1

Code: 9A05702

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### SOFTWARE TESTING

(Common to CSE & IT)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

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- 1 (a) Give differences between functional testing and structural testing.
  - (b) Specify on which factors the importance of bugs depends and give the metrics for it.
  - (c) Briefly explain the various consequences of bugs.
  - (d) What are the remedies for test bugs?
- 2 (a) Explain about path instrumentation. How are link counters useful in path instrumentation method?
  - (b) Write about implementation of path testing and what are the various applications of path testing.
- 3 (a) Write about KV charts. Explain them with three and four variables.
  - (b) Obtain the simplified expressions in SOP for the following Boolean function using Karnaugh maps:

(i) 
$$F(A, B, C, D) = \sum (7, 13, 14, 15)$$
  
(ii)  $F(W, X, Y, Z) = \sum (2, 3, 12, 13, 14, 15)$ 

- 4 Explain the domain boundary bugs for two dimensional domains.
- 5 (a) Implementation of a transaction flow is usually implicit in the design of the systems control structure and database, explain.
  - (b) Discuss about sensitization and instrumentation based on transaction flows.
- 6 (a) Whether all predicates are restricted to binary truth value or not? Explain.
  - (b) Illustrate the applications of decision tables.
- 7 Explain state graphs with implementation.
- 8 (a) Write the partitioning algorithm.
  - (b) Write an algorithm for all pairs of paths using matrix operations.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

#### SOFTWARE TESTING

(Common to CSE & IT)

Time: 3 hours Max. Marks: 70

> Answer any FIVE questions All questions carry equal marks

> > \*\*\*\*

- 1 Define testing and explain the purpose of testing.
- (a) How a programs control structure can be represented graphically? Explain with the help of diagrams.
  - (b) How a flowchart differs from a control flow graph?
  - (c) Explain about multi entry and multi exit routines and fundamental path selection criteria.
- 3 Write short notes on the following:
  - (a) Transaction dispatcher
  - (b) Self test support
  - (c) Transaction control block
- 4 Classify what can go wrong with boundaries then define a test strategy for each case in domain testing.
- 5 Write short notes on:
  - (a) Path products
  - (b) Path expressions
  - (c) Path sums
  - (d) Path loops
- 6 (a) Write about KV charts. Explain them with three or four variables.
  - (b) Obtain the simplified expressions in SOP for the following Boolean functions using Karnaugh maps:
    - (i)  $F(A, B, C, D) = \sum (7, 13, 14, 15)$ (ii)  $F(W, X, Y, Z) = \sum (2, 3, 12, 13, 14, 15)$
- 7 (a) Write an algorithm for node reduction.
  - (b) Illustrate the applications of node reduction algorithm.
- 8 Write relative merits and demerits of different graph matrix representations.

3

Code: 9A05702

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

#### SOFTWARE TESTING

(Common to CSE & IT)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 List out various dichotomies and explain.
- 2 Describe the following concepts:
  - (a) Predicates
  - (b) Predicate expression
  - (c) Predicate coverage
  - (d) Achievable paths
- 3 (a) Implementation of a transaction flow is usually implicit in the design of the systems control structure and database, explain.
  - (b) Discuss about sensitization and instrumentation based on transaction flows.
- Why the domain testing in easy for one dimension and difficult for two dimensions?
- 5 (a) Define structured code. Explain lower path count arithmetic.
  - (b) What is the looping probability of a path expression? Write arithmetic rules and explain with an example.
- 6 (a) Minimize the function using Karnaugh map method:

 $F(A, B, C, D) = \sum (1, 2, 3, 8, 9, 10, 11, 14) + \sum d(7, 15)$ 

- (b) Demonstrate by means of truth tables the validity of the following theorems of Boolean algebra.
  - (i) Associative laws
  - (ii) Demorgan's theorems for three variables
  - (iii) Distributive law over +
- What are the principles of test case design? Explain.
- 8 (a) Write about building tools of graph matrices.
  - (b) What are relations and give their properties?

