May-2017

[5156] - 401

SYMCA (Engineering)
Advanced Web Technology
(2013 Pattern) (Semester-IV)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:
1) Neat diagrams must be drawn wherever necessary.
2) Figures to the right 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 theses 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 (WCF) [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 with example how to access data using XML in Web Application. [8]

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Total No. of Questions : 12]

SEAT No. : ☐

P2364

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[Total No. of Pages : 2

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SYMCA (Faculty of Engineering)
Banking Financial Accounting & Management
(Semester-IV) (2013 Pattern)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

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 indicate full marks.
4) Assume suitable data if necessary.

Q1) a) Explain the 3 types of accounts and their related rules used in Accountancy. [6]

b) Explain the concept of Subsidiary books. [2]

OR

Q2) a) Explain the types of Subsidiary books with their formats & purpose.[6]

b) Explain the difference between Regular & Analytical Cash Book. [2]

Q3) Enter following transactions in the Journal of Rajesh & Company — Stock as on 30th May 2016— Rs. 9500/-, Cash in hand Rs.7500/- and Rs.8500/- in Bank of India account. [8]

1st June 2016 Purchased Goods worth 5000/- with Rs. 2000/- in cash and rest on credit from P & G Distributors.

4 June 2016 Sold Goods worth Rs.2000/- in Cash to Rekha Enterprises.

6 June 2016 Sold Goods worth Rs. 3000/- on credit to Ratnam & Co.

8 June 2016 Deposited Rs. 1500/- in bank account & Paid rent Rs. 3000/-.

12 June 2016 Purchased Goods from Raheja Distributors Rs. 8000/- and gave Rs.5000/- with cheque.

15 June 2016 Paid Rs. 2000/- towards Family Floater Health Insurance of the owner.

17 June 2016 Sold Goods Rs.7000/- on 5% trade discount to M/S. Jaymala Enterprises.

Prepare the journal for above transactions and find out the closing cash, bank balance for the Rajesh & Company.

P.T.O.

Q4) a) Explain different types of Ratio Groups and their use by lenders / investors. **[6]**

   b) Explain the motives behind holding of Cash by business. **[2]**

Q5) a) What is Working Capital? How its requirement is calculated? **[6]**

   b) Explain the concept of marginal Costing. **[3]**

OR

Q6) a) How the working capital can be calculated for a seasonal business like selling of Firecrackers / Sweets in Diwali? **[6]**

   b) Explain the various sources of financing the Working Capital requirement. **[3]**

Q7) Explain the role of NABARD in Indian banking industry. **[8]**

OR

Q8) Explain the Fixed Deposit schemes and various aspects related with it. **[8]**

Q9) What is meant by NEFT & RTGS? How these products benefit bank customers? **[8]**

OR

Q10) Explain the concept of Automated Clearing House in India with example. **[8]**

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

OR

Q12) Explain how CBS banking is benefitting the Indian customers? **[9]**

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SYMCA (Faculty of Engineering)
Computer Network & Information Security
(2013 Pattern) (Semester-IV)

Time : 3 Hours]   [Max. Marks : 50

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

Q1) Explain Time Division Multiplexing. Justify "Statical TDM is better than Synchronous TDM". [8]

OR

Q2) Explain transmission media. Explain about any two Guided & Unguided transmission media. [8]

Q3) Give details of the components mention [8]
a) NIC
b) Repeater
c) Router
d) Gateway

OR

Q4) Explain Collision Free protocols with neat diagram [8]

Q5) a) Explain ICMP Protocol in detail with diagram [5]
b) Write difference between TCP & UDP [4]

OR

Q6) a) Draw and explain IPv6 in detail [5]
b) Write a short note on ARP [4]

Q7) a) Explain how MIME support Email protocol [4]
b) Write a short note on Firewall [5]

OR

P.T.O.

