~~BC-301~~

~~SAD~~

BCA-3rd Sem. (2018-21)

Time : 3 hours *Full Marks : 80*

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

The questions are of equal value.

Answer any five questions.

1. Discuss different types of system.
2. What is Information? Describe different types of information.
3. Explain different basic rules relevant to constructing a DFD. Distinguish between DFD and Flow Chart.
4. What are attributes of a good analyst ? Explain.
5. Discuss about the Structural analysis tools.
6. What is Software maintenance? Describe different types of software maintenance.
7. Differentiate between Verification and validation in software testing.
8. Discuss the fact finding techniques which should be used for investigating the information requirement of a large Organisation.

P.T.O.

9. What do you mean by System Implementation? Discuss different methods used for system implementation.

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

    (a) DSS

    (b) Language Process

    (c) Project Selection

    (d) Sources of Information

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BC-302

DBMS

BCA-3rd Sem. (2018-21)

Time : 3 hours *Full Marks : 80*

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

The questions are of equal value.

Answer any five questions.

1. What is DBMS ? What are the basic components of a DBMS?
2. Explain the role and responsibilities of a Database Administrator in an Organization.
3. What are the basic difference between Random storage Devices and Sequence Devices.
4. Define Normalization. Why it is done? Explain.
5. What is the Relational Data Modal? Illustrate the structure of relational data model.
6. Draw a data table and define its various components in details.
7. Describe different types of key constraints used in Data Manage System.
8. Discuss advantages and types of SQL.

P.T.O.

9. Write SQL to perform the following :
   (a) Insert a new record
   (b) Update the record
   (c) List all the record of students of a school having roll numbers between 2 to 15.
10. Write Short notes on any two of the following:
   (a) Attribute Inheritance
   (b) Mapping
   (c) Data Model
   (d) Natural Join

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BC-303

OOP in C++

BCA-3rd Sem. (2018-21)

Time : 3 hours *Full Marks : 80*

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

The questions are of equal value.

Answer any five questions.

1. What is Object Oriented Programming? Discuss the features and application of C++.
2. What do you mean by Nesting of member function? Write a program to find area and perimeter of a circle using nesting of member function.
3. Write a program to over pad (+=) using friend function.
4. What is multilevel Inheritance? Write a program to explain multilevel Inheritance with suitable example.
5. Write notes on any two:
   (a) Abstract class
   (b) Copy Constructor
   (c) This keyword
   (d) In line function.

P.T.O.

6. What is Destructor? Write a program to demonstrate the concept of destructor with suitable example.
7. Explain File Stream Classes. Write a program to read and write information in a binary file using write ( ) + read ( ).
8. What is constructor? Discuss the types of constructor. Write a program to calculate area of circle using constructor.
9. What is static data member and static member function? Write a program to show advantages of static data member.
10. What is pure Virtual function? Write a program to explain the concept of pure virtual function.

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BC-304

Computer Network

BCA-3rd Sem. (2018-21)

Time : 3 hours *Full Marks : 80*

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

The questions are of equal value.

Answer any five questions.

1. What is Computer Networks? Explain the Characteristics of Computer Networks.
2. What is Physical Media? Explain the types of Physical media.
3. What is OSI Layers? Explain the services of OSI Layers.
4. What is Switching technique in computer Network? Write difference between Packet Switching and circuit switching technique.
5. What are the routing Principals? Explain the types of routing algorithm.
6. Describe the following:
   (i) Go back N ARQ Protocol.
   (ii) Selective Repeat Protocol.

P.T.O.

7. What is Error detection and correction Technique in computer Network? Explain it in details.
8. What is www? Explain the services and feature of www.
9. What are Internet back bones? Explain the uses of Internet in real life.
10. Compare the OSI model with TCP/IP model.

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