



C20-CM-105

7025

**BOARD DIPLOMA EXAMINATION, (C-20)
OCTOBER/NOVEMBER—2023**

DCME – FIRST YEAR EXAMINATION

BASICS OF COMPUTER ENGINEERING

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define RAM and ROM.
2. Define high level language and low level language with examples.
3. Draw the symbols used in flowchart.
4. Write the steps involved in algorithm development.
5. List various functions of operating system.
6. List different components of window.
7. Write briefly about computer networks.
8. Mention three functions of BIOS.
9. Write any six applications of machine learning.
10. Write any three characteristics of Big Data.

PART—B

8×5=40

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Explain the classification of computers based on size and processor.

(OR)

(b) List and explain the functions of any four input devices and four output devices.

12. (a) Write an algorithm and draw a flowchart to calculate the circumference of a circle.

(OR)

(b) Write an algorithm and draw a flowchart to find whether a given number is even or odd.

13. (a) Explain disk defragmentation using system tools.

(OR)

(b) Explain the procedure for installing and uninstalling hardware using control panel.

14. (a) Explain about POST and important beep codes.

(OR)

(b) Explain the role of a modem in accessing the internet.

15. (a) Explain about the classification of machine learning.

(OR)

(b) List and explain different phases in ethical hacking.

PART—C

10×1=10

- Instructions :**
- (1) Answer the following question.
 - (2) The question carries **ten** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 16.** Draw a flowchart to print principal amount, interest and total amount for the following cases by using simple interest for the period of one year. If the Principal amount is less than 2 lakhs then interest is 8%, and if the Principal amount is more than 2 lakhs then the interest is 10% and if the Principal amount is more than 4 lakhs then the interest is 11%.

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