

[4961]-408

S.Y.M.C.A.(Under Engineering Faculty)

ADVANCED DBMS

(2013 Course)

may-16

Time :3Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) Neat diagrams must be drawn wherever necessary.
- 2) Assume suitable data if necessary.

- Q1) a) With suitable diagram explain the steps in query processing. [4]
- b) Describe Binary Search algorithm for selection operation. [4]

OR

- Q2) a) Consider the following query "Select balance from account where balance < 2500." write relational algebra expression for the above query and explain query evaluation plan. [4]

- b) Explain materialization evaluation with a suitable example. [4]

- Q3) a) Differentiate between centralized and client-server systems. [4]

- b) Explain parallel database architectures. [4]

OR

- Q4) a) Explain speed up and scaleup in parallel databases with suitable diagram. [4]

- b) Explain the structure of Transaction Server Process with diagram. [4]

- Q5) a) Explain Distributed DBMS Architectures. [4]

- b) Explain need for Distributed Databases. [4]

OR

- Q6) a) Explain Distributed query processing methodology. [4]

- b) Explain Data and Access Control. [4]

- Q7) a) Explain structured types with example. [4]

- b) Explain object identity and reference types with examples. [4]

OR

P.T.O.

- Q8) a) What is persistent programming language and how it is different from embedded language? [4]
b) Explain need of complex data type? [4]

- Q9) a) What is the purpose of XML? What are the rules for XML. [4]
b) What is a Native XML Database? Features of Native XML Database. [4]

OR

Q10) Write short note on: [8]

- a) XML schema document
b) Generating XML pages using Basic SQL.

- Q11) a) What is NoSQL? Explain its features and applications in brief. [4]
b) What is Graph Databases? What are the pros and cons of Graph database? [3]

- c) What is Schema-less Databases? What are the pros and cons of Schema-less Databases? [3]

OR

Q12) Write short note on: [10]

- a) Single server.
b) master-slave replication
c) Sharding
d) peer to peer replication.



Total No. of Questions : 12]

P3725

[4961]-401

SEAT No. :

[Total No. of Pages : 2

S.Y.M.C.A.(Engineering)

ADVANCED WEB TECHNOLOGY
(2013 Course) (Semester-IV) (410909)

Time : 3 Hours]

Instructions to the candidates:

may 16

[Max. Marks : 50

- 1) Neat diagrams must be drawn wherever necessary.
- 2) Figures to the right side indicate full marks.
- 3) Assume suitable data if necessary.

- Q1) a) Explain common Language Runtime along with its component diagram. [4]
- b) Explain Namespaces in Visual C# and how these namespaces are import in the program with an example. [4]

OR

- Q2) a) List and Explain Characteristics of Visual C#. [4]
- b) Define Managed code and explain advantages of managed code. [4]
- Q3) a) Explain Exception Handling along with an example. [5]
- b) What is Method Overriding and how it is implemented in C#, Give an Example. [5]

OR

- Q4) a) Explain concept of Delegate that is used in C#. [5]
- b) Give the Syntax of following loops/Control statement of C#2008. [5]
- | | |
|------------|-------------|
| i) for | ii) while |
| iii) do | iv) foreach |
| v) if else | |

P.T.O.

- Q5) a) What is Web Based Application and how to create Custom control. [4]
b) Draw and Explain Architecture of Windows Presentation Foundation (WPF). [4]

OR

- Q6) a) Explain windows Presentation Foundation (WPF) along with its main features. [4]
b) Explain WPF 3.5 Controls (Any four). [4]

- Q7) Explain main features of Silver light. [8]

OR

- Q8) Explain the following ASP.NET controls with example: [8]

- a) Validation Control (Any one)
b) Web Server Control(Any one)

- Q9) Draw and Explain Architecture of Windows Communication Foundation (W.CF). [8]

OR

- Q10)How you can display web Application or website on target server. [8]

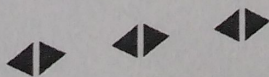
- Q11) a) Explain ADO.NET Architecture. [4]

- b) Write a short note on LINQ. [4]

OR

- Q12)Explain following concepts of C#2008: [8]

- a) Inheritance
b) Polymorphism



Total No. of Questions : 12]

P3726

SEAT No. :

[Total No. of Pages : 2

[4961]-402

S.Y.M.C.A. (Faculty of Engineering)
BANKING FINANCIAL ACCOUNTING & MANAGEMENT
(2013 Course) (Semester - IV) (410910)

may 16

Time : 3 Hours]

Instructions to the candidates:

[Max. Marks : 50

- 1) Solve either of Question 1 or 2,3 or 4,5 or 6,7 or 8,9 or 10,11 or 12 in same answer sheet.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) Explain the 3 rules used for book keeping. [6]
b) Explain the purpose of creating Balance Sheet & Profit & Loss Account. [2]

OR

- Q2)** a) Explain the concepts of "Going Concern" & "Recording transactions at Cost". [6]
b) Explain the difference between 2-Column & 3-Column Cash Book. [2]

- Q3)** A company Produces single product. About its product following data has been given:- [8]

Selling price per unit – Rs. 40/-, Marginal cost per unit – Rs. 24/-

Fixed cost per annual – Rs. 1600/-

Calculate –

- a) P/V Ratio,
- b) Break -even sales,
- c) Sales to earn a profit of Rs. 2000/-,
- d) Profit at the sales of Rs. 12, 000/-

OR

P.T.O.

