

- a) 2 b) 3
c) 6 d) 16

Q.5 Which of the following is not a choice of material for heat sink? (CO1)

- a) Copper b) Plastic
c) Aluminum d) Alloy of Aluminum

Q.6 A chopper converts _____ into _____. (CO3)

- a) DC, AC b) AC, DC
c) DC, DC d) AC, AC

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Define inverter? (CO3)
Q.8 Expand UPS? (CO5)
Q.9 In Resistance based triggering, firing angle can be up to 90°. (T/F) (CO1)
Q.10 Define firing angle? (CO2)
Q.11 What is duty cycle in a chopper? (CO3)
Q.12 List two suitable power sources for an inverter? (CO3)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Explain series and parallel operation of SCR? (CO1)
Q.14 Write a note on VFD? (CO4)
Q.15 List 4 applications of SMPS? (CO5)
Q.16 What is triggering? List its types and explain any one in details? (CO1)
Q.17 Explain working of series inverter with the help of neat sketch? (CO3)
Q.18 Describe working of single-phase Dual converter using suitable circuit diagram? (CO3)
Q.19 Explain single phase full wave half-controlled rectifier with waveform and circuit diagram? (CO2)
Q.20 Write a note on SCR specifications/ratings? (CO1)
Q.21 Compare flux control and voltage control method of DC motor Speed control? (CO4)
Q.22 Explain two transistor analogy of SCR? (CO1)