

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING & EXAMINATION

M.B.A Vth SEMESTER (Part Time)

S. No	Board Of Study	Sub. Code	Subject	Periods Per Week			Scheme Of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory / Practical				
							ESE	CT	TA		
1.	Management	(Refer Table III)	Discipline Elective I	3	1	-	80	10	10	100	4
2.	Management	(Refer Table III)	Discipline Elective II	3	1	-	80	10	10	100	4
3.	Management	(Refer Table III)	Discipline Elective III	3	1	-	80	10	10	100	4
4.	Management	(Refer Table III)	Discipline Elective IV	3	1	-	80	10	10	100	4
5.	Management	(Refer Table III)	Discipline Elective V	3	1	-	80	10	10	100	4
6.	Management	636521 (36)	Summer Training Report & VIVA	-	-	2	60	-	40	100	1
Total				15	5	2	460	50	90	600	21

L – Lecture – Tutorial, P – Practical, ESE- End Semester Exam, CT- Class Test, TA – Teacher's Assessment

TABLE-III: MBA SEMESTER-V - List of Discipline Electives (I to V)

Discipline Electives – MBA_SEMESTER-V			
S.No.	Board of Studies	Code	Name of Discipline with Subject
			MARKETING MANAGEMENT
1	Management	636531	Marketing Research
2	Management	636532	Consumer Behavior and Sales Management
3	Management	636533	Integrated Marketing Communication
4	Management	636534	Customer Relationship Management
5	Management	636535	Industrial Marketing
	Management	636536	Services Marketing
			FINANCE
1	Management	636541	Corporate Finance
2	Management	636542	Security Analysis and Portfolio Management
3	Management	636543	Taxation and Tax Planning
4	Management	636544	Insurance and Risk Management
5	Management	636545	Derivatives and Risk Management
			HUMAN RESOURCE MANAGEMENT
1	Management	636551	Human Resources Planning And Development
2	Management	636552	Management of Training and Development
3	Management	636553	Compensation Management
4	Management	636554	HRD Instruments
4	Management	636555	Leadership and Sustainable Development
			SYSTEM MANAGEMENT
1	Management	636561	SAD and Data Structures
2	Management	636562	Software Engineering and Project Management
3	Management	636563	E-Commerce
4	Management	636564	DBMS, RDBMS & SOL Concepts
5	Management	636565	Computer Networking

PRODUCTION AND OPERATION MANAGEMENT			
1	Management	636571	Materials Management
2	Management	636572	Production Planning and Control
3	Management	636573	Manufacturing Strategy
4	Management	636574	Logistics and Supply Chain Management
5	Management	636575	Quality Management
TECHNOLOGY MANAGEMENT			
1	Management	636581	R&D Management
2	Management	636582	Technology Acquisition and Diffusion
3	Management	636583	Technology Evaluation and Negotiation
4	Management	636584	Technology knowledge and society
5	Management	636585	Technology System, Environment and Policy
PUBLIC SYSTEM MANAGEMENT			
1	Management	636591	Public Enterprise Management
2	Management	636592	Energy Management
3	Management	636593	Tourism & Hotel Management
4	Management	636594	Planning and Management of Education System
5	Management	636595	Marketing of Social Services

Semester: V

Branch: Management Electives: Discipline- Marketing Management

Subject Name: Marketing Research

Subject Code: 636531(36)

Total Theory periods: 40

Total Tutorial periods: 12

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted: 02

UNIT-I

Marketing Research - Introduction, Basic concepts, Marketing Research & MIS, Marketing Decision Support System, Research: Planning, Process, Design and formulation, and Data Sources. Case Study

[No of Periods : 8 + 2]

UNIT-II

Research Design: Exploratory, Descriptive, Conclusive ; Experimental Designs, Causal Research Methods of Data Collection, Data Preparation and Tabulation, Measurement and Scaling Techniques and questionnaire design. Case Study

[No of Periods : 8 + 2]

UNIT-III

Data Analysis Techniques - Univariate, Bivariate, Tabulation and Analysis. Multivariate Data Analysis and its applications - Multiple Regression Analysis, Factor Analysis, Discriminant Analysis, Cluster Analysis, Conjoint Analysis, Multi Dimensional Scaling: Analysis of data with the help of Statistical Packages, Problems and Case Study.

