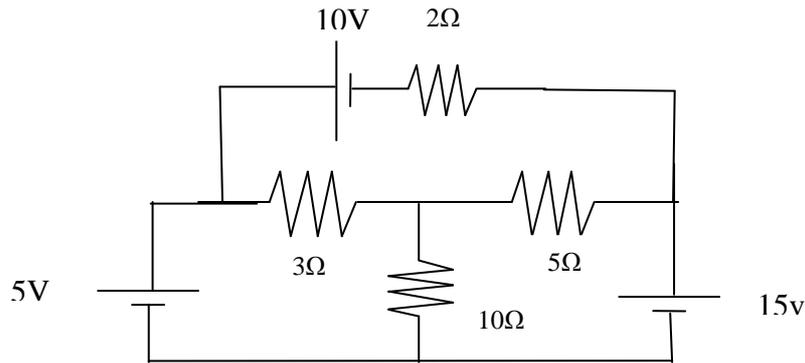


20. Differentiate free running multivibrator and monostable multivibrator.

PART C (5 x 14 = 70 Marks)
(Not more than 400 words)

Q.No. 21 is Compulsory

21. Using Superposition theorem find the current through 10Ω resistor in the following fig (2).



Fig(2)

22. a) Draw the construction of junction field effect transistor and explain its operation.

(OR)

b) Explain the operation of PN junction diode under forward bias and reverse bias condition with its VI characteristic curve.

23. a) Analyze the bridge rectifier and its types with the help of circuit diagram and waveform.

(OR)

b) Explain the operation of voltage regulator and its types with neat diagram.

24. a) What are the different types of feedback amplifier and determine its input impedance and output impedance of current series feedback.

(OR)

b) Identify the oscillator which uses resonant circuit and explain how the oscillations are maintained and derive the frequency of oscillation.

25. a) Discuss the operation of non inverting amplifier and explain how it can be used as summer, comparator and integrator.

(OR)

b) Explain the operation of Schmitt trigger using operational amplifier.
