B.C.A. (PART-I) EXAMINATION - 2018

(Faculty of Science)

(Under your Scheme of 10+2+3 Pattern)

Paper - 135

COMPUTER ORGANIZATION

Time : Three Hours

Maximum Marks - 100

PART - I

Each question is of 2 marks. Words limit for the answer is 40 words

1 (a) What do you mean by Von Neumann machine architecture?

(b) What is the utility of system clock in computer architecture?-

(c) What is instruction cycle?

(d) What do you mean by memory hierarchy?

(e) What do you mean by I/O subsystem organization?

(f) What are the system buses?

(g) What are stack pointer and accumulator?

(h) What are EPROM and EEPROM?

(i) What is Microprocessor and Microcontroller?

(j) Give the introduction of 8085. [10x2=2

PART - II

Each question is of 4 marks. Words limit for the answer is 80 words.

2. Write about the Mother Board and Network Adapter Card.

3. Discuss about the control unit and its functions.

4. Discuss the shift micro operations with suitable diagram.

5. What do you mean by Static and Dynamic RAM?

6. Draw the block diagram of Common bus of 4 Registers of 4 bit each. [5x4=

PART - III

Each question is of 12 marks.

7. Discuss following points about the storage devices.

   (a) Random versus Sequential access.

   (b) Tracks and Sector

   (c) Optical Disk

OR

Discuss following

(a) Magnetic Tape

(b) TV Tuner card

(c) Input Devices [3 x 4 = 12]

8. Discuss about the Control Unit and its functionality in details. [6 + 6]

OR

Give the classification of computer systems and discuss the merit and demerit of each. [12]

9 Explain the Instruction cycle with the Fetch and Decode phase. [12]

OR

Discuss about the Register Transfer Language and Draw the block diagram of the hardware that implements the following statement. [6 + 6]

P: $R2 \leftarrow R1$

10. Explain the cache memory and directmapping. [6 + 6]

OR

Explain virtual memory in detail. [12]

11. Draw the pin diagram of 8085 and discuss each pins in brief. [6 + 6]

OR

11. Discuss about the RISC and CISC Computer with merits and demerits. [6 + 6]