A-104

Total Pages : 3 **Roll No. ----------**

MPHY-607

Advance Microprocessor

M.Sc. Physics (MSCPHY)

4th Semester, Examination 2024 (June)

Time: 2:00 hrs Max. Marks: 35

Note : This paper is of Thirty five (35) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A (Long-Answer-Type Questions)

Note : Section 'A' contains Five (05) long-answer-type questions of Nine and Half (9.5) marks each. Learners are required to answer any Two (02) questions only.

[2x9.5=19]

P.T.O.

Q.1. Explain the architecture of 8086 microprocessor with its suitable pin diagram.

Q.2. Explain the various addressing modes of 8086 microprocessor.

Q.3. What do you understand by Input Output Transfer Techniques? Compare between Memory Mapped I/O and I/O Mapped I/O?

Q.4. What do you mean by advanced microprocessor? Explain the architecture of 80286 microprocessor.

Q.5. Define the I/O Interfacing. Explain the working of Priority Interrupt Controller (8259).

Section-B (Short-Answer-Type Questions)

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

[4x4=16]

Q.1. Explain the role of ALU, control and timing unit in microprocessor.

Q.2. What do you mean by the instruction set and how is it used in Intel 8086 microprocessor.

Q.3. Define the different addressing modes used in 8086 microprocessor.

Q.4. Draw the pin diagram of 80386 Microprocessor.

Q.5. What do understand by Modes of Operation? Discuss about Burst Mode and Cycle Stealing Mode.

Q.6. Discuss the requirement of 8259 interrupt controller.

Q.7. Differentiate between RISC and CISC processors.

Q.8. Explain the working of Intel 8053 Programmable interval Timer in brief.

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