

Barkatullah University Bhopal  
**Semester – Wise Scheme for BCA Semester V**  
**Session 2010-11 onwards**  
**BCA**  
**Semester V**

Code No.	Paper	Marks (Theory + CCE)
<b>BCA501</b>	<b>Data Communication &amp; Network</b>	<b>35 + 15</b>
<b>BCA502</b>	<b>VB</b>	<b>35 + 15</b>
<b>BCA503</b>	<b>Marketing Management</b>	<b>35 + 15</b>
<b>BCA504</b>	<b>MIS</b>	<b>35 + 15</b>
Practical		
<b>BCA505</b>	<b>VB</b>	<b>50</b>

**BARKATULLAH UNIVERSITY BHOPAL**  
**Semester – Wise Scheme for BCA Semester V**  
**Session 2010-11 onwards**

**Paper-I**  
**Data Communication and Networking**

**MM : 35**

- Unit-I** Definition and concept of networking, evolution of Network Technology, Standards and protocol, Types of networking- LAN,WAN, MAN, features and Components of LAN,WAN, MAN with difference, Internetworking, Network Topologies, Different Transmission Media, Transmission Mode, Introduction to Analog signal, Digital signal, Modulation and Demodulation.
- Unit-II** OSI Reference Model-Layered architecture, function of each layer, protocol used, Switching-message, packet, circuit, Multiplexing, SONET, Cellular network, satellite network, IEEE 802 STANDARDS-CSMA/CD, TOKAEN BUS, TOKEN RING, Physical components of network- Hub, Bridge, Repeaters, Gateway, Routers, Adapters, Brouters.
- Unit-III** TCP/IP- Overview, Architecture, functions of each layer and protocol, IP addressing, subnet and subnet mask, IP addressing-classes, IP,IPVV, Bootstrap protocol, DHCP, mobile IP, DNS, Telenet, Internet routing protocol.
- Unit-IV** ATM network, BISDN reference model, ATM signaling, PNNI routing, classical IP over ATM, IP forwarding architecture, integrated services in internet, RSVP, differentiated services, network interconnection model, MPLS, ATM applications.
- Unit-V** Cryptography, Cryptography algorithms, security protocol, DATA security over LAN, Levels of security, Virus and worms related threats, nature of virus, malicious program, Introduction to Firewall, Wi-Fi, Bluetooth, Infrared.

**Reference:-**

Agrawalr/ Tiwaribb Data Communication and Computer Network, IE, Vikas

Forouzan Data Communication - TMG

Stallings Data and Computer Communication Pearson

**Bhatia S.S, Sharma Yogesh , Computer Network and Data Communication**

**KALYANI**

**BARKATULLAH UNIVERSITY BHOPAL**  
**SEMESTER – WISE SCHEME FOR BCA SEMESTER V**  
**SESSION 2010-11 ONWARDS**

**PAPER-II**

**VISUAL BASIC**

**MM : 35**

- Unit-I** Introduction to Visual BASIC, VB Environment- User Interface screen, Forms, Project Explorer, Properties, Code Window, VB Menu options, Tool Bar, adding components to tool bar. VB Controls: Text Box, Label, Frames, Option Buttons, Check Box, Line, Command Button, Image, Picture Box, Data Types, Variable declarations, Constants, Scope of Variables, VB files, Naming Conventions, Default property for each VB control. Operators – logical, relational, mathematical operators. Statements- simple, using while & until in Do-Loop structure.
- Unit-II** Using MsgBox and Input Box statement and functions, Input Validation, Writing Events-adding & calling forms in a project, calling Event Procedures, Debugging VB Projects, using Common Dialog Box, Writing Procedures – subroutines & functions and its calling methods, using multiple forms, using standard code modules.Using An About Box and Splash Screen, using Sub Main for Startup, using List Boxes and Combo Boxes, creating and using Menus, using String Function, Control Arrays, Case Structure.Arrays – Single and Multi dimensional arrays, User Defined Data Types.
- Unit-III** Handling Data Files- Sequential file Organisation, Trapping Program Errors, Sequential Data Files. Accessing Database files – Data Bound Control (DAO & ADO) objects, Navigating Database in Code, Updating database file, Preventing Errors.  
Advanced Data Handling – using Grids, Validation, setting a recordset, repositioning the records, finding & filtering recordset, using SQL in

recordset. Various methods of using SQL as Recordsource and changing at runtime. Date Report Designer – creating Data Environment and linking to Data Report.

