

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
 TEST -1 EXAMINATION- Feb 2020  
 B.TechIV Semester (ECE)

COURSE CODE: 15B11EC411

MAX. MARKS: 15

COURSE NAME: BASIC ELECTRONICS

COURSE CREDITS: 4

MAX. TIME: 1 Hr

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Q1) Using nodal analysis, find the current through  $3\Omega$  resistor in fig.(1). (3)

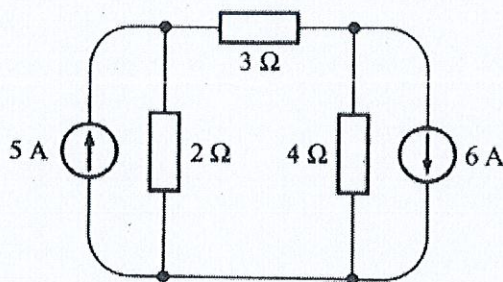


Fig.(1)

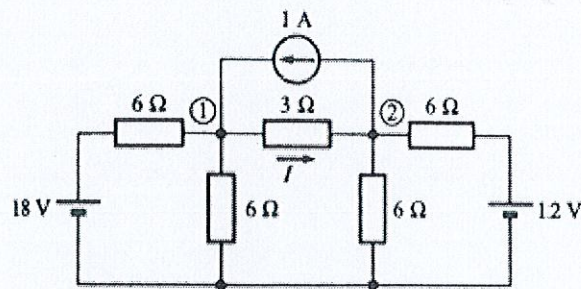


Fig.(2)

Q2) Using mesh analysis find the current  $I$  and voltages at node 1 and 2 in fig.(2). (4)

Q3) Calculate the voltage drop across  $3\Omega$  resistor in fig.(3). (4)

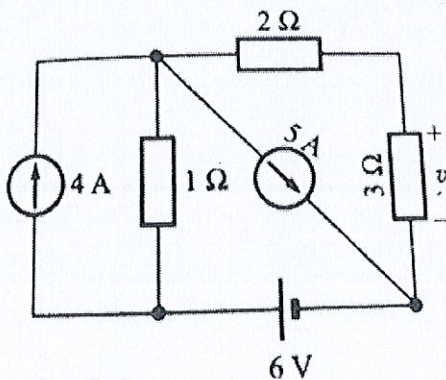


Fig.(3)

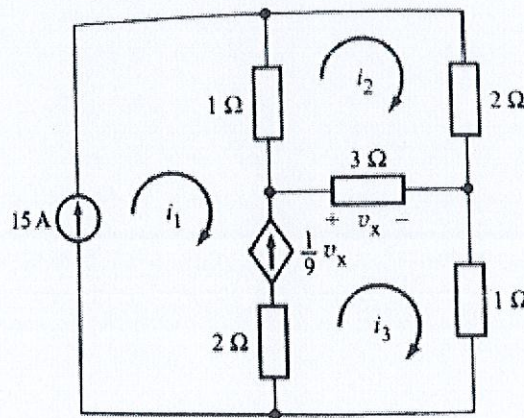


Fig.(4)

Q4) Calculate the loop currents  $i_1$ ,  $i_2$  and  $i_3$  in fig.(4). (4)