SVKM'S NMIMS
School of Technology Management & Engineering, Navi-Mumbai Campus
B.Tech. (Sem- I) (CSBS)
Assignment-1
Subject: Principles of Electrical Engineering
Date of Submission: 27/08/2019

Q.1 Calculate the effective resistance R_{AB} of a network shown in fig.1.

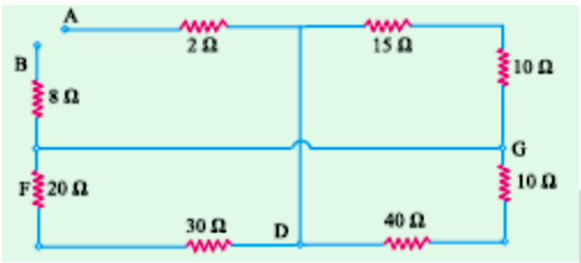

Fig. 1

Q.2 Find the current trhough lamp when switch s is closed in the circuit shown in fig. 2.

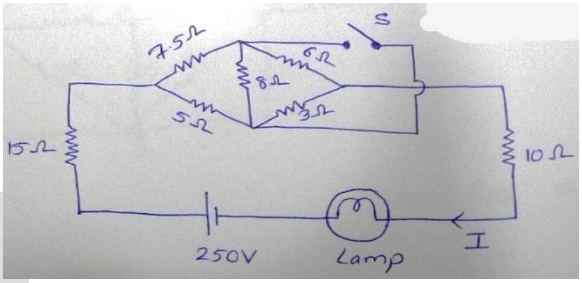

Fig. 2

Q.3 Calculate the effective resistance of the circuit of fig. 3 and the current through 8Ω resistance, when potential difference of 60 V is applied between the points A and B.

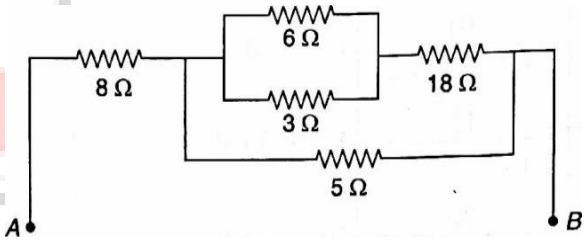

Fig. 3

Q.4 What is reading of the ammeter shown in the circuit shown in fig. 4?

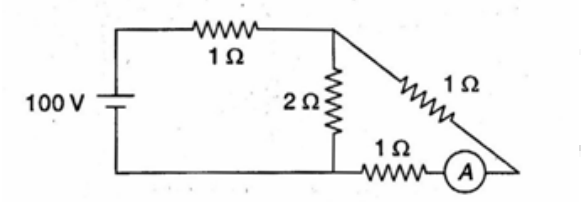

Fig. 4

Q.5 Calculate the effective resistance R_{AB} of network of fig.5.

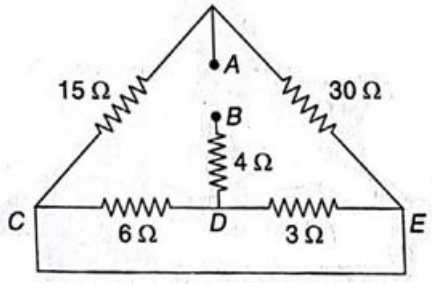

Fig. 5

Q.6 Calculate the equivalent resistance between terminal A & B of circuit shown in fig. 6.

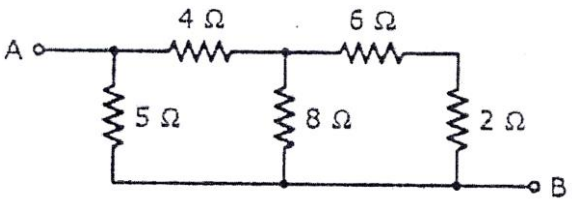

Fig. 6

Q.7 For the circuit shown in fig. 7, find the value of resistance R, when power consumd by 12Ω resistane is 36W.

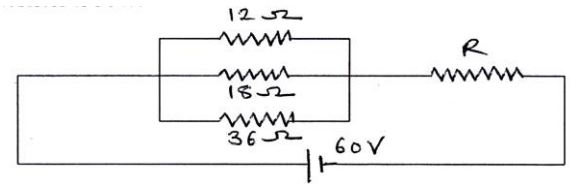

Fig. 7

Q.8 Find the equivalent resistance of the network of Fig. 8 between terminals *A* and *B*. All resistance values are in ohms.

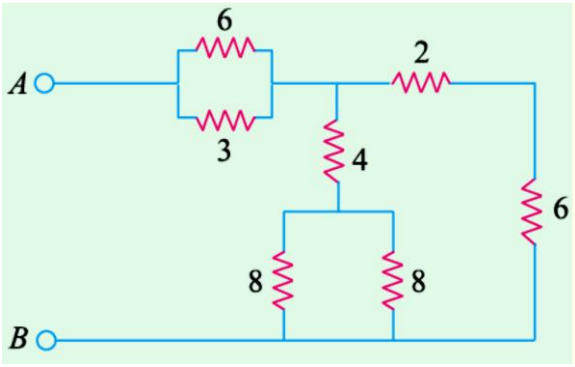

Fig. 8

Q.9 Compute the value of battery current *I* in Fig. 9. All resistances are in ohm.

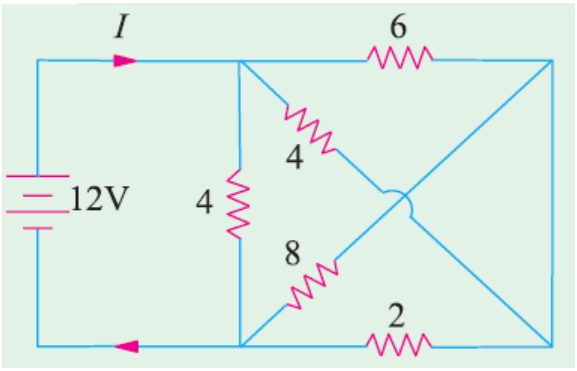

Fig. 9

Q.10 Compute the equivalent resistance of the circuit of Fig. 10 (*a*) between points (*i*) *ab* (*ii*) *ac* and (*iii*) *bc*. All resistances values are in ohm.

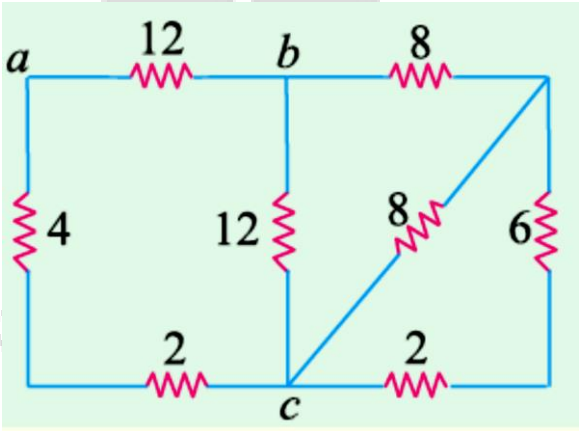

Fig. 10