Roll No.	***************************************

# E - 3781

# B. Sc. (Part III) EXAMINATION, 2021

#### COMPUTER SCIENCE

## Paper First

### (Computer Hardware—Part C)

Time: Three Hours ] [Maximum Marks: 50

**Note:** Attempt any *two* questions from each Unit. All questions carry equal marks.

#### Unit—I

- (a) Compare and contrast between I/O mapped I/O and memory mapped I/O.
  - (b) Draw the schematic block diagram of microcomputer showing its essential components and explain each function.
  - (c) Draw and explain Hardware controlled I/O or DMA I/O technique.

#### Unit—II

2. (a) Explain different kinds of disk controller used in computer.

- (b) What is CGA? Explain various modes of CGA.
- (c) Describe various types of PC-bus slots and feature cards.

#### Unit—III

- 3. (a) Explain basic structure of Disk operating system. Also explain in detail ROM boostrap.
  - (b) Describe ROM-BIOS Diskette service INTI3-H in brief.
  - (c) Discuss file structure of DOS.

#### Unit—IV

- 4. (a) Differentiate between root directory and sub-directory.
  - (b) Describe how to load, call, return and execute EXEC function.
  - (c) What do you mean by Parameter block?

#### Unit—V

- 5. (a) Define redirection of I/O under DOS.
  - (b) Explain the following:
    - (i) Filters in operating system
    - (ii) Clock and Break interrupts
  - (c) Write a detailed note on networking features of Windows OS.

#### E-3781