

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2017**

(CUCBCSS—UG)

Complementary Course

BCS 1C 01—COMPUTER FUNDAMENTALS

Time : Three Hours

Maximum : 64 Marks

**Part A***Answer all questions.***I. Choose the correct answer from the choices given :**

1. In a flowchart a rhombus represents :

- (a) Decision. (b) Connector.  
(c) Terminal. (d) Process.

2. \_\_\_\_\_ is an optical storage device.

- (a) Floppy. (b) Hard disk.  
(c) CD. (d) None.

3. 1024 MB is equivalent to \_\_\_\_\_.

- (a) 1 GB. (b) 1 TB.  
(c) 1 MB. (d) 1 Byte.

**II. Fill in the blanks :**

4. MIDI stands for \_\_\_\_\_.

5. In BCD,  $10_{10}$  is represented as \_\_\_\_\_.6. The binary equivalent of  $25_{10}$  is \_\_\_\_\_.**III. State whether the following statements are True or False :**

7. Floppy disk is not magnetic storage device.

8. PROM is a volatile memory.

9. DVD is a sequential storage device.

(9 × 1 = 9 marks)

**Turn over**

**Part B**

*Answer all questions.*

10. What is PROM ?
11. Describe X-OR gate with logic diagram and truth table.
12. What is meant by non-positional number system.
13. Write a note on Plotter.
14. What is a parity bit ?

(5 × 2 = 10 marks)

**Part C**

*Answer any five questions.*

15. Convert  $168.75_{10}$  to binary, Octal and Hexadecimal number systems.
16. Explain the principle of duality with example.
17. Explain any three secondary storage devices.
18. Differentiate Inkjet and Dot-matrix printers.
19. What is a Flowchart ? Explain the different symbols used in flowchart.
20. Explain Memory Hierarchy.
21. Explain the different types of computer codes with examples.
22. Differentiate half adder and full-adder.

(5 × 5 = 25 marks)

**Part D**

*Answer any two questions.*

23. Write the algorithm and draw the flowchart to find the largest among three different numbers entered by user.
24. What are Logic Gates ? Explain the following logic gates with circuit diagram.  
AND, OR, NOT, NAND, NOR, XNOR.
25. Explain any *four* input and output devices in detail.

(2 × 10 = 20 marks)