



**C20-CM-105**

**7025**

**BOARD DIPLOMA EXAMINATION, (C-20)**

**SEPTEMBER/OCTOBER—2021**

**DCM - FIRST YEAR EXAMINATION**

**BASICS OF COMPUTER ENGINEERING**

*Time : 3 hours ]*

*[ Total Marks : 80*

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**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 cache memory.
2. Convert  $(50A2)_{16}$  hexadecimal number into decimal number.
3. Define the following and draw their symbols : 1+1+1
  - (a) Input/output box
  - (b) Decision box
  - (c) Terminal box
4. Write an algorithm to find sum of two numbers.
5. Define command. State the “dir” command with an example.
6. List any three features of windows desktop.
7. State the need of system board (mother board) components.
8. List classes of IP address with their ranges and default subnet mask.

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*[ Contd...*

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9. List the applications of big data.
10. Define the terms artificial intelligence and deep learning.

**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 current family of CPUs used in computer.

**OR**

- (b) (i) State the use of storage devices used in a computer. 4  
(ii) State the importance of cache memory. 4

12. (a) Explain the steps involved in drawing a flowchart with an example.

**OR**

- (b) Write an algorithm and draw flowchart to “accept the age of a person and check whether he/she is eligible to vote or not. A person is eligible to vote only when he/she is 18 or more.”

13. (a) Explain the method of finding a file using search option.

**OR**

- \* (b) Explain the step by step procedure of installation of a printer.

14. (a) Explain POST and beep codes.

**OR**

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

- 15.** (a) Define the following terms :
- (i) Cyberspace 2
  - (ii) HCI (Human-Computer Interaction) 2
  - (iii) Augmented reality 2
  - (iv) Mixed reality 2

**OR**

- (b) Explain in detail about penetrate testing.

**PART—C**

10×1=10

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

- 16.** Draw the flowchart for the following question :

Accept a number and Check-

- (a) Whether the number is divisible by 2 and 5, then display message as “Number is divisible by 2 and 5”.
- (b) Whether the number is divisible by 2 but not by 5, then display message as “Number is divisible by 2 only”.
- (c) Whether the number is divisible by 5 but not by 2, then display message as “Number is divisible by 5 only”.
- (d) Whether the number is neither divisible by 2 nor by 5, then display message as “Number is neither divisible by 2 nor by 5”.

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