

AI-1346
(018) B.C.A. PART-III (THREE)
Examination MAR.-APR. 2021
Compulsory/Optional
Group-
Paper-

Name/Title of Paper- **COMPUTER ORGANIZATION AND ARCHITECTURE**

Maximum Marks- 100

Time:- **Three Hours**

Minimum Passing Marks-33

Note: Attempt any five questions. All questions carry equal marks.

- 1 Explain floating point arithmetic operations with example. **20**
OR
What is instruction? Explain types of instructions and operands with suitable example.
- 2 Explain ALU design in detail. How the overflow handled by ALU? **20**
OR
Explain different types at designing controller.
- 3 What is main memory? Explain its types with difference in detail. **20**
OR
What is virtual memory? How it is implemented?
- 4 Explain different types of computer based on speed and type with their uses. **20**
OR
Explain different types of pipelining with suitable example.
- 5 What is DMA? Why are need DMA? Write its advantage in detail. **20**
OR
Explain tightly coupled MIMD architecture in detail.