Electronics-II

CS/2051

Paper B

759/MH

Semester-VI

Time Allowed :3 Hours

Maximum Marks:30

Section – A (ANY TWO)

1. What is SCR. Explain its construction, working and characteristics.(5)
2. Discuss construction, working, characteristics and uses of IMPATT. (5)
3. What is a thermistor ? Discuss its types, uses and V-I characteristics.(5)
4. Explain UJT with an equivalent circuit.(5)

Section – B (ANY TWO)

5. Explain Gunn effect. Discuss the mechanism and characteristics of Gunn Diode. (5)
6. Discuss the working and analysis of CE Amplifier using h-parameters. Derive expression for current gain and input resistance. (5)
7. What do you understand by feedback ? Explain negative feedback and discuss its one advantage with suitable diagram and expression. (5)
8. Discuss Voltage divider biasing with equivalent circuit diagrams. Also discuss its advantages. (5)

Section – C (Do any five) (5x2)

9. (i) What is a PIN diode?
   (ii) Name the parameters of FET and give relation between them.
   (iii) Discuss Tunneling phenomenon?
   (iv) What are the advantages of thermistors over other temperature sensing devices.
   (v) Why do we prefer to use transistor amplifier in CE mode?.
   (vi) What do you understand by choosing Q- points in the output characteristics of a transistor amplifier.
   (vii) Give differences between Thyristor and Transistor.

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