

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

T-I EXAMINATION) - Feb-2020

B. Tech. II Semester, BI/BT

COURSE CODE: 18B11EC212

MAX. MARKS: 15

COURSE NAME: Basic Electrical Sciences

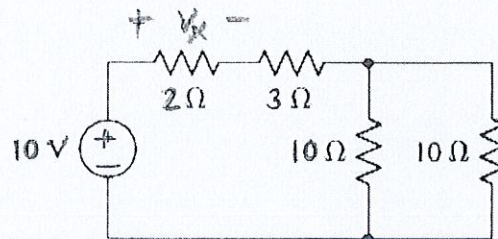
COURSE CREDITS: 04

MAX. TIME: 1 Hrs

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

Q.1 (a) Find the  $v_x$  in the circuit given below:

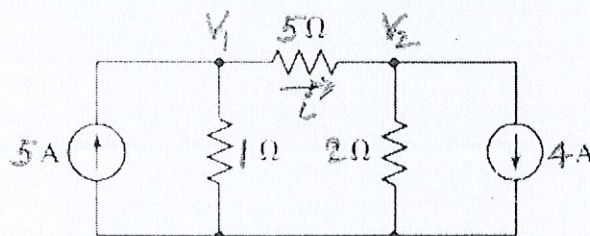
[(03), CO-1]



(b) Write the statement of KCL and KVL.

[(02), CO-1]

Q.2 Using the nodal analysis, determine the current  $i$  through the 5-Ω resistor. [(05), CO-1]



Q.3 Using super position theorem, find the current  $i_x$  in the circuit given below: [(05), CO-1]

