walkout

COPYRIGHT RESERVED

BC-301

BCA 3rd Sem.(2016-19)

Time: 3 Hrs

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.

- Define the term "System" and discuss its characteristics.
 Briefly explain the element of a system.
- 2. What is a Data Flow Diagram? Discuss the various symbols and rules for defining DFD?
- 3. What is the file organisation? How many methods of file organisation?
- 4. What is Testing? How many types of testing? Explain it.
- 5. What is fact finding techniques which is used for investigating the information of a large organisation.
- 6. What is coupling? Explain its various types in detail.
- 7. Which method are used to review systems after implementation?
- 8. Discuss about Managing Project Review and System Life Cycle?

- 9. Explain the term MIS. Explain the components of a Transaction Processing System.
- 10. Write short notes on any two of the following:
 - (a) Open verses closed system
 - (b) Decision analysis
 - (c) E. R. diagram
 - (d) Technical feasibility

BCA 3rd Sem.(2016-19)

Time: 3 Hrs

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. Explain the Role and Responsibilities of a database Administrator in an organization.
- 2. Illustrate with the help of a diagram the three levels of data abstractions.
- 3. List and explain the traditional set operations used with data tables.
- 4. What is process normalization? Discuss any three normal form with example.
- 5. (a) What do you mean by Data and Information? Differentiate it briefly.
 - (b) How Database Management System makes it easy to store and maintain data into database?
- 6. (a) Draw an ER diagram for School Management System. Give possible entities with its attributes.

- (b) Define different types of key constraints used in Database Management System.
- 7. What is Relational Data Model? Illustrate the structure of the Relational Data Model.
- Describe the step by step process used while database designing process.
- 9. Do the following using SQL commands.
 - (a) Write command to create the logical structure of the following database table :

"Student" Table

Roll	Name	Course	Sem.	Contact
Ron				State Control

- (b) To insert a New Record.
- (c) List those entire students having course BCA.
- (d) Delete the whole structure of the student table.
- 10. Write short notes on any two of the following:
 - (a) Database Auditing
 - (b) Data Encryption
 - (c) Instance and Schema
 - (d) Database Designer

BC-302

2

BC-303

OOP in C++

BCA 3rd Sem.(2016-19)

Time: 3 Hrs

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 C++. Write down the application and features of C++ programming language.
- 2. What is class and object, Write a C++ program to enter Student Name, Roll Number and Marks. Display students Name, Roll Number and Marks using class and object.
- 3. What is static Data Member and Static Member Function.
 Write a C++ program to demonstrate the concept of Static
 Data Member and Member Function.
- 4. What is Operator Overloading. Write C++ program to overload Unary Operator (++).
- 5. Write a C++ program to overload binary (+) operator using Friend Function.
- 6. What is Polymorphism. Discuss the different type of polymorphism with suitable examples.

- 7. What is command line arguments. Write a C++ program to find maximum of n given number using command line arguments.
 - 8. What is function overloading. Write a C++ program to demonstrate the concept of Function Overloading.
 - What is C++ dynamic allocation operator. Write a C++
 program to accept N Number and Print Maximum of N
 given Number using New and Delete Operator.
 - 10. Write Notes: Any two
 - (a) Virtual Base Class
 - (b) Abstract Class
 - (c) "This" Pointer
 - (d) Constructor and Destructor

Computer Network

BCA 3rd Sem.(2016-19)

Time: 3 Hrs

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. Define Computer Network? Discuss its application and types of Network Topology.
- 2. Explain the following:
 - (i) LAN
 - (ii) MAN
 - (iii) WAN
- 3. What is OSI Model? Explain the functions and protocols and services of each layer.
- 4. Explain about the different types of transmission Medias in Computer Networks.
- 5. Explain about Sliding Window Protocols in Detail.
- 6. What is Media Access Control? Explain about the carrier Sense Multiple Access Protocols.
- 7. Comparison of Virtual Circuit and Data Gram Networks.

- 8. Explain about the Routing Algorithms.
- 9. Differentiate between Bus Backbone and Star backbone.
- 10. What is the difference between Network Layer Delivery and Transport Layer Delivery?

BC-304