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

#### SOFTWARE TESTING

(Common to CSE & IT)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 What are domain bugs? How to test them?
- 2 Discuss about different kinds of predicate blindness.
- 3 Name and explain data flow testing strategies.
- 4 (a) Explain nice and ugly domains.
  - (b) Describe the interior point, boundary point and extreme point.
- 5 (a) Define structured code. Explain lower path count arithmetic.
  - (b) What is the looping probability of a path expression? Write arithmetic rules and explain with an example.
- (a) Write Boolean algebra rules. Illustrate the rules with path expressions.
  - (b) Use a Karnaugh map to minimize F = AB'C'D' + A'B'C'D + A'BCD + ABD + B'CD' + A'BC'D
- 7 (a) Differentiate between good state graphs and bad state graphs.
  - (b) What are principles of state testing? Explain its advantages and disadvantages.
- 8 (a) Define structured code. Explain lower path count arithmetic.
  - (b) What is the looping probability of a path expression? Write arithmetic rules and explain with an example.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### **NETWORK MANAGEMENT SYSTEMS**

(Common to CSE, IT and CSS)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

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- 1 Explain about the protocol data unit communication model between end systems.
- 2 Explain in detail about organization and information model.
- 3 (a) Explain the changes made to the system group as well as SNMP group in SNMP V2.
  - (b) Describe the following with a suitable examples:
    - (i) SNMP trap (4)
    - (ii) SNMP trap (5)
    - (iii) SNMP trap (6)
- 4 Explain in detail about RMON SMI and MIB.
- Generate an ASN.1 object group macro for the address translation group in SNMP V2 implementation.
- 6 (a) Compare the functionalities of TMN functional architecture and TMN physical architecture.
  - (b) Explain about TMN information architecture.
- 7 (a) What are the sub-classes of the logical element? Explain them.
  - (b) Explain briefly about CIM object manager and protocol provider.
- 8 (a) Explain about network management tools.
  - (b) Explain about network statistics measurement system.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

#### **NETWORK MANAGEMENT SYSTEMS**

(Common to CSE, IT and CSS)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Explain the internet configuration for a TCP/IP based networks.
  - (b) Explain about the gateway communication to a proprietary sub network.
- 2 Describe the SNMP get next request with indices.
- 3 (a) Explain the various functions associated with RMOM1 MIB.
  - (b) Explain the different stages in remote network monitoring management information base.
- 4 (a) Give the complete list of services provided by TMN.
  - (b) Give brief description about management service architecture of TMN.
- 5 Explain the SNMP V2 conformance statements with suitable example.
- 6 (a) Explain the operations system for traffic measurement.
  - (b) Give brief description about functional NMS configuration.
- 7 (a) Give brief description about enterprise management solutions.
  - (b) Explain the low-end system management.
- 8 (a) Explain the simplified WBEM CIM core model.
  - (b) What are the sub classes of the logical element? Explain them.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### **NETWORK MANAGEMENT SYSTEMS**

(Common to CSE, IT and CSS)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 What is mean by MIB? Give the genetic representation of range information.
- 2 Explain the TMN conceptual model with neat diagram.
- 3 Explain case histories of networking and management.
- 4 What are the operations of SNMP? Explain about the genetic maps involved.
- Describe the SNMP V2 network management architecture on multiple transport domains.
- 6 (a) What enhancements are made to RMON2 MIB group? Explain it.
  - (b) Explain the new data types defined in RMON1 textual conventions.
- Generate an ASN.1 object group macro for the address translation group in SNMP V2 implementation.
- 8 Explain the evolution of internet management documents related to SNMP V1.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

#### **NETWORK MANAGEMENT SYSTEMS**

(Common to CSE, IT and CSS)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 Explain the SNMPV2 conformance statements with suitable example.
- 2 Explain current status and future of network management.
- 3 (a) What are the advantages of using CIM in WBEM?
  - (b) List and explain the various components of web based enterprise management.
- 4 (a) Compare the functionalities of TMN functional architecture and TMN physical architecture.
  - (b) Discuss about the implementation issues of TMN.
- 5 Describe the SNMP GET NEXT REQUEST with indices.
- 6 Explain in detail the desktop management interface.
- What are the different network statistics measurement systems? Explain them in detail.
- 3 (a) List and explain the various components of web based enterprise management.
  - (b) Give brief description about CIMOM.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### MOBILE APPLICATION DEVELOPMENT

