

Day : Saturday
Date : 07/05/2011



Time : 2:00 p.m. to 5:00 p.m.
Max Marks : 70

N.B.:

- 1) Q.No.1 is **COMPULSORY**.
- 2) Each question carries **14** marks.
- 3) Attempt **ANY FOUR** questions from **Q.2** to **Q.7**.
- 4) Use of non programmable **CALCULATOR** is allowed.
- 5) Graph paper and Statistical table will be permitted if necessary.

- Q.1** a) Use the false position method to find the root of the equation $x^2 - x - 2 = 0$ in the range $1 < x < 3$.
- b) Solve the following system of equation by using Gauss Seidel iterative method
- $$\begin{matrix} 3x_1 + 2x_2 = 5 \\ x_1 - 3x_2 = 5 \end{matrix}$$

- Q.2** a) Convert the following decimal into binary equivalent.
- i) 43.375 ii) 0.65
- b) Find the square root of 1.5 using the Lagrange and interpolation formula. The table gives square root for integer.

x	1	2	3	4	5
f(x)	1	1.4142	1.7321	2	2.2361

- Q.3** a) Solve the following system of linear equations by Gauss Elimination Method.
- $$\begin{matrix} 3x_1 + 6x_2 + x_3 = 16 \\ 2x_1 + 4x_2 + 3x_3 = 13 \\ x_1 + 3x_2 + 2x_3 = 9 \end{matrix}$$
- b) Draw 'less than' and 'more than' ogives from the following distribution of marks obtained by 100 candidates in an examination.

Marks obtained	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60
No. of candidates	3	16	26	31	16	8

- Q.4** Calculate mean, median and mode from the following data:

x	5	6	7	8	9	10	11	12	13	14	15
Frequency	18	15	34	47	68	90	80	62	35	27	11

- Q.5** a) Find the rank correlation for the following data:

x	56	42	72	36	63	47	55	49	38	42	68	60
y	147	125	160	118	149	128	150	145	115	140	152	155

- b) The mean of 30 observation is 150 on checking it was found that two observation are wrongly copied as 7 and 3. If the wrong observations are replaced by correct values 6 and 10 then find the correct mean.

- Q.6** From the given data find:

- a) Two regression coefficient.
- b) Two regression equation.
- c) Most likely figure of production when demand is 30.

X-Demand	25	28	35	32	31	30	29	38	34	32
Y-Production	43	46	49	41	36	32	31	30	33	39

- Q.7** Write short notes on **ANY TWO** of the following:

- a) Errors in Arithmetic
- b) Bisection Method
- c) Methods of Data Collection
- d) Limitation of Statistics

Day : Thursday
Date : 05/05/2011



Time : 2:00 p.m. to 5:00 p.m.
Max Marks : 70

14

N.B.:

- 1) Q. No. 1 is **COMPULSORY**.
 - 2) Solve any **FOUR** questions from Q. No. 2 to Q. No. 7.
 - 3) Each questions carries **14 (Fourteen)** marks.
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Q.1 Your institute has planned an annual get together for the student. You have been appointed as the coordinator and head of the event. You have one month to prepare for the same. The Director and faculty have asked you to submit a detailed plan of the event to be organized. Consider all aspects and submit the same.

Q.2 Discuss the principles of management put forth by Taylor.

Q.3 Differentiate between delegation and Decentralization.

Q.4 "Ethics is essential to Business" Justify the statement.

Q.5 What is leadership? Discuss the qualities of a good leader.

Q.6 Discuss control process for effective management.

Q.7 Write short notes :

- a) Evolution of Management thought
- b) Behavioral approach to leadership
- c) Non budgetary control devices.

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Subject : Systems Analysis & Design

15

Day : Tuesday
Date : 03/05/2011



Time : 2:00 p.m. to 5:00 p.m.
Max Marks : 70

N.B:

- 1) Each Question carries **FOURTEEN** marks.
 - 2) Question **I** is **COMPULSORY**.
 - 3) Attempt any **FOUR** questions from **Q-2 –Q-7**.
 - 4) Use of non programmable scientific calculator is allowed.
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SECTION-I

- Q.1. a)** Discuss the advantages and disadvantages of Questionnaires and Interviews.
- b)** Sagar Medical stores sales the medicines to customers as per the prescription. Bill is prepared for every sale, which is given to the customer. Customer makes payment against the bill. Customer can pay payment in Installments. Draw Context Level And First Level DFD.
- Q.2** Explain Prototyping Model in Detail.
- Q.3** What Is Testing? Explain how testing is benefited to Software Industry.
- Q.4** What is Data Dictionary? Explain with suitable Example.
- Q.5** What is Interface? Explain in detail the Input and Output Design.
- Q.6** How system analyst acts as middle man between Software Developer and End user.
- Q.7** Write a short notes on **(ANY TWO)** :
- a) System Design
 - b) E-R Diagram
 - c) Structured English
 - d) Decision Support System

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Day : Saturday
Date : 30/04/2011



Time : 2:00 p.m. to 5:00 p.m.
Max Marks : 80

N.B:

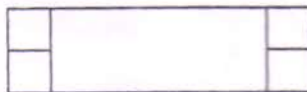
- 1) Attempt any **FIVE** questions from Section-I. Each question carries 10 Marks.
- 2) Attempt any **TWO** questions from Section-II. Each questions carries 15 Marks.
- 3) Answers to the both sections should be written in the **SAME** answer Book.