[No of Periods : 8 + 2]

UNIT-IV

Applications of Marketing Research: -Sales Analysis, Market Potential Analysis, Sales Forecasting Market Segmentation Product Research: New Product Development Process, Test Marketing Advertising Research: Media Research, Copy Testing Pricing Research: Skimming and Penetration Pricing Distribution Research : Warehouse Research, Retail Location Research Brand Positioning, Problems and Case Study.

[No of Periods : 8 + 2]

UNIT-V

International Marketing Research; Framework, survey methods, questionnaire; Motivation Research; Ethics in marketing research. Case Study

[No of Periods : 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books:

1. Naresh Malhotra, Marketing Research: Applied Orientation, Pearson Education.
2. G.C.Beri: Marketing Research, TataMcGraw Hill
3. V.Kumar, "International Marketing Research", Pearson Education
4. Luck & Rubin: Marketing Research , Prentice Hall India

Reference Books:

1. P.Kotler, A.Koshi, M. Jha, "Marketing Management", Pearson Education
2. D.R. Allen, "Customer Satisfaction Research Management", Pearson Education
3. Tull & Hawkins: Marketing Research- Prentice Hall India
4. Mishra: Modern Marketing Research, Himalaya

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM-V

Branch: Management

Elective: Discipline- Marketing Management

Subject Name: Services Marketing

Total Theory periods: 40

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted: 02

Subject Code: 636536 (36)

Total Tutorial periods: 12

UNIT-I

Introduction, Growth of service sector economy, Service Characteristics, Service Marketing Triangle, Service Marketing Mix, Contribution of the services sector to the Economy, Major differences between, Services and Goods, Customer Involvement and Perception, Classification of Different types of Services: professional, religious, public education services etc, Case Study

[No of Periods : 8 + 2]

UNIT-II

Consumer Behavior in Services, Customer Expectation of Service, and Customer Perception of Service. Understanding Customer expectation and Perception through Marketing Research. Service scope effects on behavior , Importance and Strategies for effective delivery through Employees, Intermediaries and Customer Participation. Managing Demand, Managing Capacity, Waiting Line Strategies, Case Study

[No of Periods : 8 + 2]

UNIT-III

Service Marketing Mix: Introduction, Targeting, Segmentation & Positioning of services, Branding of services and its difficulties; Communication Strategies, Product Promotion Price , revenue and distribution: Factors related to Pricing, Pricing approaches, Pricing Strategies, Service Quality and Productivity, Quality Gaps, Prescriptions for closing Quality Gaps, Customer Service Function. Services Management Trinity, Inter actional Conflicts, Internal Marketing. Case Study.

[No of Periods : 8 + 2]

UNIT-IV

Relationship Marketing-Concept, Benefits & Strategies Market Segmentation & Targeting Service recovery. Service Development & Design New Service Types, Supplementary Services, Positioning Strategy, & Positioning Maps. Managing service delivery process, Case Study.

[No of Periods : 8 + 2]

UNIT-V

Physical Evidence of a Service: Introduction, Physical Evidence of a Service, Contribution of Physical Evidence to the Service, Service Quality, Measurement and Control: Introduction, Importance, Measurement of Service Quality, Quality Gap Model. Customer Feedback and Service Recovery: Customer responses to effective Service Recovery, Principles of Effective Service Recovery Systems, Learning from Customer Feedback. New Trends and emerging concepts in Service Marketing. Case Study

[No of Periods : 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books:

1. C. Lovelock, J. Chatterjee , "Service Marketing" ,Pearson Education
2. Zeithmal, Valarie; A Services Marketing, Tata McGraw Hill
3. K. Rama Mohana Rao, "Service Marketing", Pearson Education

Reference Books:

- 1 Payne A; The Essence of Service Marketing Prentice Hall
- 2 Govind Apte; Services Marketing, Oxford Press
- 3 Glynn & Barner, Understanding Setrvice marketing, PHI

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V

Branch: Management

Elective : Discipline- Finance

Subject Name: Security Analysis and Portfolio Management

Subject Code: 636542 (36)

Total Theory periods: 40

Total Tutorial periods: 12

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted: 02

UNIT I

Investment: Meaning, nature, scope and features of an investment program, alternatives-speculation, gambling. Investment risk-interest risk, market risk, inflation risk, default risk, systematic and unsystematic risk. Case Study. Investment companies: concept, market design of Mutual funds, types of investment companies, computation of Net Asset Value. Case Study. [No of Periods : 8 + 2]

