



Bharathiar University

Coimbatore - 641 046

M.B.A Core / Telecom Management with

Diploma in Entrepreneur Development (CBCS Pattern)

(for the affiliated college students admitted during the academic year 2009-10 & onwards)

SCHEME OF EXAMINATIONS - Choice Based Credit System (CBCS) Pattern



Study Components	Course Title	Ins. Hrs/Week	Examinations				Credits
			Dur Hr.	CI A	Mks	Total	
Semester - I							
	Management Principles and Practice	3	3	25	75	100	3
	Organisational Behaviour	3	3	25	75	100	3
	Managerial Economics	3	3	25	75	100	3
	Financial and Management Accounting	3	3	25	75	100	3
	Quantitative Methods for Management	3	3	25	75	100	3
	Executive Communication	3	3	25	75	100	3
	Elective/Diploma - 1 : Entrepreneur Development	3	3	25	75	100	3
Semester - II							
	Operations Management	3	3	25	75	100	3
	Marketing Management	3	3	25	75	100	3
	Financial Management	3	3	25	75	100	3
	Human Resource Management	3	3	25	75	100	3
	Quantitative Techniques	3	3	25	75	100	3
	Research Methods for Management	3	3	25	75	100	3
	Business Environment & Ethics	3	3	25	75	100	3
	Elective/Diploma: 2: Entrepreneurship & Innovations	3	3	25	75	100	3
Semester - III							
	International Business	3	3	25	75	100	3
	Management Information System	3	3	25	75	100	3
	Telecom Industry Overview	3	3	25	75	100	3
	The Future of Communications	3	3	25	75	100	3
	Business Models for Sustainable Telecom Growth	3	3	25	75	100	3
	Telecom Regulations	3	3	25	75	100	3
	Computer Applications: Integrating Business Process through SAP*	3	3	-	-	-	-
	Summer Placement Project Report & Viva-Voce***	-	-	20	80	100	3
	Elective/Diploma-3 : Legal Aspects of Business	3	3	25	75	100	3
Semester - IV							
	Strategic Management : Indian Global Context	3	3	25	75	100	3
	Telecommunication Management	3	3	25	75	100	3
	M-Commerce	3	3	25	75	100	3
	Telecom Project and Service Level Management	3	3	25	75	100	3
	Value Added Services for Next Generation Networks	3	3	25	75	100	3
	Computer Applications: Integrating Business Process though SAP* - Practical						
	a. Management Practice (*)	-	-	-	-	-	-
	b. Comprehensive Viva-Voce (Internal)#	-	-	-	-	-	-
	Elective/Diploma-4 : Business Plan	3	3	25	75	100	3
	Total	-	-	-	-	3000	90

*The Course will be taught during III and IV Semesters.

*** Application based project work would be guided by one or two (in the case of inter functional) teachers, the evaluation should be experts who have not less than 5 years of experience in the respective fields of specialization.

The Comprehensive Viva-Voce is to be internally evaluated / conducted by the colleges/ institutes themselves and be awarded the grades. No external examiners.

Options for various add on Diplomas available.



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SCHEME OF EXAMINATIONS - Choice Based Credit System (CBCS) Pattern



MBA Telecom Management (Electives / Specialization)

1. Telecom Industry Overview
2. The Future of Communications
3. Business Models for Sustainable Telecom Growth
4. Telecom Regulations
5. Telecommunication Management
6. M-Commerce
7. Telecom Project and Service Level Management
8. Value Added Services for Next Generation Networks

Proposed subjects for PG Diploma in Telecom Project Management

1. Telecom Systems
2. Data Communication Management
3. Telecom System Planning and Analysis
4. Telecom Entrepreneurship

FOUNDATION FOR ADVANCED RESEARCH & EDUCATION (FARE)
Bangalore

MBA Telecom Management
(Electives / Specialization)

1. Telecom Industry Overview

- a) Telecom market overview
 - a. Introduction to the telecommunication industry
 - b. Evolution of telecomm network
 - c. Fixed vs Mobile
 - d. Data and voice communications
 - e. Satellite communication system
 - f. Cable television network
 - g. The Internet
- b) Network elements
 - a. Terminals,
 - b. Service networks,
 - c. Edge node,
 - d. packet backbone,
 - e. Access network and Interconnections
- c) Mobile industry and Regional Trends
 - a. Overview of Asia pacific market
 - b. Developed markets
 - c. Developing markets
 - d. Underdeveloped markets
 - e. Indian telecom operators – case study
- d) Key trends in Asia pacific Mobile markets
 - a. Privatization and Open competition
 - b. Changing regulatory landscape
 - c. Rush for revenue with data networks
 - d. Influence of Regional and Global organizations
- e) Telecom Market drivers
 - a. Prepaid
 - b. Open competition
 - c. SMS & MMS etc
 - d. Data services opportunity
 - e. Voice over IP
- f) Problem and challenges
 - a. Declining ARPUs
 - b. Building Distribution into a competitive advantage
 - c. Branding with customer care
 - d. Prepaid growth strategy and results

Book Reference

- a) Understanding Telecom Management (Hardcover - 2004) by Vinayshil Gautam Sanjay Sinha.
- b) Telecommunications Essentials, Second Edition: The Complete Global Source (2nd Edition) (Paperback) by Lillian Goleniewski.
- c) Introduction to Telecommunications management - Gaborone, Botswana.
- d) Understanding Changing Telecommunications: Building a successful Telecom business by Anders Olsson.

