

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**E-COMMERCE**

Time : 3 Hours

Max. Marks : 75

***Instruction*** : Answer ***all*** questions from Part – A and answer ***any five*** questions from Part – B.

PART – A

(12×2+1×1=25)

1. What are the goals of networking ?
2. Compare and contrast traditional commerce and e-commerce.
3. What is product data exchange ?
4. Define extranet.
5. What are sniffer programs ?
6. List out the threats of e-commerce.
7. What is cyber vandalism ?
8. Explain Authenticity.
9. Explain Proxy servers.
10. What is Registration Authority ?
11. What is SET protocol ?
12. What is Rational binding ?
13. \_\_\_\_\_ is used to create a digital watermark.

**P.T.O.**

## PART – B

Answer **any five** :

**(5×10=50)**

1. What are the advantages of using e-commerce over the traditional one ? Explain.
  2. What are the necessary transactional steps followed in establishing B2B e-commerce ?
  3. Explain :
    - a) The classification of computer security and
    - b) Copyright and Intellectual property.
  4. What is Public-key cryptography ?
  5. What is CERT ? Explain.
  6. How to hold e-cash ?
  7. Explain how a website can help firms to identify and reach out to customers.
  8. Discuss in detail Data warehousing products.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**DATA WAREHOUSING AND DATA MINING (Freshers)**

Time : 3 Hours

Max. Marks : 75

***Instruction** : Answer **all** questions from Part A, and answer **any five** questions from Part B.*

**PART – A**

**(12×2+1×1=25)**

1. Write the benefits of Data Warehouse.
2. What is Linear Regression ?
3. What is Hierarchical Clustering ?
4. Define Database Marketing.
5. What is Data Mining ?
6. Define OLAP.
7. What is an Operational System ?
8. Define DCE components.
9. Write the outline of basic genetic algorithm.
10. What is distributed operating system ?
11. What is DCE cell ?
12. Write the advantages of Star Schema.
13. What is Data Warehouse Team ?

**P.T.O.**

## PART – B

Answer **any five** :

**(5×10=50)**

1. a) What is a Data Warehouse ? Explain different types of Data in Data Warehouse.  
b) What is learning ? How can we achieve it ?
  2. Explain the nearest Neighbor with two examples.
  3. What is a Neural Network ? Explain its applications.
  4. Explain the evolutions of distributed Computing System.
  5. Explain the KDD process and applications.
  6. Explain Relational OLAP.
  7. Explain choice of data structure and dimensions.
  8. Explain the levels of Data Redundancy.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**INTERNET PROGRAMMING (Freshers)**

Time : 3 Hours

Max. Marks : 75

***Instruction :*** Answer ***all*** questions from Part A, and answer ***any five*** questions from Part B.

PART – A

(12×2+1×1=25)

1. What are Fragment URLs ?
2. What are contextual Markup Languages ?
3. Write a note on Frame set Elements.
4. Write the code to initiate conversation with Client.
5. Define Mail Agents.
6. What is a java script ?
7. Write the contents of MMDR.
8. Define weblogic.xml.
9. What is the use of JDBC ?
10. What is Tcl ?
11. Explain JDBC.
12. What are Entities ?
13. Expand CGI.
  - a) data-sources.xml
  - b) MMDBS.

**P.T.O.**

PART – B

(10×5=50)

**Any five :**

1. A1) Explain the Standard MIME types.  
A2) Write a note on MIME Header.
  2. Explain SGML, DTDS and Document instances.
  3. What are Frames ? Explain the Frame Set elements.
  4. Describe with an example Web-Based Protocol Handlers.
  5. What are Primitives ? Explain their uses in different Programs.
  6. Describe the following :
    - a1) Receiving Messages from a Mail Box
    - a2) Formatting Messages.
  7. What are Cookies ? How do you Store and Read a cookies from a Java Servelet ?
  8. What is a Perl ? Explain its relevance in web development.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**MOBILE COMPUTING**

Time : 3 Hours

Max. Marks : 75

PART – A

Answer **all** questions :

**(12×2+1×1=25)**

1. What do you mean by custers?
2. Explain M.Sc.
3. Write the 2G standards.
4. What are the uses of mobile computing ?
5. What is VOIP ?
6. Mention the protocols of Mobile IP.
7. Write a note on content encoders.
8. Write the advantages of WAP.
9. Write a simple WML example.
10. What is <setvar> element ?
11. How do you declare functions ?
12. Write a note on type operators.
13. Expand GSM.