UNIT II

Operations of stock markets in India: New issue market-concept and role functions, organization, underwriting and distribution. Secondary Market-Organizational structure, regulatory framework. NSE, BSE, OTCEI. Case Study. Market Indexes-concept, methods of computing price weighted, quantity weighted and value weighted indices. Case Study. [No of Periods : 8 + 2]

UNIT III

Security Analysis: Fundamental security analysis-Analysis of Company, Industry and Economy. Economic analysis-anticipatory surveys, barometric approach, econometric model building, opportunistic model building. Case Study. Key characteristics in industry analysis-past sales and earning performance, permanence of industry, attitude of government, labor and competitive conditions, stock price relative to earnings, industry cycle and other sources for industry analysis. Company analysis- study of financials, estimation of intrinsic value, and obstacles in the way of analyst. Technical analysis-Dow theory, Eliot wave principle, Kondratiev wave theory and Chaos theory. Charting techniques and technical indicators. Efficient Market Hypothesis Equity valuation- dividend discount model, earning multiplier approach, earnings and other comparative valuation ratios. Bond portfolio management-bond values, durations, yield spreads, bond portfolio immunization, corporate bonds-types, characteristics, and determinants of discount rates. Case Study. [No of Periods : 8 + 2]

UNIT IV

Portfolio utility theory and indifference curves. Markowitz Portfolio selection model: the specific model, corner portfolios, dominance principle, short selling. Portfolio of two risky securities, three security portfolio. Relationship between leveraged and unleveraged portfolio. Case Study. [No of Periods : 8 + 2]

UNIT V

Sharpe single index model, Capital asset pricing model, factor models, and Arbitrage pricing theory. Portfolio investment process-selection, execution, revision and performance evaluation. Case Study. [No of Periods : 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books:

1. M. Ranganatham, "Investment Analysis and Portfolio Management", Pearson Education.
2. D.E. Fisher, "Security Analysis and Portfolio Management", Pearson Education
3. Bhalla, V. K. "Investment Management: Security Analysis and Portfolio Management"
4. Kevin S. "Portfolio Management ", Prentice Hall of India.

Reference Books:

5. P. Chandra, "Investment & Portfolio Management ", Tata Mc Graw Hill.
6. Elton, Edwin J and Gruber, Martin J. "Modern Portfolio Theory and Investment Analysis." John Wiley
7. Lee, Cheng F. etc. "Security Analysis and Portfolio Management." Scott, Foresman.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V

Branch: Management

Elective : Discipline- Finance

Subject Name: Taxation and Tax Planning

Subject Code: 636543 (36)

Total Theory periods: 40

Total Tutorial periods: 12

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted: 02

UNIT-I

Basic concepts: assessment year, previous year, person, assessee, Income, charges on income, gross total income, capital and revenue receipts, residential status, receipt and accrual of income, connotation of income deemed to accrue or arise in India, incidence of tax, Tax Planning, Tax Evasion, Tax Management. Case Study

[No of Periods : 8 + 2]

UNIT-II

Explanation under various heads of income, income from salary (Basic problems), income from other sources (theory), Income under capital gain, basis of charge, transfer of capital asset, inclusion & exclusion from capital asset, capital gain, computation, theory & problems, slump sale, Exemptions, capital gain in special cases, Securities Transaction Tax (88E). Case Study

[No of Periods : 8 + 2]

UNIT-III

Income under the head profit and gains of business or professions and its computation- basis- method of accounting- scheme of business deductions/ allowance- deemed profits- maintenance of books, Depreciation (Both Theory & Problems) special provisions relating to 44AD, 44AE& 44AF. Problems on computation of income from business/ profession. Case Study.

[No of Periods : 8 + 2]

UNIT-IV

Setoff and carry forward of losses- permissible deductions –under Ch. VI-A 80C, 80CCC, 80D, 80DD, 80DDB, 80E, 80U, Sec 10A, 10B, 10BA. Computation of taxable income of a firm and partners – Computation of taxable income of a company with special reference to MAT- Corporate div. Tax, Fringe Benefit Tax. Problems and cases.

[No of Periods : 8 + 2]

UNIT-V

Central sales tax- objects & provisions in brief (theory) Inter state, Intra state, Deemed exports Registration, VAT: basic Concept, procedure, utility and implementation, merits and demerits of VAT. Central excise and custom acts- objects and provisions of the act in brief (theory)- goods, excisable, marketable Concept of CenVAT- customs- Basic definition, charge. GST: Introduction to goods and services tax. Case Study.

