Babasaheb Bhimrao Ambedkar Bihar University, Muzaffarpur

Directorate of Distance Education

PROFESSIONAL/TECHNICAL

BCA/3RD/BCA13/13-16 : Bachelor of Computer Applications

Paper-1 : System Analysis and Design: MODEL QUESTIONS (Full Marks -70)

ANSWER ANY FIVE QUESTIONS

Q. 1. What is system? Describe the types of system.

Q. 2. Discuss the system development model in detail.

Q. 3. What is information? Discuss the importance characteristics of information.

Q. 4. What is decision support system? Explain the attributes of decision support system.

Q. 5. What is system analysis? Describe the procedure of analyzing the existing system.

Q. 6. Explain the system development life cycle in details.

Q. 7. What is feasibility study? Discuss the types of feasibility study used in SDLC.

Q. 8. Describe the role of personnel involved in data processing organization and their responsibilities and duties.

Q. 9. What is system project? Discuss the important reasons for system project.

Q. 10. What is system flow chart? Draw a system flow chart for roll system.

Q. 11. What is decision table? Discuss the advantage and drawback of decision table.

Q. 12. What is data flow diagram? Discuss the symbol used in DFD.

Q. 13. What is data dictionary? Discuss the four rules that govern the construction of data dictionary.

Q. 14. Explain the objective and characteristics of good documentation.

Q. 15. Write short notes on any two of the following:

a) Systems Communication
b) System Implementation
c) Decision Trees

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Paper-1 : Database Management System: MODEL QUESTIONS (Full Marks -70)

ANSWER ANY FIVE QUESTIONS

Q. 1. Define RDBMS? Also explain Hierarchical model of DBMS.

Q. 2. Explain three schema structures. What are the limitations of the Hierarchical model or Network data model?

Q. 3. What is the purpose of Hashing? What do you mean by the collision?

Q. 4. What is the signification of Integrity constraints? Differentiate entity integrity and referential integrity constraints.

Q. 5. Explain data independence. What are the limitations of a database approach?

Q. 6. Define an entity, an attribute and a relationship. Discuss different kinds of relationship.

Q. 7. Explain the following SQL commands with example CREATE, SELECT, and JOIN.

Q. 8. What is normalization? Differentiate 3NF, BCNF and 4NF.

Q. 9. Explain the use of cryptography. What do you understand by public key encryption?

Q. 10. Describe feature about RDBMS. Explain about primary, foreign and candidate key.

Q. 11. What are the SQL server 2005administrative tools?

Q. 12. Explain in brief the installation procedure for SQL server2005.

Q. 13. What are the data types used in SQL server 2005?

Q. 14. Why are use indexes? How many types of indexes are there in SQL server 2005?

Q. 15 Write short notes on any two of the following:

a) Transact SQL b) Views c) The Relational Model

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BCA/3RD/BCA15/13-16 : Bachelor of Computer Applications

Paper-1 : Object Oriented Programming in C++: MODEL QUESTIONS (Full Marks -70)

ANSWER ANY FIVE QUESTIONS

Q. 1. What is OOP? Describe the important features of object oriented programming.

Q. 2. Write a C++ program to display a Fibonacci series of numbers.

Q. 3. Write a C++ program to add three integers using functions.

Q. 4. Define looping. Also explain one of the looping statements with example.

Q. 5. Write a C++ program to perform multiplication of two matrices.

Q. 6. Write and explain operators used in C++ language.

Q. 7. Describe a class. Also explain static data member and static member functions.

Q. 8. Write a class representing a Customer and implement its data members and member methods to store and display member data.

Q. 9. What are friend functions and when are they used?

Q.10. What do you understand by operator overloading? Give an example.

Q.11. What do you understand by polymorphism? Also explain abstract class.

Q.12. Define exception class. Write a suitable exception class to handle invalid number exception.

Q.13. What do you mean by constructor and destructor. Give suitable example.

Q.14. What do you understand by class inheritance? Describe the different types of inheritance.

Q.15. Write short note on any two of the following:

a) Encapsulation b) Polymorphism c) Templates.

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Paper-1 : Computer Network: MODEL QUESTIONS (Full Marks -70)

ANSWER ANY FIVE QUESTIONS

Q. 1. What is meant by network topology?

Q. 2. Differentiate between physical and logical topology for networks.

Q. 3. Write and explain different types of communication channels.

Q. 4. Discuss and explain various layers in the ISO-OSI model.

Q. 5. What do you understand by distributed data processing?

Q. 6. Explain the teletext and videotext networks.

Q. 7. Write about TCP/IP protocol suite.

Q. 8. Discuss the design issues for Data Link Layer.

Q. 9. What do you mean by Sliding Window Protocol?

Q. 10. What are the hardware and software requirements for establishing an Internet>

Q. 11. What is ISDN? Discuss its relevance.

Q. 12. Explain the various multimedia authoring tools with example.

Q. 13. Discuss about the various MIDI software's.

Q. 14. What is WWW? Discuss its importance.

Q. 15. Write short notes on any two:

a.) RPC (Remote Procedure Calls) b.) LAN c.) Routers.

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