

**Manonmaniam Sundaranar University,
Directorate of Distance & Continuing Education,
Tirunelveli - 627 012 Tamil Nadu, India**

INTERNAL ASSIGNMENT FOR MAY 2026 EXAMINATION

Name of the Programme : Digital Electronics and Microprocessor 8085

Year : 2025-2026

Contact Mobile Number :

Assignment Question No:

1. (a) Explain decimal, binary, octal, and hexadecimal number systems with examples.

(or)

(b) What is a half adder? Explain its logic diagram, Boolean expressions, and truth table.

Assignment Question No:

2.(a) Define ROM. Explain different types of ROM: PROM, EPROM, EEPROM, and EAROM.

(or)

(b) Write ALP for addition, subtraction, multiplication, and division of 8-bit numbers. Discuss the advantages and limitations of 8085 microprocessor.

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INTERNAL ASSIGNMENT

Name of the Programme : Relativity and Quantum Mechanics

Assignment Question No:

1. (a) Derive the Lorentz space-time transformation formulae. Discuss length-contraction and time-dilation

(or)

(b) Define black body radiation. Explain the distribution of energy in the spectrum of black body. Derive an expression for Planck's law of radiation.

Assignment Question No:

2.(a) Discuss briefly the wave nature of matter and obtain an expression of de Broglie wavelength for matter waves.

(or)

(b) What are the postulates of wave mechanics? Derive Schrodinger's equation. What is the significance of wave function?

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