[No of Periods : 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books::

1. B.B. Lal, "Direct Taxes", Pearson Education
2. V S Datey – Indirect Taxes – Taxman Publications
3. Kul Bhushan,"How to Deal With VAT", Pearson Education
4. Vinod Singhanian- Students Guide to Income Tax – Taxman Publications

Reference Books:

1. B.B. Lal," Income Tax and Central Sales Tax", Pearson Education
2. Mehrotra- Direct Tax – Sahitya Bhavan
3. T N Manoharan- Students Guide to Income Tax – Snow White

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V

Branch: Management

Elective: Discipline- HRM

Subject Name: Human Resources Planning And Development

Subject Code: 636551 (36)

Total Theory periods: 40

Total Tutorial periods: 12

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted: 02

UNIT-I

Human Resource Management : Meaning , Benefits , Strategic planning and HR planning. Manpower Planning : Definition Objectives, benefits, limitations and problems. HR planning linkage with other HR function, Influencing factors in human resource planning. Work Measurement, method, study, work study, work sampling, structure estimating, time study.

[No of Periods : 8 + 2]

UNIT-II

Human Resource Planning, tools, methods and techniques, concept of job analysis, job description and job specialization . Skill in verifying, manpower inventory qualitative and quantitative aspects. HR Demand focusing, HR Supply, estimates action plan in separation, retention, training, redeployment and staffing.

Work Force Flow Mapping, Job Analysis: - Meaning, Purpose, Process, Methods of Collecting Data. Job Description – Contents, Writing Job Description, Job Specification, Job enhancement, job rotation and job position. Procurement of Human resource: Recruitment- Meaning and Process; Sources of Recruitment , Internal and External Source, Modern Techniques of Recruitment, Sources- Internet Based, Placement Agencies. Case Study

[No of Periods : 8 + 2]

UNIT-III

Human Resource Development – Overview , philosophy and goals of HRD , HRD culture , climate , culture practices in organization , HRD sub systems / process mechanisms, line managers and HRD , task analysis , motivational aspects of HRD, development supervision , counseling and monitoring. Case Study

[No of Periods : 8 + 2]

UNIT-IV

Organizing for HRD , HRD for workers , HRD overview in Govt. and Private systems, HRD for health and family welfare , HRD in defense , police , voluntary organizations , manufacturing organization and infrastructure , and HRD in service industries (Banking , Hospital , event etc), HRD audit , TQM and HRD strategies. Case Study

[No of Periods : 8+2]

UNIT-V

Changing environment of HRD – internal and external factors, internal factors – HR of country and changing demands of employers , employees organization , behavioral factors in HR planning , wastage analysis – retention , redeployment and exit strategies, External factors – change in technology , legal and govt., customer social factors , economic and political factors ,Case Study

[No of Periods : 8+2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books:

1. Gary Dessler, "Human Resource Management", Pearson Education
2. Gerard V McMohan, "Recruitment and Selection", Prentice Hall of India
3. C.R. Greer,"Strategic Human Resource Management", Pearson Education

Reference Books:

1. IRecent Experiences in HRD, Rao, T.V., New Delhi. Oxford & IBH
2. Evaluation of HRD, Pareek, Udai, Jaipur, Rawat Publications
3. S.S.Khanka,"Human Resource Management". S. Chand & Company Ltd.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V

Branch: Management

**Elective : Discipline- Human
Resource Management**

Subject Name: Compensation Management

Subject Code: 636553 (36)

Total Theory periods: 40

Total Tutorial periods: 12

Total Marks in End Semester Exam: 80

Minimum number of class tests to be conducted: 02

UNIT-I

Overview of compensation-Strategic role of compensation in Human Resource system, Importance of compensation, Factors influencing Effective compensation. Wage concepts, minimum, Fair and Living wage; Compensation Philosophies, Conceptual and theoretical understanding of economic theory; Competitive Imperatives: productivity, Quality, service, Speed, Learning; planning for improved competitiveness. Designing Compensation System, Strategic Compensation System. Case study

[No of Periods : 8 + 2]

Unit II

Compensation process, Employee satisfaction and motivational issues in Compensation, Developing Salary structure, Elements of compensation, Executive Compensation, Managerial Remuneration, Diagnosis and Benchmarking, Obtaining commitment, Determination of Inter and intra-industry compensation, Differentials; Internal and External Equity in Compensation system. Case study

