

4008-1

Printed Pages : 4

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

**(Honours)**

**BCA**

**[ Paper : First ]**

**[ PPU-D-I (V)H-BCA-1 ]**

**Time : Three Hours]**

**[Maximum Marks : 75**

**Note : Attempt any five questions in all. All the questions are of equal value. Question No. 1 is compulsory.**

1. Write short notes on the following terms / keywords :
  - (a) Laser Printer
  - (b) ASCII Coding
  - (c) DOS
  - (d) CISC Technology
  - (e) QBASIC

2.

- (a) What are the differences between microcomputer, minicomputer, mainframe computer and supercomputer ?
- (b) Explain in detail the components of computer hardware.

3.

- (a) List five important registers of the CPU. Also state the purpose of each register.
- (b) Show the classification of the input devices. Give a description of joystick along with its features.

4.

- (a) Convert E16, 389, E4.16 and 2A. 1B hexadecimal numbers into decimal numbers.
- (b) Perform binary subtraction on the following pairs of binary numbers.

(i) 111000, 011010

(ii) 0110, 0010

(iii) 1111, 1001

(iv) 1100, 1010

✓ 5.

- (a) What are the differences between Compiler and Interpreter ?
- (b) Describe the two categories of system software and give an example of each category.

✓ 6.

- (a) State the purpose of each of the control structures : Sequence, Selection, and Iteration.
- (b) Write an algorithm and draw a flowchart to find the sum of all odd numbers till 100.

7.

- (a) Describe the Second generation computer based on the hardware, software, computing characteristics, physical appearance, and their applications.
- (b) What are the functions of the Arithmetical Logical Unit and Control Unit ?

8.

- (a) Explain the need of the cache memory. State three important features of the cache memory.
- (b) What is the meaning of Volatile memory ? Also give an example of volatile memory with explanation.

9. (a) Describe the functionality of a daisywheel printer.
- (b) What are the differences between impact and Non-impact Printers ?
10. (a) What is Direct Memory Access (DMA) controller ? Describe with a diagram.
- (b) Describe architecture of 8086 microprocessor with a diagram.

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