S-1131

Total Pages : 3   Roll No. ....

PHY-553

Memory Devices and Microprocessors

M.Sc. Physics (MSCPHY)

2nd Examination, 2022 (Dec.)

Time : 2 Hours]   **Max. Marks : 70**

Note : This paper is of Seventy (70) marks divided into two
(02) Sections A and B. Attempt the questions contained
in these sections according to the detailed instructions
given therein.

SECTION–A
(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type
questions of Nineteen (19) marks each. Learners are
required to answer any Two (02) questions only.

(2×19=38)

1. What do you understand by advanced microprocessor? Give
some examples? Discuss Pentium Microprocessor in detail.

2. Explain addressing modes and instruction set of Intel 8085?

3. Write short note on :

(a) ECL.

(b) PMOs.

(c) CMOs Logic.

(d) Tri state logic.

4. Classify different type of Memory. Give characteristics of different type of Memories.

5. Discuss Architecture of Microprocessor 80286, 80386.

SECTION–B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only. (4×8=32)

1. Draw and explain the pin diagram of 8086 microprocessor.

2. What are the functions of segment register? What are the functions of general purpose register?

3. Define interrupts in microprocessor.

4. What are four basic operation of Microprocessor?

5. Explain the function of ALU and IO/M signals in the 8085 architecture?

6. Define Opcode and operand?

7. Compare logic families.

8. Explain timing diagrams.

———————————