

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

 $3 \times 10 = 30$

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.

/7025 2 [Contd...

- **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%.