**P.T.O.**

## PART – B

Answer **any five** questions :

**(5×10=50)**

1. Explain the cellular system architecture.
  2. Write a note on
    - 1) TDMA
    - 2) CDMA
    - 3) FWA
  3. Explain 3G technology with their features.
  4. Explain the need for mobile IP.
  5. Explain the types of voip client devices.
  6. Explain datatypes and literals.
  7. What is an element ? Explain different elements.
  8. Explain different operators with an example.
-



**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**MULTIMEDIA COMPUTING BASICS**

Time : 3 Hours

Max. Marks : 75

**PART – A**

Answer **all** questions :

**(2×10+1×5=25)**

1. What is multimedia ?
2. Differentiate between hyper text and hyper media.
3. List the application areas of multimedia.
4. What is image compression ?
5. Distinguish between lossless algorithms and lossy algorithms.
6. What is streaming video ?
7. List the input and output devices required for multimedia.
8. Briefly explain temporal dimension.
9. Differentiate multimedia programming and multimedia authoring.
10. Why multimedia database is required ?
11. Write brief note on the following :
  - a) Animation
  - b) LCD monitors
  - c) Graphics
  - d) AAC
  - e) Mark-up tools.

**P.T.O.**

## PART – B

Answer **any five** questions:

**(10×5=50)**

1. Explain the components of multimedia.
  2. Write the advantages and disadvantages of hypermedia.
  3. What are the various demands made on hardware by multimedia system ? Explain.
  4. Explain quantization step in JPEG compression algorithm.
  5. Explain the steps in the scanning process in detail.
  6. Write and explain the different types of multimedia database along with diagram.
  7. Explain feature extraction from images.
  8. Write and explain various applications of multimedia data mining.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**PROJECT MANAGEMETN AND PLANNING**

Time : 3 Hours

Max. Marks : 75

**PART – A**

Answer all questions :

**(2×12+1×1=25)**

1. Write the importance of software project managerment.
2. List out the characteristics of software project manager.
3. What should be avoided during project planning ?
4. How do you control project work ?
5. List all teh phases involved in project life cycle.
6. What is risk assessment ?
7. Define prototyping.
8. Define resource planning.
9. Define COCOMO.
10. What do you mean by project quality management ?
11. List the guidelines to write the project quality plan.
12. Write the skills necessary to manage a project.
13. Define risk identification.

**P.T.O.**

## PART – B

Answer **any five** questions :

**(10×5=50)**

1. Explain the project integration management and its importance in software project management.
  2. a) Write the characteristics of project life cycle.  
b) Write the characteristics of project phase.
  3. Explain in detail, the different processes of software estimation activities.
  4. Explain the steps involved in accessing the risk.
  5. Explain different modes of software development.
  6. Explain in detail quality planning, quality assurance and quality control.
  7. Explain the important project manager skills described in a good manager.
  8. a) Discuss briefly the project implementation plan.  
b) Describe various project maintenance activities.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**CLIENT SERVER COMPUTING**

Time : 3 Hours

Max. Marks : 75

**PART – A**

Answer **all** questions :

**(12×2+1×1=25)**

1. Write the vision of client computing.
2. List out the 3 tier client server applications.
3. List out the n tier server applications.
4. What do you mean by Remote Procedure Call ?
5. With respect to client server computing, differentiate LAN and WAN.
6. What is File Server Risk ?
7. Write the advantages of CORBA.
8. What is stress testing ?
9. Write the difference between SNMP and SMTP.
10. Write the steps in testing plan for client server system.
11. What do you mean by client server database ?
12. Write the advantages of scripting.
13. Define bottom line.

**PART – B**

Answer **any five** questions :

**(5×10=50)**

1. Explain the characteristics of client and server.
2. What is client server computing ? How is it different from point to point architecture ? Explain.

**P.T.O.**

3. Discuss the various responsibilities of ORB.
  4. Differentiate OSI and TCP models of networking.
  5. What are the technical details of CORBA architecture ? Explain.
  6. Differentiate File server and DBMS server.
  7. Compare and contrast client server database with distributed database.
  8. Write short notes on :
    - i) PHP server session
    - ii) Client side web scripting.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**REAL TIME SYSTEM**

Time : 3 Hours

Max. Marks : 75

***Instruction*** : Answer ***all*** questions from Part – A and answer ***any five*** questions from Part – B.

**PART – A**

1. What are the components of controlled process ? **(10×2+5×1=25)**
2. Describe non-preemptive task.
3. What is priority queuing list ?
4. What is Maximum jitter ?
5. What is multilevel priority scheduling policy ?
6. What is Soft Aperiodic Tasks ?
7. What is real-time task model ?
8. What is Fault-Tolerant Mechanism ?
9. What is multimode-based policy ?
10. What is real time database ?
11. Explain the following :
  - a) Operating system
  - b) Queuing delay
  - c) End-to-End transfer delay
  - d) Quantum time
  - e) Give one drawback of FCFS.

