Seat No: _____   Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA/IMCA Winter 2019 – 20 Examination

Semester: 3   Date: 26/11/2019
Subject Code: 05101201 / 05301201   Time: 2:00pm to 4:30pm
Subject Name: Business Information Systems   Total Marks: 60

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1   Answer the followings.
A.   Do as directed.   (05)
1. What is business?
2. Explain term DBMS.
3. What is network?
4. What is closed loop system?
5. List out components of data communication?

B.   Do as directed.   (10)
1. _____ topology, each node is connected to a central device called hub.
   a. Bus
   b. Star
   c. Mesh
   d. Ring
2. A relational database consists of a collection of _____.
   a. table
   b. column
   c. data
   d. none
3. Characteristics of perfect information are relevant, _____, complete& understandable.
   a. Easy
   b. User-friendly
   c. Accurate
   d. None
4. MIS refers to _____.
   a. Marketing Information System
   b. Management Information System
   c. Management Iterative System
   d. Management Information Software
5. A person who interacts with a system, typically through an interface, to extract some functional benefit is known as _____.
   a. System User
   b. Manager
   c. Customer
   d. None
6. _____ cable electrical signals for communication.
   a. Co-axial Cable
   b. Twisted Pair Cable
   c. Optical Fibre Cable
   d. None

7. Network data model use _____ relationship.
   a. One to One
   b. One to Many
   c. Many to One
   d. Many to Many

8. FM Radio is example of radio waves. (True / False)
9. Data is a raw material. (True / False)
10. RAM stands for Random Active Memory. (True / False)

Q.2   Attempt any five. (3 Marks Questions)   **(15)**
   1. Explain various user requirements.
   2. Explain network data model with proper example.
   3. List out various BIS users. Explain any two in detail.
   4. Write a short note on optical fibre cable.
   5. Explain Half-Duplex transmission mode with example.
   6. Write a short note on ring topology.

Q.3   Attempt any three. (5 Marks Questions)   **(15)**
   1. Explain term Database. List & explain any two databases with example.
   2. Explain any three types of files in detail.
   3. List& explain elements of information system.
   4. List out various types of operation support system.

Q.4   Answer the following in detail.
A.   Differentiate Hierarchical, Network & Relational Data Model.   **(05)**

B.(1) Explain different types of networks in detail.   **(05)**
B.(2) What is normalization? List out various types of normalization. Explain 1NF with example.   **(05)**
                                         OR
B.(1) Differentiate Synchronous & Asynchronous Transmission.   **(05)**
B.(2) Explain Herbert Simon Model in detail.   **(05)**