C 40950 (Pages : 2) Name.....

Reg. No.....

FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE 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 × 2 = 10 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 × 5 = 20 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.

Turn over

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 × 10 = 40 marks)