

Microprocessor & Computer Network Laboratory (IT/EC-5005)

Course Code	IT/EC -5005	Credits-2	L –0, T-0, P-2
Name of the Course	Microprocessor & Computer Network Laboratory		
Lectures to be Delivered	26 hours of lab work (2hrs each per week)		
Semester End Examination	<i>Max. Marks: 50</i>	<i>Min. Pass Marks: 40</i>	Maximum Time:3hrs
Continuous Assessment	Lab work 30%, Lab Record 25%, Viva 25%, Attendance 20%	<i>Max. Marks: 50</i>	<i>Min. Pass Marks: 25</i>

Instructions for paper setter/ Candidates

Laboratory examination will consist of two parts:

- (i) Performing a practical examination assigned by the examiner (25 marks)
- (ii) Viva-voce examination (25 marks)

Viva-voce examination will be related to the practicals performed / projects executed by the candidate related to the paper during the course of the semester.

Section A

Computer Networks:

1. Construct a network of 2 or 3 system.
2. Simple communication between the systems in exchanging a binary word.
3. Encryption and decryption on the ASCII character set being transmitted.
4. Experimentation with standard set of protocols (Tanebaum)
5. Experimentation with protocol kit
6. Experimentation with modulation
7. Asure cables, connections, crimping
8. JDM
9. Bridges, Routers, Hubs etc.

Note:- *Record to be maintained in the laboratory record book for evaluation.*

Section B

Microprocessor Laboratory:

This laboratory will based on microprocessor 8085 + 8086 kits with following interfaces:

1. Key board & display
2. Analog to Digital conversion using DAC
3. Analog to Digital conversing using Dual slope ADC
4. Elevator simulator
5. Logic controller
6. Stepper motor
7. DC motor
8. General purpose PCB with connector
9. Crystal Oscillator
10. Modulator/Demodulator
11. Serial data communication

A few experiments, which can be performed (to be detailed later on)

1. Hexadecimal addition
2. Count up/count down
3. Timing delay
4. Flash a message like 'UP'

5. Moving display
6. Display the code for the key pressed on the key-board
7. Display a digital clock with minutes and seconds
8. Interfacing motor, keyboard etc.

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