**P.T.O.**

## PART – B

Answer **any five** :

**(5×10=50)**

1. Explain scheduling properties. How would you implement schedulers ?
  2. State real time application issues.
  3. Explain scheduling properties. How would you implement schedulers ?
  4. Explain fault-tolerant mechanism.
  5. Differentiate between multimode-based policy and policy using importance value.
  6. What is message scheduling ? Explain it's principles, polices and problems.
  7. Explain the taxonomies of services discipline.
  8. Explain the manufacturing process of an aluminum reel.
-



**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**E-COMMERCE**  
**(Freshers)**

Time : 3 Hours

Max. Marks : 75

***Instructions : Answer **all** questions from Part A, and answer **any five** questions from Part B.***

**PART – A**

**(12×2+1×1=25)**

1. What is business model ?
2. What is Network Protocol ?
3. How does the WWW work ?
4. Define Naming Structure.
5. How do you download image from the Web ?
6. List the Kinds of Losses.
7. What is a Public Key ?
8. What is e-mail ?
9. Define key Length.
10. What is Network Security ?
11. What are Virtual Shopping Carts ?
12. List the Checklist for Websites.
13. Expand CGI.

**P.T.O.**

Answer **any five**:

**(5×10=50)**

1. What is an E-Commerce ? Explain its Classifications.
  2. Discuss the basic categories of business model.
  3. Explain Different Networking Devices.
  4. What is an HTTP ? Explain HTTP Transaction, Request Message, Request Line, Text Formatting.
  5. Explain Different Firewalls.
  6. Explain Electronic Checks.
  7. Explain the strengths and weaknesses of advertising.
  8. Discuss the Fundamentals of a Disaster Recovery Planning Process.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**PATTERN RECOGNITION**

Time : 3 Hours

Max. Marks : 75

**PART – A**

Answer **all** questions :

**(2×10+1×5=25)**

1. List the factors on which pattern classifier depends.
2. What is feature selection ?
3. What is Matrix factorization ?
4. What are the requirements for split-and-merge technique ?
5. List the four distinct types of shape descriptor.
6. What is KPCA ?
7. Explain the term oblique.
8. What is adaptive classification ?
9. List the assumptions of maximum likelihood estimation.
10. List the advantages of parametric methods supervised learning.
11. Write brief note on the following :
  - a) Variable table
  - b) Exo-skeleton
  - c) SDE
  - d) Thresholding
  - e) Edge finding techniques.

**P.T.O.**

## PART – B

Answer **any five** questions :

**(10×5=50)**

1. Explain the stages in pattern recognition problem.
  2. Write the differences between supervised and unsupervised learning. Explain.
  3. Explain object oriented model of the system.
  4. What do you mean by local contrast stretching ? Explain.
  5. How do you perform phase correction ? Explain.
  6. Determine maximum likelihood estimation of mean and variance of samples drawn from a Univariate normal distribution.
  7. a) Discuss the assumptions made in unsupervised learning.  
b) Describe Nearest neighbor rule of classification.
  8. What is Fisher's linear discriminate function ? How does it help in classification ?
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**DATA WAREHOUSING AND DATA MINING**

Time : 3 Hours

Max. Marks : 75

***Instruction :*** Answer ***all*** questions from Part – A, and answer ***any five*** questions from Part – B

**PART – A**

1. What is METADATA ? **(12×2+1×1=25)**
2. Define MQE.
3. Define exact and strong rule.
4. What is Segmentation ?
5. How is the learning procedure classified ? Explain.
6. What are the applications of KDD ?
7. Write a note on data modeling.
8. What is Web Data Mining ?
9. Explain Resource discovery.
10. What are decision support systems ?
11. Discuss on the maintenance of a Data warehouse.
12. What is Data Conversion ?
13. The two basic design strategies of OLTP are \_\_\_\_\_ and \_\_\_\_\_.

**P.T.O.**

PART – B

Answer **any five**

**(5×10=50)**

1. Discuss on the security and monitoring of a Data warehouse.
  2. Explain star schema for multi-dimensional view.
  3. Write any five applications of data mining.
  4. Explain the Government of India warehouses.
  5. Briefly explain the concepts used in developing data warehouse.
  6. Explain the methods to convert data into information.
  7. Explain :
    - a) Cognos Powerplay and
    - b) Privacy on the web.
  8. What is KDD ? Explain the steps of KDD process.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**MOBILE COMPUTING (Old)**

