



### 7025

# BOARD DIPLOMA EXAMINATION, (C-20)

#### JANUARY—2023

## DCM – 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 the terms software, hardware and firmware.
- 2. List various storage devices used in a computer.
- 3. Define a flowchart. List the symbols used in flowcharts.
- 4. Write about the steps involved in algorithm development.
- 5. Define operating system and state the need for an operating system.
- 6. Write the method of starting a program using start button.
- 7. What is boot process?
- 8. Write a short note on BIOS.
- 9. What is machine learning?
- 10. List the categories of hackers.

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PART—B 8×5=40

Instructions: (1) Answer all questions.

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- (2) Each question carries eight marks.
- (3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.
- 11. (a) Explain the generations of a computer.

(OR)

- (b) Explain the classification of computer based on size and processor.
- 12. (a) Write an algorithm and flowchart to find the area of a triangle.

(OR)

- b) Write an algorithm and flowchart to find the largest of three numbers.
- 13. (a) What is disk defragmentation? Write the procedure for disk defragmentation.

(OR)

- (b) Explain the procedure for changing the resolution, colour, appearance and screensaver options of the display.
- \* 14. (a) Explain about POST and the important beep codes.

(OR)

- (b) Explain the role of a modem in accessing the internet.
- 15. (a) Explain the characteristics of big data.

(OR)

- (b) Define the terms related to virtual learning.
  - (i) Telepresence
- (ii) Cyberspace
- (iii) Telexistence
- (iv) HCI (Human-Computer-Interaction)

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 $PART-C 10\times 1=10$ 

Instructions: (1) Answer the following question.

- (2) The question carries ten marks.
- (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- 16. What is web browser? List various types of web browsers and explain them.

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