Q8) a) Draw & explain Browser Architecture [5]

b) Write a difference between Static and Dynamic Pages [4]

Q9) Explain Diffie Hellman based key agreement protocol [8]

OR

Q10) Write a difference between Public Key Cryptography & Private Key Cryptography algorithm [8]

Q11) Write a short note on [8]

a) One Time Passwords

b) ARP Hazards

OR

Q12) Explain with neat diagram SSL operations [8]

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SYMCA (Engineering)
Information Systems Audit
(2013 Pattern) (Semester-IV) (Elective I)

Time : 3 Hours]

[Max. Marks : 50

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

Q1) What are the four major objectives of Information System Auditing? Explain the meaning of each one of them. [8]

OR

Q2) State the types of management controls and application controls. Explain use of one type of management controls and application controls with example. [8]

Q3) Explain briefly encryption techniques used in information system with example. [8]

OR

Q4) a) Briefly explain the risk areas and control used in Electronic Mail Systems. [4]

b) Explain DBMS vulnerabilities and their related controls. [4]

Q5) What is the Software Implementation Review? Explain why it is required? [9]

OR

Q6) Write short notes on [9]

a) Preliminary investigation and auditor's role

b) Problem Management

c) Auditor checking choice made between procurement & development.

P.T.O.

Q7) a) What is evidence? What are various evidence evaluation techniques?[4]

b) Explain the various validation controls at field, file and batch level with example. [4]

OR

Q8) a) What is Business Continuity Plan? Explain the need of Business Continuity Plan. [4]

b) What is control? What are the 3 types of controls one can have in software? Explain why Preventive controls are not preferred over detective or corrective controls. [4]

Q9) a) Define the procedure for implementing IT security Policy. [4]

b) Differentiate between short term plans and long term plans. [4]

OR

Q10) a) Explain Security & Privacy Issues addressed in IT security policy. [4]

b) What is role of Steering Committee? Explain in brief. [4]

Q11) a) Explain COBIT5 Principles with example. [5]

b) What is a Holistic Approach in COBIT 5? [4]

OR

Q12) Explain how a bank which has implemented Core Banking System can implement COBIT 5 framework. Prepare a sample RACI chart for key internal staff members like CFO, GM (IT) or CIO, CISO, GM (CBS), GM(Credit), GM (HRD). [9]

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May-2017

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S.Y.M.C.A. (Under Engineering Faculty)
ADVANCED DBMS
(2013 Pattern) (Semester-IV)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

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

Q1) a) Describe Binary Search Algorithm for selection operation. [4]

b) Explain the basic steps in query processing with suitable diagram. [5]

OR

Q2) a) Explain block nested loop join algorithm with its cost estimation. [5]

b) Explain materialized evaluation with suitable example. [4]

Q3) Explain pipelined parallelism and independent parallelism in detail with suitable example. [8]

OR

Q4) Explain the terms: [8]

a) Speedup

b) Scaleup

c) Degree of Parallelism

d) Data server

Q5) a) What do you mean by distributed database systems? Explain its advantages & limitations. [4]

b) Explain fragmentation and replication in distributed systems. [4]

OR

Q6) Explain two phase commit protocol in detail with suitable diagram. [8]

P.T.O.

Q7) A college maintains a database for students and teachers. A database schema is as given below. **[8]**

name: f_name, m_init, l_name

address: street_no, city, state, zipcode

person: name, address, date_of_birth

employee: person, department, designation, date_of_joining, qualification, salary

manager: employee, number_of_employees, skills

Construct an SQL: 1999 schema definition for this database. Use inheritance where appropriate.

OR

Q8) a) Explain type inheritance with suitable example. **[4]**

b) Explain object identity and reference types in SQL. **[4]**

Q9) a) Write note on XML Schema. **[3]**

b) Write xml DTD code to display the bank details. **[6]**

The elements are bank, customer, and account.

The attributes are account_number, branch-name, balance, customer_Id. customer_name, address. city, state. Assume suitable data.

OR

Q10) a) Write XQuery code using FLWOR expressions to display the employee detail **[6]**

i) Who have joined before 1ˢᵗ June 2006 and working in the Marketing dept.

ii) With salary less than Rs. 25000

iii) With designation as a programmer

Assume suitable data.

b) Differentiate between HTML and XML. **[3]**

Q11) Describe Data model & Graph Database model in detail. **[8]**

OR

Q12) a) Differentiate between RDBMS & NOSQL. **[4]**

b) Write note on CAP theorem. **[4]**

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