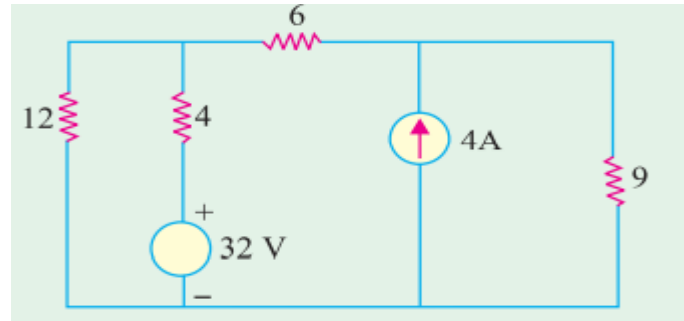


B.E (Chemical) 2nd Semester
Subject: Electrical & Electronics Engg.

Max. Marks :25

Q.1 State and prove maximum power transfer theorem. (5)

Q.2 Calculate the current and power dissipated in the following 9 ohms resistance by using Superposition Theorem.



(6)

Q.2 A compound generator is to supply a load of 250 lamps, each rated at 100W, 250 V. the armature, series and shunt windings have resistances of 0.06 Ω , 0.04 Ω and 50 Ω respectively. Determine the generated e.m.f. when the machine is connected in (i) long shunt (ii) short shunt. Take brush drop as 1 V per brush. (6)

Q.3 Explain production of rotating magnetic field in three-phase induction motor. (5)

Q.4 Define: (i) Active Power (ii) Reactive Power (iii) Phase (3)