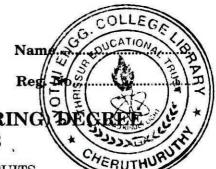
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FOURTH SEMESTER B.TECH. (ENGINEERING EXAMINATION, APRIL 2013

EC 09 403/PTEC 09 402 - ELECTRONIC CIRCUITS

(Regular/Supplementary/Improvement)

(2009 Scheme)

Time: Three Hours

Maximum: 70 Marks

Part A

- 1. What are clampers and clippers?
- 2. What is an emitter follower?
- 3. Define CMRR.
- 4. What is a multivibrator?
- 5. Define load regulation.

 $(5 \times 2 = 10 \text{ marks})$

Part B

Answer any four questions.

- 1. Write notes on resistors.
- 2. Discuss about harmonic distortion of Class A, B and C amplifiers.
- 3. Discuss any one type of biasing JFET.
- 4. Explain how transistor acts as a switch.
- 5. What is the criterion of oscillation? What are the advantages of negative feedback?
- 6. Explain the working of a half-wave rectifier.

 $(4 \times 5 = 20 \text{ marks})$

Part C

1. (a) Explain the working of CE transistor amplifier.

Or

- (b) (i) Explain the working of zener diode voltage regulator.
 - (ii) Define the terms PIV and ripple factor.

2. (a) Explain the working of Class A power amplifiers.

Or

- (b) Discuss the effect of negative feedback on voltage shunt, voltage series, current shunt feedback amplifiers.
- 3. (a) Explain the working of relaxation oscillator.

Or

- (b) Explain the working of differential amplifier with active load.
- 4. (a) Explain the working of Bistable multivibrator.

Or

(b) Explain the working of Schmitt trigger.

 $(4 \times 10 = 40 \text{ marks})$