FEDERAL UNIVERSITY OF TECHNOLOGY MINNA

DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION

FIRST SEMESTER 2017/2018 EXAMINATION

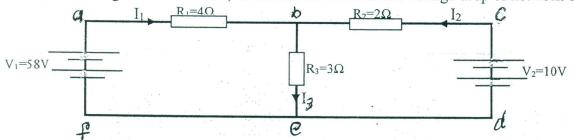
COURSE CODE AND TITLE: ITE 353, CIRCUIT THEORY

INSTRUCTIONS: Answer any Four (4) Questions

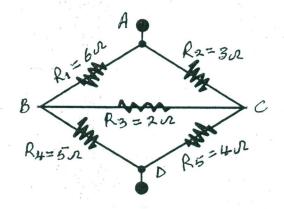
TIME ALLOWED - 2 hours

1(a). Differentiate between junction and node in an electrical circuit?

(b). Using Kirchhoff's law, determine the current and voltage drop of network below?



- 2(a). With the aid of a diagram, explain what is mesh or loop?
- (b). Using Star-Delta transformation, obtain the equivalent resistance of the network below?



- 3(a). Distinguish between active and passive network?
 - (b). Using Superposition theorem, determine the current I?

