Open Elective Offered by Department of Management Technology

Syllabus of Semester VI, Bachelor of Engineering

Course Code: MBT610-2 Course: Entrepreneurship Development

L: 3 Hrs., T: 1 Hrs., P: 0 Hrs., Per week Total Credits: 07

Course Objectives:

- 1. To provide an introduction to entrepreneurship and its development process.
- 2. To learn about business idea generation and preparation of Business Plan.
- 3. To make student understand various activities of funding agencies.
- 4. To provide understanding about various sources of finances.
- 5. To provide conceptual clarification to family business
- 6. To provide conceptual clarification networking, e-business and growth strategies.

Unit I: Concept of Entrepreneurship

Entrepreneurship – Meaning, Types, Qualities of an Entrepreneur, Classification of Entrepreneurs, Factors influencing Entrepreneurship, Entrepreneurial Development Programmes (EDP)

Unit II: Business Idea & Plan

Business Idea: Sources, Evaluation. Business Plan: Uses, Writing, Data collection. Business Plan Presentation.

Unit III: Entrepreneurial Development - Agencies

Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organization – Small Industries Service Institute. Business Incubation, Business Clusters

Unit IV: Mobilizing Resources

Entrepreneurial finance: Debt, Venture Capital Buying a Bussiness: challenges, The Search, Process, Scrutiny, Valuation, Negotiation, Franchising

Unit V: Family Business

Family business in India, The Founder, The Next Generation, Entry of Family Members, Nonfamily Managers, Succession, Corporate Social Responsibilities, Corporate Governance, Business Cases, Best Practices,

Unit VI: E- Business & Networking

E- Business: Domain Name, Website, E-Commerce, Hosting, Building Traffic Networking: Starting & Managing a Network, Infrastructure, Best Practices Growth Strategies: Stages of Growth, Global Expansion, Relocation, Financing Growth, , Business Cases

Suggested References:

- 1. Vasanta Desai: Dynamics of entrepreneurial development and management;
- 2. Vasanta Desai: Entrepreneurial
- 3. Peter F. Drucker: Innovation and development;
- 4. M.V. Deshpande: Entrepreneurship of small scale industries;
- 5. Rajeev Roy: Entrepreneurship.

Open Elective Offered by Department of Computer Application

Syllabus of Semester VI, Bachelor of Engineering

Course Code: MCT708 Course: Advanced Data Structures

L: 3 Hrs., T: 1 Hrs., P: 0 Hrs., Per week Total Credits: 07

Course Objectives

- 1. To Learn Different Data Structures and their uses.
- 2. To differentiate the different Data Structures.
- 3. To Study Applications of Data Structures in Different Areas of Research like Databases, Data Mining, Image Processing, Web Analytics, Networking etc.

Course Outcomes

- 1. To apply these Data Structures in different areas like Databases, Data Mining, Image Processing, Web Services, Networking etc.
- 2. To apply Advanced Data Structures to carry out research.

Syllabus

UNIT-I

Introduction to Data Structures - Basic programming constructs, Variables and simple data types, Assignments, Input/output, Conditions and branching, Loops and iteration, Pointers, Arrays, Linked Lists, Trees.

UNIT-II

Data Structures in Operating Systems: Priority Queues, Multilevel Queues, Feedback Queues. **Image Data Structures:** Introduction, What is Image Data, Quad Trees, Virtual Quad Trees, Translation Invariant Data Structures (TID).

UNIT-III

Data Structures For Databases: Overview of functionality of Database Management System, Data Structures for Query Processing, Index Structures, Sorting Large Files, Parse Tree, and Expression Trees, Data Structures for Disk Space Management

UNIT-IV

Data Structures in Web Information Retrieval: Introduction, Inverted Indices, Fingerprints, Finding Near Duplicate Documents.

UNIT-V

Data Mining Data Structures: Introduction, Classification, Association Analysis, Clustering, Probabilistic Data structures for Web Analytics, Data Structures for Big Databases.

UNIT-VI

Data Structures in Computer Networks: IP Router Table Data Structures, Multidimensional Packet Classification. **Dictionary Data Structures:** Hash Table, Balanced Binary Search Trees, B Trees, B+ trees.

Text Books:

- 1. Handbook of Data structures and Applications: Dinesh P.Mehta, Sartaj Sahani
- 2. Data Structures and Program Design: Robert Kruse, PHI.

Reference Books:

- 1. How to solve it by Computers: *R G Dromey, PHI.*
- 2. Science of Programming: David Greece: Springer Verlag New York Pub.
- 3. Fundamentals of Data Structures: Elis Horowitz, Sartaj Sahani, Galgotia Publications.