SECTION-I

- Q.1** What do you mean by domain name? How domain name is mapped to the respective IP address?
- Q.2** What considerations are required while designing a website?
- Q.3** Explain the following HTML Tags
- a) <Div>
 - b) <script>
 - c) <Body>
 - d) <Table>
- Q.4** Explain various data types used in Java script
- Q.5** What is a TCP/IP? Explain its various layers.
- Q.6** Explain the looping statements used in Java script with appropriate examples.
- Q.7** Write short notes on **ANY TWO** of the following.
- a) Cookies
 - b) Internet Service providers
 - c) WWW

SECTION-II

- Q.8** Write a HTML code for displaying the following structure using frame tag in a webpage.



- Q.9** Design webpage in HTML containing all text formatting tags.
- Q.10** Design a registration form using HTML and write a client side script using Java script for the following
- a) Check for the empty
 - b) Check for numbers

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Day : Thursday
Date : 28/04/2011



Time : 2:00 p.m. to 5:00 p.m.
Max Marks : 80

N.B.:

- 1) Attempt any **FIVE** questions from Section – I each questions carries **10** marks.
- 2) Attempt any **TWO** questions from Section – II each questions carries **15** marks.
- 3) Answer to both the sections should be written in **SAME** answer book.

SECTION – I

- Q.1** Explain Database Management Systems three tier architecture in detail.
- Q.2** Distinguish between Hierarchical Data Model and Network Data Model.
- Q.3** What is concurrency control? Explain the two different control mechanisms with examples.
- Q.4** What do you mean by data mining? Explain the stages of data mining process in detail.
- Q.5** Explain the following set operations:
i) Union ii) Intersect iii) Minus
- Q.6** Explain different types of integrity constraints that can be specified on the database.
- Q.7** Write short notes **ANY TWO** of the following:
a) Replication Transparency
b) Data Warehousing
c) Data Independence
- Q.8** What is normalization, 1NF, 2NF, 3NF? Normalize following employer data up to 3NF
Emp No
Emp name
Dept No
Dept name
Manager name
Course No
Course title
Project Code
Project name
- Q.9** Consider following database:
Student (S_No, S_Name, Birthdate, Class)
Course (C_No, C_Name)
Result (S_No, C_No, Grade)
Write following queries:
a) List S_Name, C_Name and total no of students who have secured 'A' grade for each course.
b) List S_Name, C_Name and grades of students in 'MCA'
c) Display list of students where Birthdate is in 'October'
d) Display class wise students.
- Q.10** Write short notes on **ANY THREE** of the following:
a) Types of attributes
b) 2PL
c) Log bared recovery
d) Transaction state

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Subject : Database Management Theory

Day : Monday

Date : 05/12/2011



Time : 2:00 p.m. to 5:00 p.m.

Max Marks : 80 Total Pages : 1

N.B.:

- 1) Attempt any **FIVE** questions from Section – I each questions carries 10 marks.
- 2) Attempt any **TWO** questions from Section – II each questions carries 15 marks.
- 3) Answer to both the sections should be written in **SAME** answer book.

SECTION-I

- Q.1 What is a Transaction? Explain ACID properties of Transaction.
- Q.2 What are different database users? Explain the characteristics of database.
- Q.3 Explain any five Aggregate functions of SQL with syntax and examples.
- Q.4 What is data modeling? Explain different types of data models.
- Q.5 Discuss E.F. CODD's rules.
- Q.6 What are different types of locks? Explain two phase locking protocols?
- Q.7 Write short notes on Any **TWO** of the following:
- a) Knowledge Discovery
 - b) Lost update problem
 - c) Instance and schema

SECTION-II

- Q.8 Normalize following employer data up to 3NF
Emp-No, Emp-Name, Dept-No, Dept-Name, Manager-No, and Manager-Name, course -No, Course- Title, project-code project- Name.
- Q.9 Considers the following relation database:
Lives (person name, street, city)
Works (person name, Company name ,salary)
Located_in(company_name,city)
Managers (persons name, manager name)
- a) List all companies located in KOLHAPUR
 - b) Find the name of all employees who works for ABC Bank Corporation.
 - c) Find the name and city of all employees who work for ABC Bank Corporation.
 - d) Give all manger a 10% raise.
 - e) Display all persons who are working in city 'Pune'.
- Q.10 Write short notes on Any **THREE** of the following:
- a) Shadow paging
 - b) Transparency
 - c) Data Independence
 - d) Types of attributes.

Day : Wednesday

Date : 07/12/2011



Time : 2:00 p.m. to 5:00 p.m.

Max Marks : 80 Total Pages : 1

N.B:

- 1) Attempt any **FIVE** questions from Section-I. Each question carries 10 Marks.
- 2) Attempt any **TWO** questions from Section-II. Each questions carries 15 Marks.
- 3) Answers to the both sections should be written in the **SAME** answer Book.

SECTION-I

- Q.1 What is a domain? Explain the process of domain registration.
- Q.2 What is java script? Explain various uses of java script.
- Q.3 Explain various text formatting tags with appropriate examples.
- Q.4 What is CSS? Explain the properties of border in CSS format.
- Q.5 How to use image as a link in HTML document. Explain important attributes of image.
- Q.6 What do you mean by a web browser? Explain any two browsers in detail.
- Q.7 Write short notes on **ANY TWO** of the following
 - a) Cookies
 - b) TCP/IP
 - c) Role of FTP

SECTION-II

- Q.8 Design HTML forum and show HTML elements used for
 - 1) Designing online deposit
 - 2) Online funds transfer form one account to another's.
- Q.9 Explain the following. HTML tags with proper syntax
 - a)
 - b) <SELECT> <OPTION>
 - c) <FRAME>
 - d) <TABLE>
 - e) <A HREF>
- Q.10 Write a java script to display list of odd numbers from 1 to 40

