RAMAKRISHNA MISSION VIVEKANANDA CENTENARY COLLEGE, RAHARA, KOLKATA
MID SEMESTER EXAMINATION 2021
FIRST SEMESTER
B.Sc. COMPUTER SCIENCE HONOURS
CORE COURSE II

Full Marks: 25   **Time: 1 hour**

Answer any five (5) questions from the following:

1. (a) Draw the expanded structure of IAS Computer.
   (b) What is the function of MQ?   (4+1)

2. Explain functionality of Control Bus in Bus Interconnection Scheme.   (5)

3. Write basic operation of Flags used in computer architecture.   (5)

4. (a) Write Commutative Law.
   (b) State and explain De Morgan's Theorems.   (2+3)

5. Evaluate the following arithmetic expression using 3-address and 2- address instructions:
   $Y = (A \times B) / [C+(D-E)]$ (5)

6. Write an ALP to Add two numbers, then subtract Decimal 5 from the result.   (5)

7. How fetch and execute cycles are involved in data transfer?   (5)

8. (a) What is Machine Language?
   (b) What is High Level Language?
   (c) What is the function of a Compiler?   (2+2+1)