

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)

OR

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

(T / F)

SECTION—B

(Marks : 10)

2×5=10

Answer five of the following questions :

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