**Unit-IV** Introduction to SQL: Components of SQL, DDL, DML, Query Language, DCL, TCL, SCL etc. Invoking sql\*plus. The oracle data types two dimensional matrix creation. Insertion, updation, deletion operations, the many faces of select command, creating tables using query, inserting data using query, modifying the structure of tables, renaming tables, dropping tables, dropping columns, logical operators, range searching, pattern matching, use of Alias, Oracle Functions. Accessing data from multiple tables. Set operations: Union, Intersect, Minus.

**Unit-V** Data Constraints: I/O constraints, Business rule constraints. Grouping data from tables. Joins: Equi-join Self-join, Sub-Queries. Views, Sequences, Synonyms, use of savepoint, rollback & commit commands, creating user accounts, granting permissions, revoking permission.

**Refernece:-**

Carnell - VB6 - From the Ground up - TMH

Deitel - VB 2005 - Hw to program - Reason

Stephons - VB 2008 Programmer's Reference - Wiley

Zok - VB 8 - Cengage

**BARKATULLAH UNIVERSITY BHOPAL**  
**SEMESTER – WISE SCHEME FOR BCA SEMESTER V**  
**SESSION 2010-11 ONWARDS**

**PAPER-III**

**MARKETING MANAGEMENT**

- Unit-I** Indian Markets:- Environment, Structure, Force and measurement: Introduction, market environment, market planning, marketing research and information system, Consumer behavior, organizational buying behavior, segmenting and targeting the market, market measurement and forecasting.
- Unit-II** Assembling marketing mix for Indian markets: Product management, new product decisions, brand equity, pricing decisions, promotion decision, advertising management, sales promotion, personal selling managing the sales force, managing the distribution function.
- Unit-III** Marketing strategy, marketing organization, marketing performance and control.
- Unit-IV** Global marketing, customer service, rural marketing.
- Unit-V** Cases in marketing management.  
Case1: The Indian Television industry.  
Case2: Hi-end audio products.  
Case3: Pepsi-Killing safely.  
Case4: Hi-Tech system distributors Ltd.  
Case5: New Inductance product for women market.  
Case6: Market opportunity for automotive gears in India.  
Case7: Zen Microgrip tyres.  
Case8: Marketing of milk-Amul.

**BARKATULLAH UNIVERSITY BHOPAL**  
**SEMESTER – WISE SCHEME FOR BCA SEMESTER V**  
**SESSION 2010-11 ONWARDS**

**PAPER-IV**  
**MANAGEMENT INFORMATION SYSTEM**

- Unit-I** Introduction: Overview role of IT, MIS trends etc. Personal Productivity  
Overviews, introduction data hardware components, O/S, applications,  
Solving problems: System approach, OO design, operations and  
transaction, database management who should control corporate data.
- Unit-II** Models and decision support biases EIS.  
DECISION IN BUSINESS AREAS :  
Accounting, finance,  
Marketing, HRM,  
Production & design,  
Geographic information system.
- Unit-III** Complex decision and artificial intelligence : DSS  
DECISION SUPPORT SYSTEM  
Importance of Decision support system, limitation,  
Characteristics of Decision Support Systems  
Decision Support and Structure of Decisions Making  
Decision Support and Repetitiveness of Decisions  
Decision Support System Users  
EXPERT SYSTEMS, SUPPORT FOR DECISION MAKING PHASES  
Support for the Intelligence Phase, Support for the Design Phase  
Support for the Choice Phase  
Decision Support and Alternative Concepts of Decision Making  
APPROACHES TO DEVELOPMENT OF DECISION SUPPORT  
SYSTEMS  
Programming Language, Spreadsheet Processor  
Analysis Package, Model Generator  
Model Base Management

## SUMMARY OF A PLANNING SUPPORT SYSTEM

Models and Facilities Used in Planning Support

Planning Software System

Database and Database Query Systems for Planning

Advantages of a Planning Support System

## SUMMARY OF A CONTROL SUPPORT SYSTEM

And AI. Strategic analysis.

**Unit-IV** Designing and maintaining information system, Organizing information system resource, information society and management.

### **Unit-V**

Performance Evaluation and monitoring, Model building, simulation.

Quality control and Quality assurance, Scheduling, pricing.

### **REFERENCE:-**

Bagchi Nirmalya Management Information System, Vikas

**Jindal Aman, Management Information System KALYANI**