M.Sc. DEGREE EXAMINATION,NOVEMBER 2019
I Year I Semester
Integrated Electronics And Microprocessor

Time : 3 Hours **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Compare the FET with UJT.
2. Give the significances of hybrid technology.
3. Mention the applications of shift register.
4. Distinguish between the A/D and D/A converters.
5. What is the need of filter circuit in OP AMP?
6. Draw the internal block diagram of 555 timer. Give its use.
7. What is an assembly language program?
8. Name the IN and OUT instructions.
9. Give the importance of interfacing.
10. What do you mean by matrix scanning?
11. Write a note on TRIAC.
12. What are the limitations in IC technology?

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. List out the comparison between UJT and MOSFET,
14. Explain the design and operation of random sequence counters.
15. Define and explain the operation of low pass and high pass filter with necessary circuits.
16. Mention the differences between I/O mapped I/O and memory mapped I/O.
17. Explain the working of DAC and ADC interface.
18. Describe the working of serial and parallel Registers with circuit diagram.
19. Explain the working of an analog integrator with the circuit diagram.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. With a neat diagram, explain the construction, operation, characteristics and application of SCR.
21. Explain the Binary weighted register D/A converter with a neat diagram.
22. Describe the design of analog circuits for differential equation using OP AMP.
23. Explain the various modes of addressing in microprocessor 8085 with an example.
24. Describe the seven segment display using PPI 8255 with a neat sketch.

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