Time : 3 Hours

Max. Marks : 75

**Instructions :** 1) Answer *all* questions in Part A.  
2) Answer *any five* questions in Part B.

PART – A

1. Define nomadic computing. (10×2+5×1=25)
2. What do you mean by Bandwidth ?
3. What is shift keying ?
4. What are the different types of FM transmissions ?
5. What is handoff ?
6. What is PSTN ?
7. Explain U.D.P.
8. What is multiparty service ?
9. How many conversations per channel can TDMS digital cellular carry at once ?
10. What is the basic service unit o cellular telephony ?
11. Expand the following :
  - a) CDPD
  - b) PIFS
  - c) MSU
  - d) MSC
  - e) MSN

**P.T.O.**

## PART – B

Answer **any five** :

**(5×10=50)**

1. Explain Mobile Computing Models.
  2. Explain Wireless Communication.
  3. Why modulation is necessary ? Differentiate multiplexing, modulation and Multiple access.
  4. Discuss in detail frequency hopping spread spectrum system.
  5. Explain the architecture of GSM network.
  6. Explain Wireless LAN's Applications.
  7. Explain the concept of Mobile IP.
  8. Explain :
    - 1) Text Input
    - 2) Select Input
    - 3) WML Script
-



**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**MULTIMEDIA COMPUTING**

Time : 3 Hours

Max. Marks : 75

**PART – A**

Answer **all** questions from Part A :

**(10×2+5×1=25)**

1. Define static and dynamic media. Give examples.
2. Define multimedia.
3. Give classification of sound.
4. What is Jitter ? Explain.
5. What are the different file image formats ?
6. Define DPCM.
7. What is OCR software ?
8. What is MPEG and JPEG ?
9. List the characteristics of continuous data.
10. What is RTP ?
11. Expand the following :
  - a) UNI
  - b) PTI
  - c) RAID
  - d) VOD
  - e) ATM.

**P.T.O.**

## PART – B

Answer **any five** questions :

**(5×10=50)**

1. With a neat block diagram explain the structure of multimedia system.
  2. Describe the image analysis in detail.
  3. Explain briefly different levels of RAID.
  4. Explain briefly the characteristics and suitability of ATM for multimedia.
  5. What is FDDI ? Explain its topology and architecture.
  6. Explain the components of resource manager.
  7. What is Entropy encoding ? Explain Huffman coding with an example.
  8. Write a note on :
    - a) An analog video system
    - b) An digital video system.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**CLIENT SERVER COMPUTING**

Time : 3 Hours

Max. Marks : 75

***Instruction : Answer all questions from Part – A and answer any five questions from Part – B.***

**PART – A**

Briefly explain the following :

**(10×2+5×1=25)**

1. What are fat servers and fat clients ?
2. Write a note on threads.
3. What is API ?
4. What is NetBIOS ?
5. What is a groupware server ?
6. What is asymmetric protocol ?
7. Write the functions of gateways ?
8. What is Message Service ?
9. What is System Management ?
10. What is distributed time transparency ?
11. Explain the following terms :
  - a) BLOBs
  - b) XDR
  - c) ACL
  - d) PDC
  - e) MOM.

**P.T.O.**

## PART – B

Answer **any five** :

**(5×10=50)**

1. Describe the characteristics of client/server architecture.
  2. Explain the intergalactic client/server model.
  3. Explain bridge, router and gateway with neat diagram.
  4. What do the NOS do to create the single system image of the Network ?
  5. Distinguish between symmetric and asymmetric multiprocessing.
  6. Explain application service accessible in middleware.
  7. State the Codd's rules which determine whether a given database.
  8. Explain relational database management system server software.
-

**III Semester M.Sc. (I.T.) Examination, June/July 2010**  
**INTERNET PROGRAMMING**

Time : 3 Hours

Max. Marks : 75

PART – A

Answer **all** questions :

**(12×2+1×1=25)**

1. Define dynamic Bandwidth.
2. What are the uses of ARP memory format ?
3. Define Datagram.
4. What is heterogeneous networks ?
5. Briefly explain fragmentation.
6. How to avoid fragmentation ?
7. Write ipv6 datagram format.
8. Define error detection.
9. Mention types of message.
10. What is internet router ?
11. Write any two features of UDP.
12. Write any two features of ipv6 ?
13. What is a “Server-class” computer ?

**P.T.O.**

## PART – B

Answer **any five** questions :

**(5×10=50)**

1. What is ICMP ? Explain its functionalities.
2. Explain internet architecture with diagram.
3. Explain TCP/IP model with TCP/IP protocol stack.
4. Explain IP datagram and datagram forwarding technique.
5. Explain TCP state machine with diagram.
6. Explain transport protocol and client server paradigm.
7. Explain types of internet socket.
8. Write a note on :
  - i) send () and receiver()
  - ii) sendto () and receivefrom ().

\_\_\_\_\_