EECE 167

Dept. of EWCE

CT-3

Marks: 20 **Time: 25 min**

1. Suppose the output voltage of a full wave bridge rectifier is given in Fig. 1(a). Now what change should be made in the circuit of the full wave bridge rectifier so that the output voltage becomes like that in Fig. 1(b)? Draw the modified circuit. 04

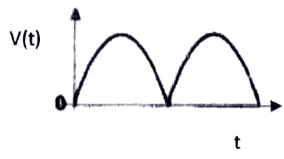


Fig. 1(a)

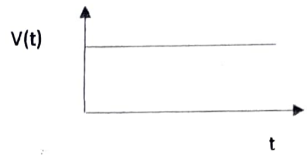


Fig. 1(b)

2. Illustrate and briefly explain the input characteristics of a common base BJT configuration. 07

3. A transistor is connected in common emitter (CE) configuration in which collector supply is 8 V and the voltage drop across resistance R_C connected in the collector circuit is 0.5 V. The value of R_C = 800 Ω. If α = 0.96, determine: 4+5 = 09
(i) Collector-Emitter voltage
(ii) Base current.

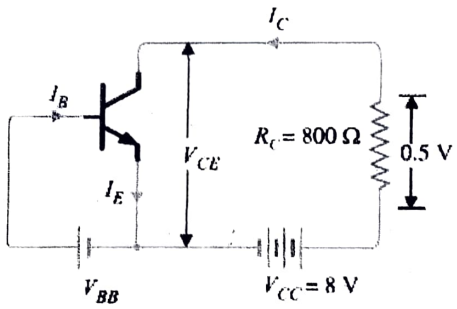


Fig. 3