2024

UG BCOM-4 Final Examinations

VAC-2 : FUNDAMENTALS OF COMPUTING

Full Marks: 37.5   Time=2 hrs.

Part-A Objective Questions.

(Figures in the right margin indicates full marks for the questions)

SECTION-I

Choose the correct answer from the following   (0.5×15=7.5)

1. Which of the following language does the computer understand?
   a) C language
   b) Assembly Language
   c) Binary Language
   d) BASIC

2. Software can be uninstalled through
   a) Compiler
   b) Linker
   c) Control panel
   d) None of the above

3. RAM is a _____ in nature
   a) Volatile
   b) Non volatile
   c) Permanent
   d) Temporary

4. The number of functions keys in a keyboard is
   a) 14
   b) 12
   c) 13
   d) 15

5. Programs designed to perform specific tasks related to managing computer resources are called
   a) System software
   b) Operating system
   c) Application software
   d) Utility programs

6. What is the full form of TCP ?
   a) Transmission Control Panel
   b) Transfer Control Panel
   c) Transaction Cache Panel
   d) None of the above

7. A _____ is a set of rules that governs data communication
   a) Protocol
   b) Forum
   c) Standard
   d) None of the above

8. Methods used to convey information _____
   a) Text and pictures
   b) Videos
   c) Animations
   d) All of the above

9. Devices may be arranged in a _____ topology.
   a) Mesh
   b) Ring
   c) Bus
   d) All of the above

10. Half duplex communication is a _____ way communication
    a) Unidirectional
    b) Bidirectional
    c) Two-way
    d) One-way

11. Which notation is used to represent the relationship between entities in an ER diagram?
    a) Rectangle
    b) Ellipse
    c) Diamond
    d) Oval

12. In a relational database, what is a primary key?
    a) A key used for indexing purposes
    b) A unique identifier for each record in a table
    c) A key used for establishing relationships between tables
    d) A key that allows null values

13. In an ER diagram, what does a double ellipse represent?
    a) Weak entity
    b) Strong entity
    c) Cardinality constraint
    d) Existence dependency constraint

14. Which type of database model organizes data into tables with predefined relationships between them?
    a) Hierarchical
    b) Network
    c) Relational
    d) Object-oriented

15. What is the primary purpose of a database in computing?
    a) Gaming
    b) Storing and managing data
    c) Graphic design
    d) Network security

SECTION –II

Answer **any five** of the following questions briefly.   (1×5=5)

1. What is CPU?
2. What is volatile and non-volatile memory?
3. List two characteristics of computer.
4. Name the types of data communication.
5. What are guided media and unguided media?
6. Define topology.
7. Define information system development.
8. What is DBMS?
9. Write the notation of ER diagram.
10. What is database?

(PART: B - DESCRIPTIVE)

(Figures in the right margin indicate full marks for the questions)

Answer any five of the following briefly   (5×5=25)

1. What is software? Discuss the types of software with the help of a diagram.

2. What is storage device? Explain different types of storage devices.

3. What is utility software? Discuss the various types of utility software.

4. What are communication channels? Explain in details the categories of communication media.

5. Differentiate between LAN, MAN and WAN.

6. What is communication application? Write the examples of communication application.

7. Explain in detail System Development Life Cycle (SDLC).

8. How to create initial design for ER Model.

9. Describe the components of Entity Relationship Diagram (ERD).

10. What is Relational Model? Discuss in brief the concept of transforming ER Model to Relational data model of accounting and business applications.

** *** **