[No of Periods : 8 + 2]

Unit III

Performance management framework-Definition and coverage, reason for undertaking PM, PM Process, Planning of Performance Management, Setting Performance standards, Performance measurement, Review of performance, linking Pay with Performance, Rewarding Performance thru-Financial and Non-Financial aspects. understanding different components of compensation packages like fringe benefits, perks etc.; incentives and retirement plans. Case study

[No of Periods : 8 + 2]

Unit IV

Laws relating to Workmen Compensation-Workmen's compensation Act, Minimum Wages act, Payment of Wages act, Payment of bonus act, Provident fund act, Equal Remuneration Act. Case study

[No of Periods : 8 + 2]

Unit V

Statutory provision governing different component of Reward system, Institution/machineries related to Reward system: Wage boards, pay commission. Government, public and private sector compensation: policy and framework. Wage and productivity: Concepts and regulations, salient features of various Acts in practice. Industry and organization compensation, compensation practices in multinational corporations. Case study.

[No of Periods: 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books:

1. P.R.N.Sinha, "Industrial Relations, Trade Unions & labor Legislations", Pearson Education
2. P.S. Rao, "Personnel & Human Resource Management", Himalaya Publishing house
3. Arun Monappa, "Industrial Relations", Tata McGraw Hill.

Reference Books:

1. C.B.Memoria. "Dynamic of Industrial Relations in India" Himalaya Publishing House
2. N. Singh, "Industrial Relations & Collective bargaining", Deep & Deep Publication
3. Prof. M.N. Rudrabasavraj, "Dynamic Personnel Administration".

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V Branch: Management Elective: Discipline- Systems Management
Subject Name: Software Engineering & Project Management Subject Code: 636562 (36)
Total Theory periods: 40 Total Tutorial periods: 12
Total Marks in End Semester Exam: 80
Minimum number of class tests to be conducted: 02

Unit I

Introduction to Software Engineering , Software engineering problem, software engineering process like waterfall model, prototype model, evolutionary model , incremental model, spiral model, Software engineering approach, software engineering life cycle, requirement analysis and specification, design and specification, coding and module testing integration and system testing , product delivery and maintenance. case study

[No of Periods : 8 + 2]

Unit II

Project Management , responsibility of project management, software engineering project management , software metrics like process metrics, private and public metrics, utility of project metrics, technical metrics for software, Mc Call's Quality factors, FUPRS, , Software project planning, cost estimation using COCOMO model, Project Scheduling , personnel planning , rayleigh curve, Software quality assurance plan, project management plan, Risk Management , risk assessment, control and monitoring. case study

[No of Periods : 8 + 2]

Unit III

Software Quality and Configuration Management, baseline, Configuration management database, version control libraries, version control and change process, system engineering approach, business process engineering, information strategy planning, business area analysis, product engineering , requirement engineering. Capability maturity model, quality management system in Software Industry. case study

[No of Periods : 8 + 2]

Unit IV

Software Requirement Analysis and Principle , Software requirement specification, requirement analysis and specification process, Data flow diagram ,various level of DFD, Data dictionary, Various component of SRS, Specification Language like structured English, decision tree , decision table, structure of SRS, case study .

[No of Periods : 8 + 2]

Unit V

Software design, problem partitioning , abstraction, coupling and cohesion, structured chart , verification methods of design phase like design walkthrough , critical design review etc. Coding standard and coding rules in software development, software testing and maintenance, software reengineering , reverse engineering, restructuring like code and data, forward engineering , Computer aided software engineering , case study

[No of Periods : 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class

Text Books:

1. Ian Sommerville, "Software Engineering", Pearson Education
2. Pressman, Roger S., "Software Engineering", A Practitioner's Approach McGraw-Hill,
3. Ghosh.S.M. ,Software Engineering – An integrated Approach – Ascent Academy (First Edition)
4. R.T. Futrell, "Quality Software Project Management ", Pearson Education

Reference Books:

1. L. Pfleeger, "Software Engineering", Pearson Education
2. W. Royce, "Software Project Management", Pearson Education
3. Fairley, Richard, Software Engineering Concepts, Tata McGraw-Hill.
4. Gillies, Alan C., and Peter Smith, Managing Software Engineering - CASE studies and solutions, Chapman & Hall
5. B. Ali & Frederick J. Hudson, "Software Engineering Fundamentals", Oxford University Press
6. Hughes, Bob and Mike Cotterell, Software Project Management (second edition), TMH , New Delhi