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) What are the applications of j2me?
  - (b) What are the different types of mobile radion networks available?
- 2 (a) Explain in detail about j2me architecture.
  - (b) How the run time environment is useful for j2me.
- 3 (a) What is event processing?
  - (b) How exception handling works in java, give a brief description in detail.
- 4 Describe all classes of screens used in j2me in detail.
- 5 Explain how j2me implements data base concept for storing, sorting and searching records.
- What are the types of jdbc drivers with all packages?
- 7 Describe in detail about the functions of SQL and indexing used for searching.
- 8 Explain the following:
  - (a) Grouping and ordering data
  - (b) Views
  - (c) Microwave technology
  - (d) Record listener

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### MOBILE APPLICATION DEVELOPMENT

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Explain in detail about j2me and how this environment is useful for wireless devices.
  - (b) What are the different type's radio data networks?
- 2 (a) Explain in detail about j2me architecture with neat sketch.
  - (b) Describe in detail about j2me wireless toolkit.
- What are the functions and uses of display, command and item classes in j2me?
- 4 Describe in detail about all classes of screens used in j2me in detail.
- Write a short note on following:
  - (a) Record storage
  - (b) Writing and reading records
  - (c) Record enumeration
- 6 Explain how data base connection establishes by using jdbc drivers and what are its statement objects.
- 7 Explain in detail about the commands DML, DDL, DCL and TCL with syntax.
- 8 Describe the following:
  - (a) Sub queries.
  - (b) Exceptions.
  - (c) The palm os emulator.
  - (d) Run time environment of j2me.

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### MOBILE APPLICATION DEVELOPMENT

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 Explain how small computing technology is useful for j2me and personal digital assistances.
- 2 (a) Describe in detail about j2me architecture with neat sketch.
  - (b) What are the small computing device requirements?
- 3 (a) Explain in detail about j2me user interfaces.
  - (b) How exception handling works in java, give a brief description in detail?
- What are the concepts involved in low level display of j2me?
- 5 How j2me implements data base concept for storing, sorting and searching records? Explain.
- Write a short note on following:
  - (a) jdbc packages.
  - (b) Result set.
  - (c) Meta data.
- 7 Explain in detail about the commands DML, DDL, DCL and TCL with syntax.
- 8 Describe the following:
  - (a) Alert class, form class.
  - (b) Multiple MIDlets.
  - (c) Messaging.
  - (d) Radio data networks.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### MOBILE APPLICATION DEVELOPMENT

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 Explain in detail about the real world environment of j2me in mobile applications.
- 2 (a) Describe in detail about j2me architecture with neat sketch.
  - (b) Explain about j2me software development kits.
- What are the best practices commands, items and event processing in j2me?
- 4 Justify how classes of screens are more useful in j2me.
- 5 Explain how j2me implements data base concept for storing, sorting and searching records.
- 6 Describe in detail about jdbc packages and user interfaces.
- 7 What are the different categories of SQL commands with syntaxes?
- 8 Write a short note on following:
  - (a) Exceptions.
  - (b) Messaging.
  - (c) Views.
  - (d) Record listener.

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 INFORMATION RETRIEVAL SYSTEMS

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Discuss the objectives of information retrieval systems.
  - (b) How the information retrieval system is related to data base management system?
- 2 (a) Describe the concepts of information extraction.
  - (b) What is an indexing? Explain its objectives.
- 3 Explain in detail natural language indexing.
- 4 (a) Clearly bring out the steps of the process of clustering.
  - (b) Compare and contrast term clustering and item clustering.
- 5 (a) Explain the various user search techniques with suitable examples.
  - (b) Discuss the features related to cognition and perception.
- 6 (a) Discuss about the techniques involved in software text search algorithms.
  - (b) List out the differences between Boyer-Moore text search algorithm and Knuth-Pratt-Morris algorithm.
- Discuss the sources of potential errors in the final set of search terms from when a user first identifies a need for information to the creation of the final query.
- 8 Explain in detail the online IR systems and digital libraries.

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 INFORMATION RETRIEVAL SYSTEMS

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Describe in detail about functional overview of an information retrieval systems.
  - (b) Compare and contrast digital libraries and information retrieval systems.
- 2 (a) Explain briefly about indexing process.
  - (b) Distinguish between cataloging and indexing.
- 3 Explain the following:
  - (a) Statistical indexing.
  - (b) Concept indexing.
- 4 (a) Explain in detail the hierarchy of clusters.
  - (b) Describe document and term clustering.
- Write about:
  - (a) Selective dissemination of information search.
  - (b) Information visualization technologies.
- 6 Describe the various measures used in the information system evaluation.
- 7 Explain about model and languages in multimedia information retrieval.
- 8 Explain the libraries and bibliographical systems.

