LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – **PHYSICS**

FIFTH SEMESTER – NOVEMBER 2016

PH 5404 - ELECTRONICS - II

Date: 17-11-2016 Dept. No. Max. : 100 Marks
Time: 09:00-12:00

PART A

Answer **all** Questions: **(10×2 =20 Marks)**

1. Draw the circuit of Logarithmic amplifier.
2. What are active filters?
3. What is resolution in D/A converter?
4. Draw a 5 bit Binary weighted resistor.
5. What are the limitations of IC?
6. Write any four advantages of Integrated circuits.
7. Write an ASM program to add two 8 bit numbers in immediate mode of addressing.
8. Explain the function of an accumulator in microprocessor8085.
9. Why are the lines AD0 –AD7 multiplexed in microprocessor 8085?
10. Explain the use DAD instruction in µp 8085.

PART - B

Answer **any four** Questions: **(4×7.5 =30 Marks)**

11. Explain the working of an Op amp as a differentiator.
12. With a neat circuit diagram, explain the working of a counter type A/D converter.
13. Discuss the various addressing modes in Microprocessor 8085.
14. Write an asm program to Divide two 8 bit no in indirect mode of addressing.
15. Write note on monolithic and thin film process used in the fabrication of IC's.

PART - C

Answer **any four** Questions: **(4×12.5 =50 Marks)**

16. Explain in detail the working of second order low pass and high pass filters.
17. With a neat diagram, explain the working of 4 bit R-2R ladder.
18. Draw and explain the internal architecture of microprocessor 8085.
19. Explain in detail the Fabrication of integrated circuits.
20. Write an asm program
    (a) To find the square root of an 8 bit no. **(6 marks)**
    (b) To find the smallest of 10 numbers in an array. **(6.5 marks)**

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