- Q4) a) Explain the preparation of Cost Sheet. [6]
b) What is a Cash Budget? Explain. [2]

- Q5) a) What is Working Capital? How its requirement is calculated? [6]
b) Explain the various factors affecting the working capital requirement. [3]

OR

- Q6) a) How the working capital can be calculated for a seasonal business like selling of Alphanso Mangoes in summer? [6]
b) Explain the various sources of financing the Working Capital. [3]

- Q7) Explain the role of Reserve Bank of India in regulation of banking industry. [8]

OR

- Q8) Explain the Savings Deposit scheme and various aspects related with it. [8]

- Q9) What is meant by Payable at Par instrument? How it benefits bank customers? [8]

OR

- Q10) Explain the concept of Standing Instructions with example. [8]

- Q11) What do you understand by Virtual Banking? Explain with example. [9]

OR

- Q12) Why CBS is also known as Any Time Any Where Any How banking? Explain. [9]

x x x

Total No. of Questions : 12]

P3727

SEAT No. :

[Total No. of Pages : 3

[4961]-403

S.Y.M.C.A. (Engg.)

CN & INFORMATION SECURITY
(2013 Course) (Semester - IV) (410911)

may-16

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) Answers to the two sections should be written in separate answer books.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

SECTION - I

- Q1)** a) What are different types of transmission modes? Explain. [4]
b) Explain LAN and WAN with diagram and usage. [5]

OR

- Q2)** a) Write short note on: [6]
i) Router
ii) Switches
iii) Bridges
b) List out six network hardware components. [3]

- Q3)** Explain TCP/IP model in detail with neat diagram. [8]

OR

- Q4)** Explain ALOHA and CSMA. [8]

P.T.O.

- Q5) a) What do you mean connection oriented and connection less services.[4]
- b) Explain different functions of transport layer. [4]

OR

- Q6) Explain any two routing algorithm. [8]

SECTION - II

- Q7) a) Write about Domain name system with suitable example of Domain name server. [4]

- b) Explain how electronic mail works and list out the services offered by SMTP. [4]

OR

- Q8) Write Short Note On: [8]

- a) HTTP Protocol.
- b) TFTP
- c) Static and Dynamic Webpages
- d) SMTP

- Q9) a) Explain different types of attack. [4]

- b) Explain RSA algorithm in detail. [4]

OR

- Q10) a) Explain DES algorithm in detail. [4]

- b) State and explain Different types of Cipher. [4]

Q11)a) Explain Secure socket layer.

[5]

b) Write a short note on

[4]

i) SNMP

ii) firewall

OR

Q12)a) Why is the SSL positioned between the application layer and the transport layer?

[5]

b) What do you mean one time passwords? Explain in brief.

[4]

x x x

Total No. of Questions : 12]

P3728

may-16

[4961]-404

SEAT No. :

[Total No. of Pages : 2

S.Y.M.C.A. (Engg.)

INFORMATION SYSTEMS AUDIT
(2013 Pattern) (410912) (Semester - IV) (Elective - I)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) Answer to the two sections should be written in separate answer books.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume Suitable data if necessary.

SECTION - I

Q1) a) What is Information System auditing? State and explain major objectives of IS auditing in brief. [5]

b) What do you mean auditing through the computer? Explain. [3]

OR

Q2) Why there is a need for control & audit of computer systems? [8]

Q3) Explain IS auditor's concern about application software might be acquired or developed by in - house - staff. [8]

OR

Q4) a) Briefly Explain the risk areas and control used in Electronic Data Interchange. [4]

b) Explain Operating System control. [4]

Q5) What are the three ways in which the IS auditor can get involved in the system development process in detail? [9]

OR

Q6) Write short note on

- a) Risk & controls of OOM
- b) Auditor's role in working of QA/QC of SDLC.
- c) Auditor's role in SDLC.

P.T.O.

SECTION - II

Q7) How the auditors can make judgment about the Controls in design of data entry screens? Explain with example. [9]

OR

Q8) Explain the concept of BCP in the context of a Bank. [9]

Q9) A person is buying home gadgets through online shopping. Discuss security related Issues that an IS Auditor needs to consider in such case. [8]

OR

Q10) What is Segregation of duties? Explain how an auditor checks it in information system staffing? [8]

- Q11) a) State any 2 control frameworks available for IS Auditing. [2]
b) Explain COBIT key principles for governance and management of enterprise IT in brief. [6]

OR

Q12) Explain 7 enablers of COBIT Framework with suitable diagram and explanation. [8]