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 INFORMATION RETRIEVAL SYSTEMS

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Clearly discuss the relevance of information retrieval systems in the context of digital libraries and data warehouses.
  - (b) Can information retrieval system be related to database management system? Justify your answer with relevant examples.
- 2 Explain in detail the various data structures used in information retrieval systems with examples.
- 3 Explain briefly about automatic indexing and hypertext linkages.
- 4 (a) Explain how a thesaurus will be generated.
  - (b) Write about item clustering.
- 5 (a) Discuss about relevance feedback techniques.
  - (b) How do you expect that relevance feedback using negative judgments will affect the precision and recall of an information system?
- 6 Explain in detail the various text algorithms.
- 7 Explain the data modeling, Query languages in multimedia information retrieval.
- 8 What is the full form of OPACs? Explain in detail OPACs with suitable examples.

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 INFORMATION RETRIEVAL SYSTEMS

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 Write about the following capabilities of an information retrieval system:
  - (a) Search.
  - (b) Browse.
- 2 Explain the following data structures giving suitable examples:
  - (a) N-gram.
  - (b) Signature file.
  - (c) Hypertext.
- 3 Write a short notes on:
  - (a) Classes of atomic indexing.
  - (b) Statistical indexing.
- If clustering has been completed on two different domains, discuss the impact of merging the domains into a single cluster for both term clustering and item clustering. What factors will affect the amount of work that will be required to merge the clusters together?
- Write short notes on the following with examples:
  - (a) Ranking algorithms.
  - (b) Similarity measures.
- 6 (a) Explain the goals of text retrieval conference.
  - (b) What are the two types of retrieval examined at TREC?
- 7 What is indexing and searching in multimedia information retrieval?
- 8 List out all the libraries and bibliographical systems.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### DISTRIBUTED COMPUTING

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Explain the architecture of distributed applications.
  - (b) Write a note on inter process communication.
  - (c) Write about request-response protocols.
- 2 (a) Discuss the message system paradigm with neat sketch.
  - (b) Explain the remote procedure call (RPC).
- 3 (a) Explain client-server paradigm issues.
  - (b) Explain various sockets API.
- 4 (a) What is distributed object system? Explain RPC and RMI.
  - (b) Draw the neat sketch for java RMI architecture.
- 5 (a) Draw the basic architecture of CORBA.
  - (b) Explain CORBA object services.
  - (c) Write a note on java IDL.
- 6 (a) Explain the following:
  - (i) Grid problem.
  - (ii) Concept of virtual organizations.
  - (iii) Grid architecture.
  - (b) Describe the grid architecture and relationship to other distributed technologies.
- 7 Discuss in detail open grid service architecture.
- 8 Describe the following regarding GT3 tool kit:
  - (a) Architecture.
  - (b) Programming model.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### DISTRIBUTED COMPUTING

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Discuss briefly various operating system concepts relevant to distributed computing.
  - (b) Write short notes on deadlocks and timeouts.
- 2 (a) Discuss the message system paradigm with neat sketch.
  - (b) Explain the point to point message model and publish/subscribe message model.
- 3 (a) What is socket? Explain the various sockets API.
  - (b) Write short notes on iterative and concurrent servers.
- 4 (a) Draw the neat sketch of RPC and RMI architecture.
  - (b) Describe the steps for building an RMI application.
- Write notes on the following:
  - (a) CORBA object interface.
  - (b) Object servers and object clients.
  - (c) Java IDL.
- 6 (a) Discuss briefly grid computing anatomy.
  - (b) Describe the grid architecture and relationship to other distributed technologies.
- 7 (a) Explain the OGSA platform components.
  - (b) Describe briefly open grid services infrastructure.
- 8 Describe the following regarding globus GT3 tool kit:
  - (a) Architecture.
  - (b) Programming model.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### DISTRIBUTED COMPUTING

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) Define distributed computing. Explain different forms of computing.
  - (b) Explain the difference between connection oriented and connectionless interprocess communication (IPC).
- 2 Explain client-server paradigm, peer to peer paradigm and message system paradigm.
- 3 Distinguish among the following:
  - (a) Connection oriented and connection less servers.
  - (b) Iterative and concurrent servers.
  - (c) Unicasting and multicasting.
  - (d) Reliable multicasting and unreliable multicasting.
- 4 (a) In distributed object paradigm (RMI) explain the steps for building an RMI application.
  - (b) Make a comparison of RMI and socket API.
- 5 (a) Write about the CORBA object services.
  - (b) Explain an example CORBA application.
- 6 (a) Explain the anatomy of grid computing.
  - (b) Describe the grid computing road map.
- 7 Explain sample use cases: commercial data center, national fusion collaboratory and online media.
- 8 Discuss the globus GT3 toolkit programming model, a sample implementation.

