



BRAINWARE UNIVERSITY

Course – BCA

Computer Fundamentals and PCS (BCA101/BCAC101)

(Semester –1)

Time allotted: 3 Hours

Full Marks: 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Questions)

10 x 1 = 10

1. *Choose the correct alternative from the following:*

- | | | |
|-------|--|--------------------------|
| (i) | Regarding a VDU, which statement is more appropriate? | |
| | a. It is an output device | b. It is an input device |
| | c. It is a peripheral device | d. It is hardware item |
| (ii) | Dot-matrix is a type of | |
| | a. Tape | b. Printer |
| | c. Disk | d. Bus |
| (iii) | The binary system uses powers of | |
| | a. 2 | b. 10 |
| | c. 8 | d. 16 |
| (iv) | Which is not application software? | |
| | a. Windows NT | b. Page Maker |
| | c. WinWord XP | d. Photoshop |
| (v) | Which of the following is not the possible way of data exchange? | |
| | a. Simplex | b. Multiplex |
| | c. Half-Duplex | d. Full-Duplex |
| (vi) | What is the size of MAC address? | |
| | a. 16-bits | b. 32-bits |
| | c. 48-bits | d. 64-bits |

- (vii) A word processor would most likely be used to do
- a. keep an account of money spent b. do a computer search in media center
c. maintain an inventory d. type a biography
- (viii) "Ctrl + PageDown" is used to
- a. Moves the cursor one Paragraph Down b. Moves the cursor one Page Down
c. Moves the cursor one Line Down d. Moves the cursor one Screen Down
- (ix) The key selected from candidate keys is known as
- a. Primary Key b. Secondary Key
c. Super Key d. Foreign Key
- (x) A single packet on data link layer is known as
- a. Path b. Frame
c. Block d. Group

Group – B

(Short Answer Type Questions)
(Answer any *three* from the following)

- 3 x 5 = 15
2. What are the basic components of a computer? Describe briefly with diagram. [1 + 4]
3. Convert:
- i) $(BAE.8)_{16} = (?)_2$ [2]
- ii) $(357)_8 = (?)_{10}$ [3]
4. What are the differences among Multi-programming, Multi-processing & Multi-threading operating systems? [5]
5. What are the differences between OSI & TCP/IP model? [5]
6. What is Windows? Compare Windows NT, Windows XP & Windows Vista. [1 + 4]

Group – C

(Long Answer Type Questions)
(Answer any *three* from the following)

- 3 x 15 = 45
7. (a) How many types of primary memory? [1]
(b) What is an operating system? How does it relate hardware & software? [5]
(c) Describe different types of Input Devices with example. [9]

8. (a) What is DBMS? What is the relationship between Tuples & Attributes?
Describe it with an example. [2 + 5]
(b) Briefly explain different types of networking devices. [8]
9. (a) What are the differences between Internal & External Commands of MS-DOS? [2]
(b) What is the meaning of OSI in ISO OSI Model? Describe different functionalities of Data link Layer in OSI model. [3 + 5]
(c) How to format a cell in Spreadsheet? Explain. [5]
10. (a) What are the different accessories of Windows? Explain briefly. [5]
(b) How many types of mass storage in a computer? Describe. [6]
(c) What is the difference between data & information? Explain. [4]
11. Short Notes (Any *Three*):- [3 x5]
(a) Memory Hierarchy
(b) Number System
(c) IP Addressing Scheme
(d) Custom Animations in Power Point Presentation
(e) Hyperlink in Spreadsheet