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Reg. No........................

Name........................

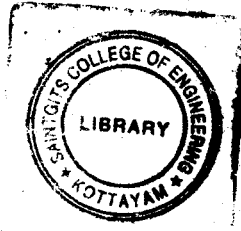# B.TECH. DEGREE EXAMINATION, MAY 2016

Fourth Semester

Branch : Applied Electronics and Instrumentation/
Electronics and Communication Engineering

AI 010 406/EC 010 406—ANALOG CIRCUITS—II (AI, EC)

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.
Each question carries 3 marks.

1. Define CMRR.

2. Explain Ideal OP-AMP parameters.

3. Draw the circuit of summing Amplifier.

4. Define Band pass filter.

5. Explain A/D converters.

(5 × 3 = 15 marks)

Part B.

Answer all questions.
Each question carries 5 marks.

6. Explain large signal analysis of differential amplifiers.

7. Discuss the effect of Bandwidth and slew rate on OP-AMP circuit performance.

8. Discuss Instrumentation amplifiers.

9. Differentiate between Bandpass and Band elimination filters.

10. Explain PLL topology.

(5 × 5 = 25 marks)

Part C

Answer all questions.
Each question carries 12 marks.

11. Explain frequency response of differential amplifiers.

Or

12. Describe Wilson current mirror.

Turn over

13. Discuss the internal circuit of 741–OP-AMP.

Or

14. Describe ideal OP-AMP parameters.

15. Describe V to I and I to V converters using OP-AMPS.

Or

16. Describe comparators.

17. Explain Switched capacitor filter.

Or

18. Discuss the design of a First order low-pass butterworth filter.

19. With neat circuit diagram explain 555 Astable multivibrator.

Or

20. Describe Analog to digital conversion using successive approximation technique.

(5 × 12 = 60 marks)