

Roll No.....

**DD-2715**

**B.Sc. (Part-II)**  
**EXAMINATION, 2020**  
**COMPUTER SCIENCE**  
**Paper First**  
**(Computer Hardware)**

**Time : Three hours**

**Maximum Marks : 50**

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

**Unit-1**

- 1.(a) Draw and explain major components of digital computer.
- (b) Explain the following :
  - (i) Multiprocessing.
  - (ii) Software & Firmware.
- (c) Explain word length and processing speed of computer.

**Unit-2**

- 2.(a) Explain Instruction word size with example.
- (b) Explain fetch and execution operation of CPU.

**[P.T.O.]**

- (c) What are Interrupt ? Explain it.

### **Unit-3**

- 3.(a) Explain primary memory and secondary memory.  
(b) Explain the following :  
(i) DACD  
(ii) Optical Disk.  
(c) Explain Memory controller and Bubble Memory.

### **Unit-4**

- 4.(a) Describe types of printer with example.  
(b) Explain the working of I/O devices of Micro-Controller.  
(c) Draw and explain I/O processor architecture.

### **Unit-5**

- 5.(a) What are application packages ? Explain it.  
(b) Write and explain different shapes of flow chart design.  
(c) Explain machine language and assembly language with their advantages and disadvantages.