing,			2
7		first pattern matching algorithm			3
8		second pattern matching algorithms			4,5
9	Unit II	Linear arrays and their representation in memory,		Week 5	1
10		inserting operations,			2
11		deleting operations,			3
12		Bubble sort,			4
13		Linear search and Binary search algorithms.	February	Week 1	1
14		Multidimensional arrays, Pointer arrays.		Week 2	1,2
15		Record structures and their memory representation			3
16		.Matrices and sparse matrices			4
17	UNIT III	Linked lists and their representation in memory,			5
18		traversing a linked list,		Week 3	1
19		searching a linked list.			2,3
20		Memory allocation & garbage collection.			4
21		Insertion Operations			5
22		deletion operations on linked lists.		Week 4	1,2,3
23		Header linked lists, Two-way linked lists.		Week 5	1,2
24		Stacks and their array representation.			3
25		Push & Pop operation			4
26	T IV	Arithmetic expressions:Polish notation.		Week1	1,2
27		Evaluation of expression			3,4

Prof. Ram Meghe Institute of Technology & Research, Badnera
P.G. Department of Computer Applications
EVEN Semester AY: 2019-2020

Execution Plan

Name of Faculty: N.D. Bobade Year: Section: A/B/DSE
Subject Name: Data structure & Algorithm Sem: Subject Code:

Sr. No	Date	Topics to be Covered	Sign. of Faculty	Sign. of HOD
1	4/02/2020	Introduction to DS, Data structure operation	NB	
2	5/02/2020	Linear Arrays & their representation in memory	NB	
3	10/02/2020	Deleting & element from Array (inserting element into array) Linear Search	NB	
4	11/02/2020	Binary Search	NB	
5	12/02/2020	Multidimensional Arrays	NB	
6	13/02/2020	Pointer, Pointer Array	NB	
7	15/02/2020	Record structures, Matrices & Sparse Matrices	NB	
8	18/02/2020	Linked List, Representation, Traversing	NB	
9	24/02	Searching a linked list.	NB	
10	24/02	Insertion operation	NB	
11	27/02	Insertion operation	NB	
12	3/03	Deletion operation	NB	
13	3/03	Header linked list, Two way linked list	NB	
14	5/03	Stack, Representation, push pop operation	NB	
15	11/03	Evalution of expression, Test	NB	
16	12/03	Quick sort, Recursion, Towers of Hanoi problem	NB	
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				