2. The Future of Communications

- a) Wireless technology roadmap
 - a. The past present and future of wireless telecom industry
 - b. Roadmap of GSM network - GPRS/EDGE/UMTS
 - c. Roadmap of CDMA networks
 - d. LTE and beyond
- b) IT applications technology roadmap
 - a. M-commerce - - The Technology and Business of Next Generation Internet Services
 - b. SMS
 - c. MMS
- c) Technologies and services
 - a. Core network technologies and systems
 - b. Access network technologies and systems
 - c. Consumer products
 - d. Convergent services and system
- d) A different paradigm
 - a. Changes to the Value chain
 - b. Convergence culture
 - c. The new challenges
 - d. Experience of the end-user

Book Reference

- a) Convergence: User Expectations, Communications Enablers and Business Opportunities (Telecoms Explained) (Paperback) by Dr. Christian Saxtoft (Author)

3. Business Models for Sustainable Telecom Growth

- a) The Impact of Communication on Developing Markets
 - a. Overview
 - b. Defining developing countries
 - c. Importance of information access for developing countries
 - d. Developing countries and the internet
 - e. Technological progress
 - f. Mobile telephony – Can mobile growth be sustained?
- b) Customer's need for telecom services and application
 - a. Overview
 - b. Understanding the needs of the low-end consumer segments
 - c. Market development
 - d. Mobile wireless communication for Mass market
- c) Defining innovative business models for sustainable telecom growth
 - a. Emerging business models and opportunities in developing countries
 - b. Mobile Network Operators (MNO)
 - c. Mobile Virtual Network Operators (MVNO)
 - d. Mobile Network Enabler (MNE)
 - e. Mobile virtual network enabler (MVNE)
 - f. Mobile shared spectrum enabler (MSSE)
 - g. Service provider (SP)
 - h. Branded reseller
- d) Trends and approaches
 - a. Global trends in the Telecomm industry

- b. Creation of shared global knowledge networks
 - c. Leading global network suppliers
 - d. Seeking opportunities to innovate
 - e. Approaches being used by major players in the communication industry
 - f. Internet in Rural areas – Emerging business model and opportunity in developing countries
- e) Convergence business trends
 - a. Market trends and predictions
 - b. Important market characteristics
 - c. Value system in communication industry
 - d. Structure and strategies in the competitive environment
 - e. Triple play – Building the converged network for IP, VOIP and IPTV
 - f. Value added Services
 - f) Forecasting Telecommunication services
 - a. Why forecast
 - b. Sources of forecast information
 - c. Forecasting method

Book Reference

- a) Business Models for Sustainable Telecoms Growth in Developing Economies (Hardcover) by Sanjay Kaul (Author), Dr. Fuaad Ali (Author), Subramaniam Janakiram.
- b) Convergence: User Expectations, Communications Enablers and Business Opportunities (Telecoms Explained) (Paperback) by Dr. Christian Saxtoft (Author)
- c) Triple Play: Building the converged network for IP, VoIP and IPTV (Telecoms Explained) (Paperback) by Francisco J. Hens
- d) Understanding Changing Telecommunications: Building a successful Telecom business by Anders Olsson
- e) The Irwin Handbook of Telecommunications Management - James Harry Green

4. Telecom Regulations

- a) Telecommunications regulations and licenses
 - a. Why Regulation
 - b. The debate on licensing – why license, alternative to license, other issues
 - c. Alternatives to licenses
- b) Regulatory options
 - a. Auction
 - b. Beauty pageant
 - c. Hybrid license
 - d. First-come-First-Serve
- c) Telecommunication Act
- d) Frequency allocation and numbering
- e) Regulatory statutes in India
 - a. TRAI – introduction
 - b. Telecom legislation
 - c. Government policy & guidelines
- f) Making it happen: Enabling communication in developing economies

Book Reference

- a) Business Models for Sustainable Telecoms Growth in Developing Economies (Hardcover) by Sanjay Kaul (Author), Dr. Fuaad Ali (Author), Subramaniam Janakiram.
- b) Understanding Telecom Management (Hardcover - 2004) by Vinayshil Gautam Sanjay Sinha
- c) TRAI Regulations

