(2015-18)

COPYRIGHT RESERVED

BC-301 SAD

2017

Time: 3 hours

Full Marks: 80

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

The questions are of equal value.

Answer any five questions.

- Describe the various phases of object oriented analysis and design life cycle.
- 2. What is Reverse Engineering? Explain the need of Reverse Engineering with an example.
- 3. Describe the tools and techniques of Cost Benefit Analysis.
- 4. What is the need of Software testing? Describe the objectives of Performance testing.
- What are different phases in SDLC? What is the need of System Analysis? Explain the role of System Analyst.
- 6. Briefly discuss various criteria for Form and Report design, using an example.
- 7. What is Cohesion? Explain any four types of Cohesion.

P.T.O.

- 8. Explain various steps involved in the process of documentation.
- 9. Explain Structured Analysis and Structured Design. What are its goals?
- 10. Distinguish between technical, operational and economic feasibility with suitable examples.

4/7/18

COPYRIGHT RESERVED

BC-302 DBMS

2017

Time: 3 hours

Full Marks: 80

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

The questions are of equal value.

Answer any five questions.

- 1. What is ER Modelling? Describe in detail the basic concept of ER Model with example.
- 2. Draw a data table and define its various components in detail.
- 3. Illustrate with the help of a diagram the three levels of data abstractions.
- 4. What is the Process Normalization? Discuss any three normal form with example.
- 5. What are the advantages and disadvantages of DBMS?
- 6. Describe the step by step process used while database designing process.
- 7. What is a Log File? Explain.

- 8. Draw an ER Diagram for a shop with their possible entities.
- (a) Write SQL Command to create a table to manage the record of 'Students' of a school with suitable field and represent it graphically
 - (b) Write SQL to perform the following:
 - (i) Insert a new row
 - (ii) List all the record of students having roll between 10 and 50.
 - (iii) Update the name of Roll No.12 with "Suresh".
- 10. Write short notes on any two of the following:
 - (a) Database Auditing
 - (b) Data Encryption
 - (c) Instance and Schema
 - (d) Database Designer

COPYRIGHT RESERVED

BC-303
OOP in C++

2017

Time: 3 hours

Full Marks: 80

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

The questions are of equal value.

Answer any five questions.

- 1. What is C++? Write down the features of object oriented programming language.
- 2. What is function overloading? Write a C++ program to demonstrate the concept of function overloading.
- 3. What is friend function? Write C++ programme to demonstrate the concept of friend function.
- What is Destructor? Write C++ program to show concept of destructor.
- 5. Write a C++ program to overload (+=) short hand operator-
- What is constructor? Discuss the types of constructor.
 Write a C++ program to demonstrate the concept of overloaded constructor.

P.T.O.

- 7. What is operator overloading? Write a C++ program to overload binary operator (-) using friend function.
- 8. What is Inheritance? Discuss the type of Inheritance. Write a C++ program to demonstrate the concept of single inheritance with example.
- 9. Write a C++ program to demonstrate the concept of constructor in derived class with suitable example.
- Discuss C++ Dynamic allocation operator. Write a C++
 program to accept N number from user and display n
 number using New and delete operator.

COPYRIGHT RESERVED

BC-304

Computer Network

2017

Time: 3 hours

Full Marks: 80

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

The questions are of equal value.

Answer any five questions.

- What is Computer Network? Explain different types of Computer Network.
- 2. Explain different approaches of Framing.
- 3. What is Topology? State the various topologies that are possible with LAN.
- 4. What is Work station? How is a PC different from Work station? Describe it.
- 5. What is Server? Discuss about three types of Server in detail.
- Differentiate between OSI and TCP/IP reference model.
 Using diagram show the correspondence between relevant prosocol layers in the two models.

P.T.O.

- 7. What is IP addressing? How is it classified? How is subnet addressing performed?
- 8. What is IPV6? Explain its advantages over IPV4. Also explain its frame format.
- 9. What is bridge? Explain functions of bridge. How does a router differ from bridge?
- 10. What is Datagram? Explain Datagram approach in detail.