

4005-1

Printed Pages : 4

**Degree (Part-I) (Vocational)
Examination, 2020**

(Honours)

INFORMATION TECHNOLOGY

[Paper : First]

[PPU-D-I(V)H-IT-1]

Time : Three Hours]

[Maximum Marks : 75



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Note : All the questions are of equal value. Answer **five** questions, selecting at least one from each group.

GROUP-A

1. Write short notes on the following terms/keywords :
 - (a) ALU
 - (b) Cache Memory
 - (c) Machine Language

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(1)

2. (a) What do you understand by Network Topologies ? Describe Star, Bus and Ring topologies.
- (b) Convert E16, 389, E4.16, and 2A. 1B hexadecimal numbers into decimal numbers.
3. (a) What are the differences between Assembler, Compiler and Interpreter ?
- (b) Describe the various types of Operating Systems.

GROUP-B

4. Write short notes on the following terms/keywords :

- (a) Call by Reference
- (b) Recursion
- (c) Union

5. (a) State the purpose of each of the control structures : Sequence, Selection and Iteration.
- (b) Write a function that compares two integer arrays to see whether they are identical or not.

6. Define a structure type named `Employee` that would contain employee name, `joining_date`, and `salary`. Using the `Employee` structure, write a program to read all the information for 10 employees from the keyboard and print the same on the screen (using loop).

GROUP-C

7. (a) What is Direct Memory Access (DMA) controller ? Describe with a diagram.
- (b) What do you mean by Microprocessor families ?
8. (a) What is VGA Controller ? How does VGA Controller work ?
- (b) What is Coprocessor ? What operations are performed by Coprocessor ?
9. Describe the architecture of 8086 Microprocessor with a diagram.

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