5. Telecommunication Management

- a) Introduction
 - a. Wireless service provider challenges.
 - b. Defining best practices.
 - c. Network management maturity and strategic action list
 - d. Network operation management best practices.
 - e. Elements of telecom operations support systems (OSS).
 - f. Next generation OSS
- b) Network management systems
 - a. Functions of network management system
 - b. .Network control
 - c. Remote monitoring
 - d. Simple network management protocol
- c) Telecom management – Operations
 - a. Introduction
 - b. The management system
 - c. Basic process
 - d. Customer care and data warehousing
 - e. Qos management
 - f. Terminal management
 - g. Access network management
 - h. Security management
 - i. Cutover planning and management
- d) Quality of service
 - a. Objective
 - b. Perception of Qos
 - c. Threats to Qos
 - d. Qos Enablers
- e) Disaster prevention and recovery
 - a. The emergency response team
 - b. Disaster prevention
 - c. Controlling equipment and service hazards
- f) Telecommunication cost control
 - a. Controlling telecommunication costs
 - b. Benchmarking telecommunication results
 - c. Contracting and outsourcing
 - d. Sizing and optimizing the network
 - e. Reduce vendor charge, the amount of service and productivity enhancement
- g) Managing services
- h) Telecom Audit
- i) Security

- a. Objective
- b. Confidentiality
- c. Sources of vulnerability
- d. Integrity
- e. Main ways of implementing security
- f. Connecting security Terms into telecommunication
- g. Access control

Book Reference

- a) Understanding Changing Telecommunications: Building a successful Telecom business by Anders Olsson
- b) The Irwin Handbook of Telecommunications Management - James Harry Green.
- c) Telecommunications Cost Management - by S.C. Strother
- d) What Great Telecom Managers Know: How to Get the Recognition You Deserve by Demonstrating Your Value and ROI by Roger K. Yang
- e) Telecom Audit : A Complete Cost-Reduction Strategy for Your Corporate Telecommunications Bills by M S Mastel.
- f) OSS for Telecom Networks: An Introduction to Network Management (Paperback) By Kundan Misra.

6. M-Commerce

- a) Introduction
 - a. What is M-commerce
 - b. The forces behind M-commerce Revolution
 - c. What is special about M-commerce
 - d. M-commerce – Value chain
 - e. Opportunities
- b) Technologies of M-commerce
 - a. Mobile communications: The transitions
 - b. Roaming and billing
 - c. Network technologies
 - d. Mobile devices
 - e. Service development technology
 - f. M-commerce Enabling standards
- c) M-commerce service today and tomorrow
 - a. M-commerce services today
 - b. Next generation M-commerce
 - c. Issues and Future prospects , early lessons
 - d. Mobile internet
- d) Mobile Advertising
 - a. A brief history of advertising
 - b. A digital revolution
 - c. Introduction to mobile advertising
 - d. Mobile advertising models
 - e. Technology
 - f. Challenges and accelerators for mobile advertising
 - g. Measuring results
- e) Case studies

Book Reference

- a) Mobile Advertising: Supercharge Your Brand in the Exploding Wireless Market (Hardcover) by Chetan Sharma
- b) M Commerce: Technologies, Services, and Business Models (Paperback) by Norman Sadeh (Author)
- c) Mobile Commerce : Opportunities, Applications, and Technologies of Wireless Business (Paperback) by Paul May
- d) Mobile Marketing: Achieving Competitive Advantage Through Wireless Technology (Paperback) by Alex Michael (Author), Ben Salter (Author)

7. Telecom Project and Service Level Management

- a) Introduction to Service level management
 - a. The challenges
 - b. The perception and management of service levels
 - c. Service level reporting
 - d. Service level agreement
 - e. Standards efforts
- b) Business case for service level management
 - a. Service level management practices
 - b. Service level management products
 - c. Implementing service level management
 - d. Capturing data for SLA (service level agreement)
- c) Project management for Telecomm managers
 - a. Project management overview
 - b. Project scheduling technique
 - c. Project management and control
 - d. Planning a project
 - e. Running a project
 - f. Roles of team members

Book Reference

- a) Foundations of Service Level Management (Paperback)
- b) by Rick Sturm
- c) Project Management for Telecommunications Managers (Hardcover) by Celia L. Desmond

8. Value Added Services for Next Generation Networks

- a) Introduction
 - a. Advances in computing technology
 - b. Liberalization of Telecommunication market
 - c. Opportunities for third parties
 - d. Non-technical factors
- b) Technical requirement for a modern VSA platform
 - a. Towards layered platform architecture
 - b. Load balancing
 - c. Redundancy
 - d. Database replication
 - e. High availability
 - f. Service selection
 - g. Overload protection
- c) Prepaid services
 - a. Prepaid fixed telephony
 - b. Prepaid mobile communication
- d) Messaging services
 - a. Email
 - b. SMS
 - c. MMS
 - d. Instant messaging
 - e. Unified messaging
- e) Context Services
 - a. Pull and Push content
 - b. WWW
 - c. WAP
 - d. I-Mode
 - e. Streaming context
- f) Location based services
 - a. Location technique
 - b. Location architecture and interface
 - c. Adding location value
 - d. Regulatory issues
- g) Standardization work for next generation networks
 - a. Definition of Next Generation Networks (NGN)
 - b. IETF
 - c. 3GPP
 - d. 3GPP2
 - e. TISPAN
 - f. ITU-T
 - g. Charging and rating requirement for new communication means

Book Reference

- a) Implementing Value-Added Telecom Services (Hardcover) by Johan Zuidweg
- b) Value-Added Services for Next Generation Networks (Informa Telecoms & Media) (Hardcover) by Thierry Van de Velde (Author)