Semester-VI

Paper Name: Project Management

Paper Code: BBA (BA) 601
Total Credit: 6
Total hours of lectures: 60 hours

Course Outcome:

After completion of the course, the students will be able to

1. Develop the concepts of Project Management for planning to execution of projects

2. Illustrate various steps as well as aspects involved in Project Management.

3. Identify the importance of team in the successful execution of a project

4. Develop understanding about tools and techniques of project management along with application in proper context.

Sl.	Topic/Module	Hours
1.	Module 1: Project Management tools, functions, activities	6
2.	Module 2: Project Selection management - feasibility - types and checkpoints in the Project Management, Life Cycle; Financial Analysis (NPV, ROI, IRR); Development Productivity Index (DPI); Screening Process.	8
3.	Module 3: Project Management Methodology. Project appraisals, feasibility reporting, final project report including P&I appraisal as applicable. Technical and Financial Analysis.	8
4.	Module 4: Project Planning and Scheduling (Network Analysis, CPM, PERT, Crashing and Resource Optimization; Project Work Breakdown and structure (functions, activities and tasks); Project cost estimation.	10
5.	Module 5: Project Roles, Team Types and Team Building. Organization structure for effective project implementation.	8
6.	Module 6: Project risk Management and Mitigation Strategies; Social cost-benefit analysis. Project Control. Project Management measuring, monitoring and tracking techniques; Resource allocation and scheduling and purchasing.	8

7.	Module 7: Project MIS - principal features	12

Suggested Readings:

1. Sitangshu Khatua : Project Management and Appraisal : Oxford

2. Dr. Raj Kumar Yadvendra Gullybaba.com Panel: MS-52 Project Management, Gullybaba Publishing House Pvt. Ltd.

3. Horold Kerzner : Project Management : A System Approach to Planning, Scheduling and Controlling : Wiley.

4. Erik Larson and Clifford Gray : Project Management: The Managerial Process, McGraw Hill Education.

5. Project Management: Essential Managers, DK.

6. Kalpesh Ashar: Project Management Essentials You Always Wanted To Know, Vibrant Publishers.

Paper name: Data Structures and Algorithms

Paper Code: BBA (BA) – 602
Total Credit: 6
Total hours of lectures: 60 hours

Course Outcome:

After the completion of this course the student will be able to

1. Define the concept of data types, algorithms.

2. Understand basic data structures such as arrays, linked lists, stacks and queues.

3. Describe the hash function and concepts of collision and its resolution methods
Solve problem involving graphs, trees and heaps.

4. Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data.

Sl.	Topic/Module	Hour
1.	**Module – 1**: Data Structures Basics: Structure and Problem Solving, Data structures, Data structure Operations, Algorithm: complexity, Time- Space trade-off.	06
2.	**Module 2**: Linked List: Introduction, Linked lists, Representation of linked lists in Memory, Traversing a linked list, Searching a linked list, Memory allocation and Garbage collection, insertion into linked list, Deletion from a linked list, Types of linked list.	06
3.	**Module 3**: Stack and Queue: Introduction, Array Representation of Stack, Linked List Representation of stack, Application of stack, Queue, Array Representation of Queue, Linked List Representation of Queue.	06
4.	**Module 4**: Trees: Definitions and Concepts, Operations on Binary Trees, Representation of binary tree, Conversion of General Trees to Binary Trees, Sequential and Other Representations of Trees, Tree Traversal.	08
5.	**Module 5**: Graphs: Matrix Representation of Graphs, List Structures,	08

	Other Representations of Graphs, Breadth First Search, Depth First Search, Spanning Trees.	
6.	**Module 6:** Applications of Graphs: Topological Sorting, Shortest-Path Algorithms – Weighted Shortest Paths – Dijkstra's Algorithm, Minimum spanning tree- Prim's Algorithm.	08
7.	**Module 7:** Searching and Sorting Techniques, Sorting Techniques: Bubble sort, Merge sort, Selection sort', Heap sort, Insertion Sort. Searching Techniques: Sequential Searching, Binary Searching, Search Trees.	08
8.	**Module 8:** Well Known Sorting Algorithms – Insertion sort, Bubble sort, Selection sort, Shell sort, Heap sort, Divide and Conquer Divide and Conquer Strategy; Binary Search; Max. and Min.; Merge sort; Quick sort	10

Suggested Readings:

1. Lipschutz Seymour: Data Structures with C, McGraw Hill Education India.

2. Salaria : Data Structures & Algorithms Using C 5 Edition, Khanna Publishers.

3. Prof. Dipannita Mondal, Data Structures and Algorithms, Everest Publishing House.

4. M.A.Weiss, Data structures and Algorithm Analysis in C, 2nd edition, Pearson.

5. Thomas H. Cormen, Charles E. Leiserson, Introduction to Algorithms (Eastern Economy Edition), PHI Publication

6. Karumanchi Narasimha, Data Structures and Algorithms Made Easy, Careermonk Publications

Paper Name: E-Commerce and M-Commerce

Paper Code: BBA (BA) 603 (A)
Total Credit: 6
Total hours of lectures: 60 hours

Course Outcome:

After the completion of this course the students will be able to

1. Demonstrate the basic concepts and technologies used in the E-commerce and M-commerce.
2. Develop knowledge about concepts, challenges, and security issues from business perspective in the E-commerce and M-commerce domain.
3. Develop an understanding about the concept and application of HLML.

