

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
 TEST-1 EXAMINATION – September 2019
 B.Tech, 1st Semester, CSE

COURSE CODE: 10B11EC111

MAX. MARKS: 15

COURSE NAME: ELECTRICAL CIRCUIT ANALYSIS

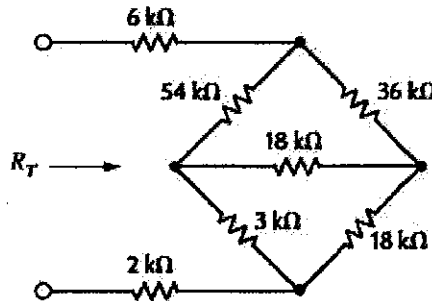
COURSE CREDITS: 4

MAX. TIME: One Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Missing data, if any, can be appropriately assumed.

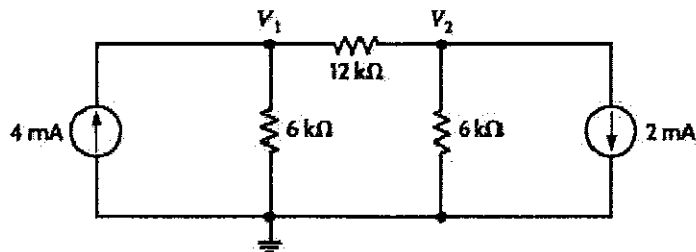
1(a) What are the four different types of dependent power sources? Draw the symbols used for each of them (2)

(b) Find the equivalent resistance R_T of the circuit shown in the figure below: (3)



2(a) What is a super-node? Give the steps to solve a circuit that contain super-node using nodal analysis. (2)

(b) Find V_1 and V_2 of the circuit below using nodal analysis. (3)



3. Find V_o in the figure using mesh analysis. (5)

