

C 26886

Name.....

Reg. No.....



**FOURTH SEMESTER B.TECH. (ENGINEERING) DEGRLE EXAMINATION  
MAY 2012**

EC 09 403/PT EC 09 402—ELECTRONIC CIRCUITS

(2009 admissions)

Time : Three Hours

Maximum : 70 Marks

**Part A**

1. Define ripple factor.
2. What is a bode plot ?
3. Define CMRR.
4. State an application of monostable multivibrator and Schmitt trigger.
5. What is the principle of low power transformers ?

(5 × 2 = 10 marks)

**Part B**

*Answer any four questions.*

1. Discuss briefly on inductors.
2. Discuss the low and high frequency response of common emitter amplifier.
3. Discuss the characteristics of UJT.
4. Discuss the working of transistor as a switch.
5. Draw the hybrid  $\pi$  and  $\tau$  models of BJT. Discuss the effect of temperature on BJT model parameters.
6. Discuss on the stability of oscillators.

(4 × 5 = 20 marks)

**Part C**

1. (a) Discuss the working and efficiency of L, C and LC filters.  
*Or*  
(b) Explain the working of RC coupled multistage amplifier. Discuss its frequency response.
2. (a) Explain the working of class AB amplifier.  
*Or*  
(b) Discuss the working of Emitter follower.
3. (a) Discuss the working of Hartley oscillator.  
*Or*  
(b) Discuss the frequency response of differential amplifier and methods to improve CMRR of differential amplifier.
4. (a) Explain the working of Schmitt trigger.  
*Or*  
(b) Explain the working of a monostable multivibrator.

(4 × 10 = 40 marks)