Sl.	Topic/Module	Hours
1.	**Module 1:** E-Business Framework: Definition of E-Business, Origin of E-Business, History of the Internet, E-Business Opportunities for Businesses, Working of E-Business, E-Business Vs the Traditional Business Mechanism, Advantages of E-Business, Disadvantages of E-Business, Main Goals of E-Business.	8
2.	**Module 2**: Network Infrastructure for E-Commerce – I: Local Area Network (LAN), Ethernet: IEEE 802.3: Local Area Network (LAN) Protocols, Wide Area Network (WAN), The Internet, TCP/IP Reference Model, Domain Names, Hyper Text Markup Language (HTML), Simple Exercises in HTML.	6
3.	**Module 3**: E-Business: Requirements and Architecture: Requirements of E-Business, Functions of E-Business, E-Business Framework Architecture, I-way or Information Highway. Business Models: Evolution of Internet Business Models, Business Models in Practice, Business Model: The Six Components.	6
4.	**Module 4**: Security in Electronic Business: Intranet and Extranet Security: Threats and Protection, Protection Methods, Data and Message Security, Firewalls. Encryption: Cryptography, Encryption, Digital Signature, Virtual Private Network.	6

5.	**Module 5**: E-Marketing: Challenges of Traditional Marketing, Retailing in E-Business Space, Internet Marketing, Advertisement and Display on the Internet, E-Business for Service Industry. EDI, E-CRM and E-SCM: Electronic Data Interchange (EDI), E-CRM, E-SCM	6
6.	**Module 6:** Mobile Commerce: Overview of M-Commerce - Wireless Application Protocol (WAP), Generations of Mobile Wireless Technology, Components of Mobile Commerce, Networking Standards for Mobiles.	8
7.	**Module 7:** HTML: Creating web pages using HTML tags, elements, basic and advanced text formatting, multimedia components, designing web pages, document layout, Lists, Tables, Hyperlinks, Working with frames, forms, controls etc.	10

Suggested Readings:

1. Joseph, P.T. (2005). E-Commerce an Indian Perspective (2e), New Delhi Prentice-Hall of India

2. Kaspersky, (2008). The Cybercrime Ecosystem Whitepaper, Kaspersky Lab

3. O'Brien, J. (2004). Management Information Systems Managing Information Technology in The Business Enterprise, New Delhi Tata McGraw-Hill.

4. Rayport, J. F. & Jaworski, B. J. (2002). Introduction to E-Commerce, New York McGraw-Hill Irwin.

5. Stair, R. M. & Reynolds, G. W. (2001). Principles of Information Systems, 5e, Singapore Thomson Learning.

6. Ramesh Bangia: Learning HTML, Khanna Book Publishing Company.

Paper Name: Data Mining

Paper Code: BBA (BA) 603 (B)

Total Credit: 6

Total hours of lectures: 60 hours

Course Outcome:

After the completion of this course the students will be able to

1. Illustrate the knowledge using data mining techniques.
2. Outline the basic concepts of data warehouse, data mart, data cube etc.
3. Demonstrate various types of data mining techniques along with application criteria.
4. Examine various model evaluation techniques.

Sl.	Topic/Module	Hour
1.	Module 1: Introduction to Data Mining: Concept, Methodology (SEMMA/CRISP - DM), Kind of patterns, Technologies, Application, Issues, Data Objects, Attribute types, Basic Statistical descriptions of data, Measuring Data Similarity and Dissimilarity, Basics of data Pre-processing.	6
2.	Module 2: Introduction to Data Warehousing: Basic Concepts, OLTP, OLAP, Data Cube, Data Mart.	6
3.	Module 3: Mining Patterns, Associations: Basic Concepts, Terminologies, Apriori Algorithm, Model evaluation.	4
4.	Module 4: Introduction to Classification: Definition, Concepts, Applications, Techniques: Decision tree Induction, k-NN, Bayes Classifiers, Rule-based classification: Basic Concepts, Terminologies, Applications, Only introductory concepts of Neural Network.	4
5.	Module 5: Introduction to Cluster Analysis: Definition, Terminologies, Technologies: Hierarchical and Non-hierarchical clustering.	10
6.	Module 6: Introduction to Dimension Reduction Techniques: Concepts, Terminologies, PCA.	10

7.	Module 7: Natural Language Processing: Concept, Terminologies, Techniques.	10
8.	Module 8: Model Evaluation Techniques.	10

Suggested Readings:

1. Jhan, M Kambel & J Pei: Data Mining Concepts & Techniques, Molgan Kaufmann Series.

2. Soumendra Mohanty: Analytics in Practice, Tata McGraw-Hill Education Private Limited.

3. Arun Pujari: Data Mining, Prentice Hall India.

4. Satish Kumar : Neural Network: Tata Mcgraw Hill.

5. Nitin R Patel & Peter C Bruce: Data Mining for Business Intelligence, Wiley, India.

6. Han & Kamber: Data Mining Concepts and Techniques, Morgan Kaufman.