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V Branch: Management
Subject Name: Computer Networking
Total Theory periods: 40
Total Marks in End Semester Exam: 80
Minimum number of class tests to be conducted: 02

Elective: Discipline- Systems Management
Subject Code: 636565 (36)
Total Tutorial periods: 12

UNIT-I

Networking fundamentals. Communication fundamentals (transmission and transmission media; communication techniques; transmission efficiency) Wide area networks, local area networks, ISDN's; OSI architecture, IBM's SNA, Digitals DNA, Internetworking; network applications: - EDI, Email, file transfer, conferencing, Enterprise networking. Case Study [No of Periods : 8 + 2]

UNIT-II

Networking technologies and applications. Design and development of enterprise network; Web-based application development, Design of large-scale intranets, Network and systems management issues, Remote access to computer resources, Network and system security. Managing networks. Preparing for doing business on the internet; Choosing and costing networks and network services; network management requirements; network performance indicators; performance monitoring. Case Study [No of Periods : 8 + 2]

UNIT-III

Physical Layer: Concepts of data transmission, transmission media, guided and unguided media, digital and analog transmission, transmission impairments, Multiplexing- TDM, WDM, FDM, Switching techniques- circuit, packet and message, Cellular Radio, wireless transmission, Modems, DSL, cable modem, ISDN- introduction, ISDN channels, ISDN layers, services, and Communication Satellites.
Data Link Layer: Framing, error control, flow control, unrestricted simplex, simplex stop-and-wait protocol, sliding window protocols, HDLC, SLIP, PPP.
Network Layer: Internal organization, routing, congestion, routing-shortest path, multipath, congestion control algorithms, preallocation of buffers, choke packets, deadlocks and Services of network layer.
Transport Layer: Services of transport layer, Transport protocols, connection management.
Upper OSI layers: Session layer and Transport Interaction , Presentation Layer –Translation, Authentication, Data Compression, Application layers – Message Handling System(MHS), File transfer ,Access and Management (FTAM) Case Study [No of Periods : 8 + 2]

UNIT-IV

Transmission Technology: Broadcast networks, Point-to-Point Networks, LAN, MAN & WAN topologies and its components, Wireless networks, Internetworking, Introduction to Bridges, Routers, Switches, Gateways, and Repeaters, Introduction, Functioning and Services- Novell Netware, Window NT, NOS (Network Operating Systems) Case Study [No of Periods : 8 + 2]

UNIT-V

Network Applications and Management: Design of business networks, installation guidelines, maintenance and security. Case studies on network design and establishment. Advanced Topics VLAN, VPN, VoIP, IPv6, ADSL overview. Case Study [No of Periods : 8 + 2]

- The examination paper will include questions from each unit and case analysis is compulsory.
- The list of cases and specific references including recent articles will be announced and discussed in the class.

Text Books:

1. Andrew. S. Tannanbaum, "Computer Networks", Pearson Education
2. Behrouz A.Forouzan, "Data Communication and Networking", Tata McGraw Hill Publication
3. Van ValkenBerg, "Network Analysis", Pearson Education
4. Martin, J., "Computer Networks and Distributed Processing", Prentice-Hall.

Reference Books:

1. William Stallings, "Data and Computer Communication", Pearson Education
2. S. Keshav, "An Engineering Approach to Computer Networking", Pearson Education
3. Tom Sheldon, "Encyclopedia of Networking", Tata McGraw Hill Pub. Co. Ltd.
4. William A. Shay, "Understanding Data Communications and Networks", Vikas Publishing House.

CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

Semester: MBA SEM- V Branch: Management

Subject Name: Summer Training Report & VIVA

Total Practical periods: 28

Total Marks in End Semester Exam: 60

Minimum number of class tests to be conducted: 01

Elective: Discipline- Systems Management

Subject Code: 636521 (36)

Total Tutorial periods: NIL

The student has to submit summer training report to the Institution / department within three weeks after the start of the third semester and the report will be evaluated by one external and internal examiner followed by viva voce for ESE examination. The TA marks will be awarded on the basis of attendance, presentation, test and viva and on the basis of feedback from the concerned Training manager of the organization.