



# ADITYA DEGREE COLLEGE, KAKINDA

PEFINAL EXAMINATION

B.Sc IV SEMESTER - ELECTRONICS

TOTAL TIME:3Hrs

TOTAL MARKS:75

## SECTION-A

**Answer any Four questions**

**5 x 5=25m**

1. Explain Block diagram of OP-AMP 741
2. Write any 4 parameters of OP-AMP?
3. Explain the working of logarithmic amplifier
4. Write a short note on sine wave generator
5. Explain BCD to GRAY code converter?
6. Write SIPO Shift Register
7. Explain single slope A/D converter
8. Explain inter facing of LED

## SECTION-B

**Answer all questions**

**5 x 10=50m**

9. (a) Explain how OP-AMP can be used as Integrator & Differentiator with wave forms.  
(OR)  
(b) Explain inverting & Non inverting amplifier of OP-AMP and obtain expression for gain
10. (a) Explain the working of A stable Multivibrator using OP-AMP with the help of neat diagram  
(OR)  
(b) Draw & Explain IC 555 functional Block diagram
11. (a) Explain how to convert BCD to 7 segment  
(OR)  
(b) Explain the working of Universal shift register (USR)
12. (a) Explain successive approximation of A/D convertor?  
(OR)  
(b) Explain R-2R ladder network D/A converter with suitable example
13. (a) Discuss the working of Universal Asynchronous Receiver Transmitter(UART)  
(OR)  
(b) Explain digital clock in detail