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### DISTRIBUTED COMPUTING

(Information Technology)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 (a) What is monolithic, distributed, parallel and cooperative computing?
  - (b) Explain the strengths and weaknesses of distributed computing.
- 2 Discuss various paradigms for distributed applications.
- 3 (a) Explain the diagram socket API.
  - (b) Describe the stream mode socket API.
- 4 (a) Give a sample RMI application and explain.
  - (b) What is distributed object system? Explain RMI and RPC.
- 5 Describe in brief CORBA, ORB, GIOP and IIOP.
- 6 (a) Describe the grid computing road map.
  - (b) Draw the merging grid services architecture with the web services architecture.
- 7 (a) Explain the architecture and goal of open grid service architecture.
  - (b) Discuss open grid services infrastructure in detail.
- 8 Describe and draw the neat sketch of globus GT3 toolkit architecture.

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

(Common to CSE, IT and CSS)

Time: 3 hours Max Marks: 70

Answer any FIVE questions All questions carry equal marks

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- 1 Explain the nature of problems studied in managerial economics. What is the importance of the study of such problems in business management?
- What is elasticity of demand? Explain how elasticity of demand is useful for decision making.
- 3 Explain the concepts of breakeven point, margin of safety, angle of incidence and managerial significance of BEA.
- 4 Define perfect competition market. Compare and contrast between perfect competition and monopoly.
- 5 Define Indian co-operative societies. Explain its merits and demerits.
- 6 XYZ Co. is considering the purchase of machine. Two machines A and B each costing Rs.50,000 is available. Earnings after taxes are expected to be as under:

Year	1	2	3	4	5
Machine 'A'	5,000	15,000	20,000	30,000	20,000
Machine 'B'	15,000	20,000	25,000	15,000	10,000

Estimate the two alternatives according to:

- (a) Payback method, and
- (b) NPV method a discount rate of 10% is to be used.
- 7 Journalize the following transactions:

a.	Started business with a capital of Rs.2,00,000
b.	He paid into the Bank Rs.15,000
C.	He purchased goods for cash Rs.50,000
d.	He withdraw cash from Bank for office use Rs.8,000
e.	He sold goods for cash Rs.6,000 to Y
f.	He purchased furniture for cash Rs.2,000 from Chan dram & Co.
g.	He purchased goods from M on credit for Rs.4,000
h.	He paid wages Rs.3,000 for installation of a new plant purchased for Rs.10,000
i.	He used goods valued at Rs.200 of the business for his domestic purpose
j.	He sold goods to K for Rs.2,000 and received a cheque.

Discuss the importance of ratio analysis for inter firm and intra-firm comparison, including circumstances responsible for its limitations, if any?

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

(Common to CSE, IT and CSS)

Time: 3 hours Max Marks: 70

Answer any FIVE questions All questions carry equal marks

\*\*\*\*

- 1 Define the law of demand. What are its exceptions? Explain.
- What is forecasting demand? How correlation and regression methods can be used for forecasting demand?
- A firm has two products B and C. The particulars of the price per unit, variable cost per unit and percentage of share in the total sales volume are given in the following table:

Products	Selling Price	Variable Cost	% of share
В	Rs 400.00	Rs 160.00	30
С	Rs 500.00	Rs 200.00	50

The total fixed costs during the year amount to Rs.10,00,000. The total volume of sales is Rs.80,00,000. The company wants to drop product B as it is yielding less contribution per unit. Instead, it wants to add product D. if D is added, the new fixed cost is likely to be up by 10% and the sales volume is likely to increase by 5%. Do you recommend for adding product D?

