(2014-17)

BCA (Voc.) III Sem.
SAD (BC-301)

2015

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.
*Answer any **five** questions.*

1. What is the difference between system approach and system analysis?

2. Define the terms: EDP, MIS, DSS, EIS and KBS.

3. List out various processing techniques.

4. What is role of the personal computer in the information revolution?

5. Discuss different types of system.

(Turn over)

6. List out various methods commonly used for input verification and control.

7. Explain briefly about the criteria for hardware and software selection.

8. What are attributes of a good analyst?

9. Bring out the significance of interviewing in system.

10. What do you mean by coupling and cohesion?

BCA (Voc.) III Sem.
DBMS (BC-302)

2015

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.
*Answer any **five** questions.*

1. What is the difference between base table and view? Explain the different constraints used in database.

2. Describe the step by step process used while database designing process.

3. What is the basic difference between random storage devices and sequential storage devices?

4. What is relational data model? Illustrate the structure of relational data model.

5. How database management system makes it easy to store and maintain data into database.

6. Describe data encryption and database auditing.

(Turn over)

7. a) Define different types of key constraints used in database management system.

   b) Draw an ER diagram for school management system. Give possible entries with its attributes.

8. How the generalization and specialization are reverse of each other. Define with examples.

9. Do the following using SQL commands

   a) Write command to create the logical structure of the following database table:

"Employee" Table

Emp_id	Emp-Name	City	Salary	Designation

   b) To insert a new record.

   c) Add a new column bin to the database.

   d) Delete the whole structure of the employee table.

10. Write short notes on any two of the following:

   a) Data and information

   b) Multi valued attribute

   c) Data Dictionary

   d) Degree of Relationship

BCA (Voc.) III Sem.
OOP in C++ (BC-303)

2015

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

*Answer any **five** questions.*

1. What is class and object? Write a C++ programme to demonstrate the concept of class and object with suitable example.

2. What is inline function? Write a C++ programme to find maximum of given two number using inline function. Also explain the criteria where inline function are not used.

3. What is operator overloading? Write a C++ programme to overload unary operator (++).

4. Write a C++ programme to overload + binary operator using friend function.

5. What is virtual function? Distinguish between pure virtual function and virtual function.

6. What is file stream classes? Write a C++ programme to write and read a text in a file.

7. What is file? Discuss the types of file.

8. What is constructor? Discuss the types of constructor and also explain the characteristics of constructor.

9. What is inheritance? Discuss the types of inheritance with diagram. Create C++ programme to demonstrate the concept of multiple inheritance with suitable example.

10. Write short notes on any two of the following:
   a) OOP language
   b) Friend function
   c) Polymorphism
   d) Destructors

BCA (Voc.) III Sem.

Computer Network (BC-304)

2015

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

*Answer any **five** questions.*

1. What is LAN? Explain network equipment used in wired LAN and explain the functions of HUB, SWITCH and BRIDGE.

2. What is structured cabling? State the main rules that should be used when installing a cable. Show that maximum cabling area for LAB for horizontal cabling runs is approximately zoom.

3. What is OSI reference model? Differentiate between OSI model and TCP/IP model.

4. What is Gateway? What is the main function of Gateway? A Gateway operate at which layer?

5. What is HDLC protocol? Write down the basic features of HDLC protocol? Could HDLC can be used as a data link protocol for LAN?

6. What is congestion control? What is difference between congestion control and QOS (Quality of Service)?

7. What are the reasons for using layered protocols? Why do data link layer protocols position the check sum in the trailer and not in the header?

8. What is IP addressing? How it is classified? How subnet addressing is performed?

9. Define Computer Network. Explain two types of Computer Network Architectures.

10. Write short notes on any two of the following:

a) Fiber-optic

b) Half-Duplex and Full Duplex

c) Multiplexing

d) Gateway