

Total No. of Questions : 8]

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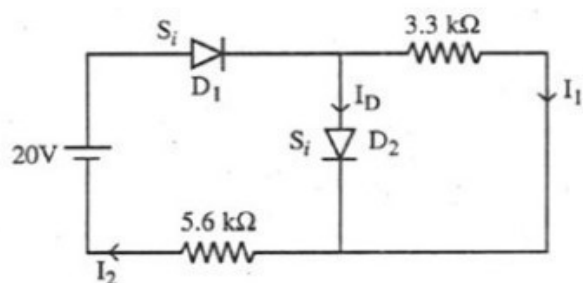
EX-304 (Old)
B.E. III Semester
 Examination, December 2016
Electronic Devices and Circuits - I

Time : Three Hours

Maximum Marks : 70

- Note: i) Attempt any five questions.
 ii) All questions carry equal marks.

1. a) Determine the currents I_1 , I_2 and I_D for the network shown below. 7



- b) Differentiate between half wave and full wave centre tap rectifier. 7
2. a) Elaborate the working of clipper and clamper circuits with the help of neat diagrams. 7
- b) Write short note on any two of the following : 7
- Zener Diode
 - Tunnel Diode
 - LCD

[2]

- Explain the working of a JFET and give its characteristics curve. 7
 - Discuss features of Depletion-type MOSFET. 7
- Explain the concept of early effect in CB configuration of BJT. Is two back to back diodes can work as transistor? Give reason to support your answer. 7
 - Discuss the h parameter analysis of CC, CE and CB configurations of transistors at low frequency. 7
- Explain the principle of Bootstrapping and give its advantages. 7
 - Explain the analysis of low frequency response of RC coupled amplifier in CE configuration. 7
- Describe general characteristics of negative feedback amplifier and also discuss the effect of feedback on amplifier characteristics. 7
 - Draw and explain the circuit diagram of Darlington amplifier. 7
- Draw the circuit diagram of RC phase shift oscillator and explain its operation. 7
 - Explain the working of class A push pull amplifier with circuit diagram. Also list the advantages of power amplifier. 7
- Write short notes on any two of the following : 14
 - Cross-over distortion and harmonic distortion
 - Single tuned and double tuned voltage amplifiers
 - UJT
 - Schottky diode