Professional Course (Odd) Examination, 2024

(CBCS)

(1st Semester)

BACHELOR OF COMPUTER APPLICATIONS

(Introduction to Information Technology)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(PART : A—OBJECTIVE)

(*Marks* : 25)

SECTION—I

(*Marks* : 15)

A. Tick (✓) the correct answer in the brackets provided :   1×10=10

1. CD-ROM is a
   (a) memory register   ( )
   (b) magnetic memory   ( )
   (c) semiconductor memory   ( )
   (d) non-volatile memory   ( )

2. Which component of the computer is called the brain of computer?
   (a) Memory   ( )   (b) Monitor   ( )
   (c) CPU   ( )   (d) Printer   ( )

3. Which of the following is not an output device?
   (a) Headphone   ( )
   (b) Monitor   ( )
   (c) Speaker   ( )
   (d) Scanner   ( )

4. Which of the following programs is essential for the functioning of a computer system?
   (a) MS Word   ( )
   (b) Operating system   ( )
   (c) MS Excel   ( )
   (d) MS PowerPoint   ( )

5. Software programs developed for performing particular tasks related to managing computer resources is called
   (a) system software   ( )
   (b) utility software   ( )
   (c) application software   ( )
   (d) helper software   ( )

6. Which type of data can be stored in the database?
   (a) Image-oriented data   ( )
   (b) Text, files containing data   ( )
   (c) Data in the form of audio or video   ( )
   (d) All of the above   ( )

7. What is the full form of OSI?
   (a) Optical Service Implementation   ( )
   (b) Open Service Internet   ( )
   (c) Open System Interconnection   ( )
   (d) Operating System Interface   ( )

8. What is the term used for the data communication system within a building or campus?
   (a) MAN   ( )
   (b) LAN   ( )
   (c) PAN   ( )
   (d) WAN   ( )

9. URL stands for
   (a) Uniform Resource Locator   ( )
   (b) Uniform Reference Label   ( )
   (c) Unique Reference Label   ( )
   (d) Unique Resource Locator   ( )

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10. Any information created by us that exists in digital form is called
   (a) Cyber print   (   )   (b) Internet print   (   )
   (c) Digital footprint   (   )   (d) Web fingerprint   (   )

B. State whether the following statements are *True (T)* or *False (F)* by putting a Tick (✓) mark :   1×5=5

   1. The data need not be converted into information for its usefulness.

   (T   /   F   )

   2. Multiprogramming is mainly accomplished by hardware.

   (T   /   F   )

   3. The primary key is a candidate key chosen by the database designer to identify the tuple in the relation uniquely.

   (T   /   F   )

   4. There are 6 layers in the ISO OSI reference model.

   (T   /   F   )

   5. Using someone's twitter handled to post something will be termed as identity theft.

   (T   /   F   )

SECTION—II

(*Marks* : 10)

C. Answer the following questions :   2×5=10

   1. What are the functions of the CU and ALU in a CPU?

   2. How does a compiler differ from an interpreter?

   3. What is Database Management System? Why do we need a DBMS?

   4. Define router and switch.

   5. What is Phishing? Give example.

(PART : B—DESCRIPTIVE)

(Marks : 50)

1. (a) Discuss the different types of data that can be given as input to the computer with examples. 5

   (b) Explain the simple model of a computer. 5

   OR

   (c) Explain in detail the different types of storage used for backups. 10

2. (a) What is an output device? Explain impact and non-impact printers with their characteristics. 4

   (b) Discuss the functions of operating system. 6

   OR

   (c) Explain the workings of multiprogramming, multitasking and multiprocessing systems. 6

   (d) What is a flowchart? Explain the basic symbols used in flowchart designs. 4

3. (a) What is software? What are the two types of software? 3

   (b) Discuss the different types of application software with suitable examples. 7

   OR

   (c) What is Data Organization? Explain the need for data organization. 4

   (d) Explain briefly about Database Management System. 6

4. (a) Describe the basic elements of the communication system with suitable block diagram. 5

   (b) Discuss the TCP/IP model with a neat diagram. 5

   OR

   (c) Explain the features of LAN, MAN and WAN. 6

   (d) Mention two advantages each of both Half-Duplex and Full-Duplex transmission modes. 4

5. (a) Write a short note on E-mail system. 5

   (b) Explain the basic components of World Wide Web. 5

   OR

   (c) Explain the impact of information technology on society. 5

   (d) How can you provide security to a PC from attacks? 5

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