

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY (VSSUT), ODISHA
Odd Mid Semester Examination for Academic Session 2024-25

COURSE NAME: B.TECH

SEMESTER: 1st

BRANCH NAME: D, E, F, G, H, I, J
SUBJECT NAME: BASIC ELECTRICAL ENGG.

FULL MARKS: 30

TIME: 90 Minutes

Answer All Questions.

The figures in the right hand margin indicate Marks. Symbols carry usual meaning.

Q1. Answer all Questions.

[2 × 3]

- a) Find the current in $3\text{K}\Omega$ resistor in fig.(1)

- CO1

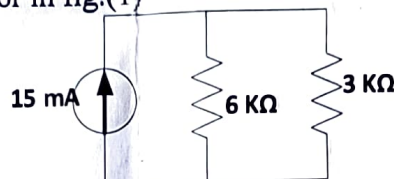


Fig.(1)

- b) Define Form Factor & Peak factor?

- CO2

- c) What are the different types of magnetic material? Give example each of them.

- CO3

Q2.

[4+4]

- a) Using Nodal analysis find the current in various resistors of the circuit shown in fig.(2)

- CO1

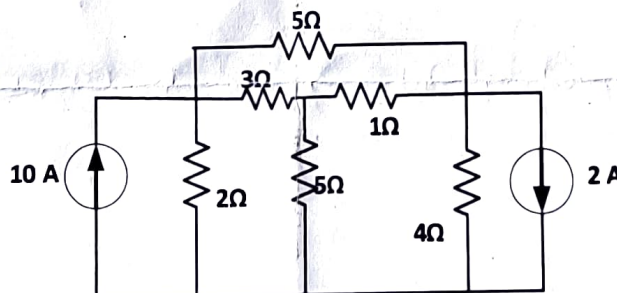


Fig. (2)

- b) Using thevenin's Theorem find the current in 6Ω in the Fig.(3)

-CO1

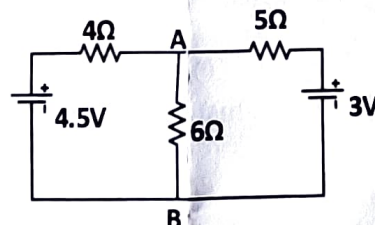


Fig.(3)

OR

- a) Calculate the current in each branch of the circuit shown in fig. (4)

- CO1