



BRAINWARE UNIVERSITY

Course – B.Sc. (CS)

Computer Fundamentals and PCS (BCS101)

(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) GUI stands for

- | | |
|-----------------------------|----------------------------------|
| a. Graph User Interface | b. Graphical Universal Interface |
| c. Graphical User Interface | d. Graphical Unique Interface |

(ii) Which shortcut key will we use to make text Italic?

- | | |
|-------------|-------------|
| a. Ctrl + U | b. Ctrl + T |
| c. Ctrl + P | d. Ctrl + I |

(iii) Graphical pictures that represent an object like file, folder etc are

- | | |
|-------------|------------|
| a. Icons | b. Windows |
| c. Task bar | d. Desktop |

(iv) EEPROM stands for

- | | |
|--|--|
| a. Electronically Erasable and Programmable Read-Only Memory | b. Electrically Erasable and Programmable Read-Only Memory |
| c. Electronically Enabled and Programmable Read Only Memory | d. Electrically Enabled Programmable and Read Only Memory |

- (v) The method of communication in which transmission takes place in both directions, but only one direction at a time is called
- Simplex
 - Half Duplex
 - Full Duplex
 - None of these
- (vi) OSI model means
- Open Systems Interconnection
 - Operating System Interconnection
 - Open Source Interconnection
 - Operating Source Interconnection
- (vii) A set of rules that governs data communication is
- RFCs
 - Standards
 - Protocols
 - Layer
- (viii) Which of the following is not a multitasking operating system?
- Windows
 - Linux
 - DOS
 - All of these
- (ix) Which memory is nonvolatile and may be written only once?
- RAM
 - EEPROM
 - EPROM
 - PROM
- (x) Which protocol provides e-mail facility among different hosts?
- FTP
 - HTTP
 - SMTP
 - TELNET

Group – B

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

3 x 5 = 15

- What is Memory Hierarchy? Explain with diagram. [5]
- What is an Instruction Set? State various phases of an instruction cycle. [2 + 3]
- What do you mean by Software? Explain briefly about System Software. [1 + 4]
- Convert:
 - $(010111.10)_2 = (?)_{10}$
 - $(1232.54)_8 = (?)_{16}$ [2 + 3]
- Write down the steps to record a new macro. [5]

Group – C

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

3 x 15 = 45

7. (a) What is a process? Describe Process State Diagram in Operating System. [5]
 (b) Describe about Data Abstraction Level in DBMS. [5]
 (c) Explain different types of file in MS-DOS. [5]
8. (a) Explain briefly about different type of Network Devices. [8]
 (b) Differentiate among Super Key, Primary Key and Candidate Key with proper example. [5]
 (c) What is Mail merge? [2]
9. (a) Briefly explain different classes of IP address. [6]
 (b) Write four differences between OSI and TCP/IP Network Model. [4]
 (c) What are Multiprogramming, Multiprocessing and Multithreading Operating System? [5]
10. (a) Describe different types of Output Device with example. [10]
 (b) Explain the relationship between hardware and software. [5]
11. Short Notes (Any Three):- [3 x 5]
 (a) Windows Accessories
 (b) ROM
 (c) Secondary Memory
 (d) Custom Animations in Powerpoint Presentation
 (e) Computer Generations