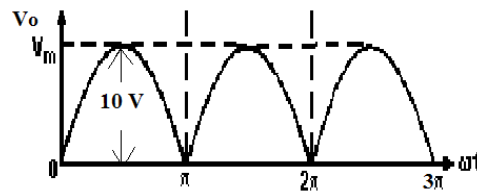


## QUESTION BANK OF EEX (17215)

### CHAPTER 3 - Rectifiers & filters

- Q1. Define i) Rectifier ii) Rectification efficiency iii) Ripple factor (3)
- Q2. List different types of rectifier. Which rectifier is widely used & why? (3)
- Q3. Compare all filters. (3)
- Q4. Draw a circuit diagram of full wave bridge rectifier with LC filter. Explain with input & output waveforms. (4)
- Q5. In FWR  $V_m=10V$ ,  $R_L=10\text{ K}\Omega$ . Calculate  $V_{dc}$ ,  $I_{dc}$  & ripple factor. Refer following fig. (4)



- Q6. Explain center tapped FWR with circuit & waveforms. (4)
- Q7. Draw a circuit diagram of series inductor filter with half wave rectifier. Explain with input & output waveforms. (4)
- Q8. Compare all types of rectifier.(4)

### CHAPTER 4 – Wave shaping circuit

- Q1. Compare linear & nonlinear wave shaping circuit. (3)
- Q2. What do you mean by the term wave shaping circuit? Explain why it is needed in practical application? (3)
- Q3. Draw a circuit diagram of RC integrator. Sketch the output waveform for square wave input. Describe the operation of the circuit. (3)
- Q4. Describe the working principle of RC differentiator. State the condition for differentiator (4)
- Q5. Explain the operation of shunt negative clipper with circuit diagram & input-output waveforms. (4)
- Q6. Explain the operation of positive clamper with circuit diagram & i/p-o/p waveforms. (4)

Q7. Compare clipper & clamper (4)

Q8. Draw circuit dia. For positive & negative voltage clamping circuits. Show the input & output waveforms.

### CHAPTER 5 – DC circuit & network theorems

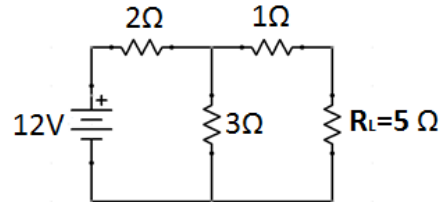
Q1. State the kirchoff's voltage law & kirchoff's current law along with formula.

Q2. Explain the following terms

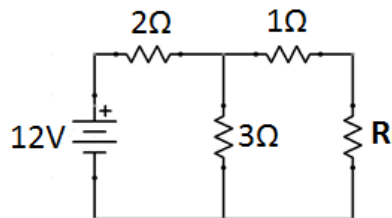
i) Active network    ii) linear network    iii) bilateral network    iv) Unilateral network

Q3. write the meaning term open circuit & short circuit

Q4. Calculate the value of current in  $5\Omega$  resistance using Norton's theorem for the following network (4)

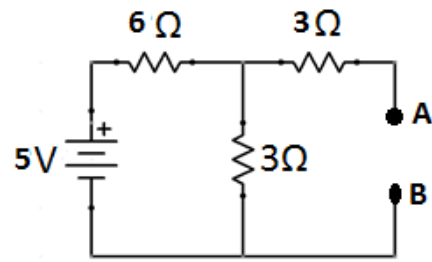


Q5. Calculate the value of R so that power transferred is maximum in the circuit shown below (4)



Q6. Three resistances each of  $12\Omega$  are connected in star. Convert it into equivalent delta connection

Q7. Obtain Thevenin's equivalent circuit for the network shown below



Q8. State the superposition theorem with suitable example.(4)

Q9. Draw the ideal current source & ideal voltage source & practical current source & practical voltage source (3)

Q9. Calculate the supply voltage of the circuit shown below (3)

