**BSE8**

**Fourth Semester B. Tech Electrical Engineering**

**Examination Aug/Sep-2015**

**Analog Electronic Circuits**

**Time:-3Hours Max. Marks: - 75**

**SECTION-A**

**Answer any five questions. (5\*5)**

1. Define the Hybrid Parameters.
2. Define Transistor Biasing. What is the need of Biasing a Transistor?
3. What do you mean by Single Stage Small Signal Amplifiers?
4. Design a full wave rectifier with an LC filter to provide 10 V d c at 150 mA with a maximum ripple of 3%. The operating frequency is 50 Hz.
5. Give a brief introduction on Light Activated SCR (LASCR).
6. Write a short note on Latching Operation of UJT.
7. In a potential divider circuit, the zero signal operating points at 1 mA, 3V. Given the Vcc =12 V, RE = 1 K, R2 =8K. Find out the value of RC and R1.

**SECTION-B**

**Answer any two questions. (10\*2)**

1. Draw and explain Transistor Terminals.
2. Explain in detail about the Transistor Actions.
3. A common emitter transistor amplifier is driven by a voltage es of internal resistance rs =800 Ω. The load impedance is a resistor RL = 2000 Ω. The parameters are : hie = 110 Ω. Find out the gain, overall voltage gain, resistance, output resistance and operating power.

**SECTION-C**

**Answer any two questions. (15\*2)**

1. Discuss the performance of a Transistor in h- Parameters. What are its limitations?
2. In an amplifier, RC= 3K, RL 10K, VCC =12 V, and operating point has coordinates of (5V,2 mA).Find the point on the current axis.
3. Enumerate the Power Circuits in detail.