BIEL-005

B. Tech. IN ELECTRONICS AND COMMUNICATION ENGINEERING (BTECVI)

Term-End Examination

June, 2011

BIEL-005 : ANALOG ELECTRONIC CIRCUITS

Time : 3 hours

00204

Maximum Marks : 70

Note: 1. Attempt any five Questions. 2. All Questions carry equal marks.

- (a) What are 'h' parameters ? Draw and 7 explain the 'h' parameter model for common Emitter (CE) configuration.
 - (b) Calculate the $A_{i'}$, $A_{v'}$, R_i and R_o for single **7** stage common emitter (CE) amplifier using h parameter model.
- (a) Draw and explain single stage R_c coupled 7 amplifier.
 - (b) Draw and explain with neat diagram the 7 Darlington compound configuration.
- (a) Explain high frequency model for CE 7 configuration.
 - (b) Explain the Analysis and design of class A 7 amplifier.

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- 4. (a) What are tuned amplifiers ? Discuss the 7 advantages and disadvantages of tuned amplifiers.
 - (b) What do you understand by the term 7 resonance ? Explain series and parallel resonant circuit with neat diagrams.
- (a) Compare the voltage gain and frequency 7 response of single and double tuned amplifiers.
 - (b) Explain the concept of feedback. Also 7 discuss the characteristics of negative feedback.
- 6. (a) What do you understand by oscillator ? 7
 Explain the principle of operation and working of Wein Bridge Oscillator.
 - (b) Explain and compare in brief monostable 7 and bistable multivibrator.
- 7. Write short notes on any two. 7x2=14
 - (a) 555 Timer
 - (b) Phase Shift Oscillator
 - (c) Frequency response of Amplifiers

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