- What is a market? Explain, in brief, the different market structures.
- 5 Explain the salient features, type's merits and limitations of partnership firm.
- 6 (a) What is the importance of capital?
  - (b) What factors determine the working capital requirements of a company?
- 7 (a) Define accounting and explain its functions?
  - (b) Explain classification of accounts with suitable examples?
- The following is the balance sheet of Sri Anurag enterprises as on 31<sup>st</sup> Dec 20007.

Liabilities	Rs.	Assets	Rs.	
Share capital	2,00,000	Buildings	2,00,000	
Reserve fund	50,000	Machinery	1,50,000	
Profit balance	30,500	Stock on hand	1,00,000	
Bank loan	1,50,000	Sundry debtors	60,000	
Sundry creditors	70,000	Cash on hand	20,500	
Provision for Tax	30,000			
	5,30,000		5,30,000	

You are required to comment on liquidity and solvency position of the concern.

# B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14 MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

(Common to CSE, IT and CSS)

Time: 3 hours Max Marks: 70

Answer any FIVE questions All questions carry equal marks

- 1 Define managerial economics. Explain its relation with other disciplines.
- 2 From the following data, using method of least squares, estimate the sales for the years 2011 and 2013.

Year	2001	2003	2005	2007	2009	2009
Sales	1400	1000	1700	1900	2000	2100
(Rs. in Lakhs)	1400	1000	1700	1600	2000	2100

- 3 Write short notes on:
  - (a) Margin of safety.
  - (b) Assumptions of BEA.
  - (c) Contribution.
- 4 Briefly explain the following:
  - (a) Sealed bid pricing.
  - (b) Peak load pricing.
  - (c) Skimming pricing.
- 5 (a) Discuss the factors affection the choice of from of business organization.
  - (b) Define partnership and explain its features and advantages.
- 6 (a) What are the factors determining the fixed capital requirements?
  - (b) Compare and contrast NPV and ARR methods of capital investment appraisal methods.
- 7 Journalise the following transactions:

October 1	Bought goods worth Rs.1600 from Kamal			
5	Purchases goods worth Rs.1400 from surrender			
8	Dividend received worth Rs.1500			
13	Returned goods worth Rs.160 to surrender			
16	Sold goods to Bharani for Rs.1000 allowing 10% trade discount			
20	Bharani returned goods worth Rs.200			
23	Sold goods to Rao Rs.1,600			
26	Interest allowed worth of Rs.100			
29	Cash received Rs.4000, and interest received worth Rs.1000			
	from Ramana			
31	Salaries paid for cheque worth Rs.2,500			

### B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December/January 2013/14

### MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

(Common to CSE, IT and CSS)

Time: 3 hours Max Marks: 70

Answer any FIVE questions All questions carry equal marks

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- 1 Briefly explain the following:
  - (a) Demand.
  - (b) Demand determinants.
  - (c) Demand exceptions.
- Write short notes on:
  - (a) Survey methods.
  - (b) Statistical methods of forecasting demand.
- A company makes a single product with a sales price of Rs.120 and a variable cost of Rs.54 per unit. Fixed costs are Rs.13,20,000. Calculate:
  - (a) Number of units to break even.
  - (b) Sales at breakeven point.
  - (c) Contribution to sales ratio (in terms of percentage).
  - (d) What number of units will need to be sold to achieve a profit of Rs.4,20,000?
  - (e) What level of sales will achieve a profit of Rs.5,60,000?
  - (f) Given an decrease in variable cost by 15% per unit, and increase in the fixed costs by Rs.1,20,000 per annum, what will be the new BEP in terms of units and sales volume.
- 4 Define market. Distinguish between perfect and imperfect markets.
- 5 What is the need of public enterprises? Explain the recent achievement of public enterprises.
- An organization has three project proposals P, Q and R in hand. The cash flow from each project has been given below.

Year	Annual cash inflow in rupees				
	Р	Q	R		
1	2000	4000	6000		
2	4000	4000	4000		
3	6000	4000	2000		

Each project has an economic life of 3 years and each project requires an investment of Rs. 9700. The total cash inflow from each project during its economic life is Rs.12,000. Determine the best project proposal based on NPV criteria assuming a rate of interest of 10%.

- 7 (a) What is 'Journal entry' and describes its importance in account books?
  - (b) Explain the basic accounting concepts and convention give examples.
- 8 What is meant by ratio analysis? Explain briefly various techniques of ratio analysis.