

**Professional Course Examination, November/December 2019**

( 1st Semester )

**BACHELOR OF COMPUTER APPLICATIONS**

**( Introduction to Information Technology )**

( Revised )

*Full Marks : 75*

*Time : 3 hours*

**( PART : A—OBJECTIVE )**

( Marks : 25 )

*The figures in the margin indicate full marks for the questions*

SECTION—A

( Marks : 15 )

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

(a) The process of copying files to a CD-ROM is known as

(i) burning ( )

(ii) digitizing ( )

(iii) writing ( )

(iv) ripping ( )

(b) A gigabyte is equal to

(i) 1024 megabytes ( )

(ii) 1024 kilobytes ( )

(iii) 1024 terabytes ( )

(iv) 1024 bytes ( )

(c) A box that can represent two different conditions.

(i) Rectangle ( )

(ii) Circle ( )

(iii) Diamond ( )

(iv) Parallelogram ( )

(d) A device used for video games, flight simulators, training simulators is

(i) mouse ( )

(ii) joystick ( )

(iii) touch screen ( )

(iv) light pen ( )

(e) Database is generally

(i) system-centered ( )

(ii) data-centered ( )

(iii) company-centered ( )

(iv) user-centered ( )

(f) Computer hardware consists of

(i) I/O devices ( )

(ii) CPU ( )

(iii) Storage devices ( )

(iv) All of the above ( )

(g) Which transmission media has the highest transmission speed in a network?

(i) Co-axial cable ( )

(ii) Electrical cable ( )

(iii) Optical fiber ( )

(iv) Twisted pair ( )

(h) Transmission data rate is decided by

(i) data-link layer ( )

(ii) physical layer ( )

(iii) session layer ( )

(iv) network layer ( )

(i) Streaming stored audio/video, files are compressed and stored on a/an

(i) IP ( )

(ii) server ( )

(iii) browser ( )

(iv) domain ( )

(j) The full form of URL is

(i) Universal Resource Locator ( )

(ii) Uniform Resource Locator ( )

(iii) Uniform Resource Link ( )

(iv) Universal Resource Link ( )

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

(a) Cache memory is the high-speed memory between the main memory and the CPU.

( T / F )

(b) In computer science, algorithm refers to a pictorial representation of a flowchart.

( T / F )

(c) System programs include operating system of computer, trace program and compiler.

( T / F )

(d) A semi-duplex mode can transmit data in both the directions but transmits in only one direction at a time.

( T / F )

(e) The open source software version of netscape is chrome.

( T / F )

SECTION—B

( Marks : 10 )

Answer *five* of the following questions :

2×5=10

1. What is secondary storage? Give examples.
2. Differentiate between interpreter and compiler.
3. What is database? What is RDBMS?
4. Write a note on client-server technology.
5. What is the function of browser?

( PART : B—DESCRIPTIVE )

( Marks : 50 )

*The figures in the margin indicate full marks for the questions*

1. (a) What is computer? Draw the block diagram of computer and discuss the functions of each component. 2+8=10

**OR**

- (b) Explain Random Access Memory with diagram. 5
- (c) What are the different types of Data? 5

2. (a) What is input/output device? Explain a function of any four output devices. 2+8=10

**OR**

- (b) What is an operating system? Explain characteristic feature of multitasking, multiprogramming, timesharing and real-time system. 2+8=10

3. (a) What is hardware and software? What are the different types of software? Explain with an example. 3+7=10

**OR**

- (b) What are the different operations carried out by DBMS assisting a user? 5
- (c) Explain non-text Database in brief. 5
4. (a) Explain any five communication media through which data may be connected. 10

**OR**

- (b) Elaborate the functions and services offered by each layer of an OSI Reference Model. 10
5. (a) Explain the following : 5+5=10
- (i) E-mail
- (ii) Search Engine

**OR**

- (b) What is intellectual property right? Explain copyright and software copyright. 2+5=7
- (c) Write a note on computer security. 3

★ ★ ★