

No. of Printed Pages : 4
Roll No.

220945

4th Sem./ Electrical
Subject : Utilization of Electrical Energy

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Space Height ratio should ideally be equal to (CO1)
a) 2 b) 1
c) 0.5 d) 3
- Q.2 The transformer used for the AV Welding Set is (CO3)
a) Booster type
b) Step up Transformer
c) Step down transformer
d) None of these
- Q.3 The deposit will be coarse when _____ current density is Employed (CO4)
a) Intermittant b) Continuous
c) Low d) High

- Q.4 Size of Air Conditioner is given in (CO3)
a) Litters b) Tonnes
c) Length of Pipe d) All of these
- Q.5 On the main line Service, More importance is given to (CO5)
a) Acceleration b) Braking
c) Speed d) Retardation
- Q.6 Modern Electrification of Track is being done for _____ system. (CO5)
a) DC b) AC
c) Composite d) None of these

SECTION-B

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

- Q.7 Define Lux. (CO1)
- Q.8 Insulating materials can be heated only by _____ (CO2)
- Q.9 Define Galvanization process. (CO3)
- Q.10 Starting Torque of Squirrel Cage Motor is _____ (CO4)
- Q.11 Expand EMU (CO5)
- Q.12 Expand HVAC

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SECTION-C

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

- Q.13 Explain Lamberts cosine law of illumination. (CO1)
- Q.14 State properties of resistance heating element. (CO2)
- Q.15 Write short note on Tungsten Inert gas Welding. (CO2)
- Q.16 State factor affecting process of electrodeposition. (CO3)
- Q.17 Draw Electrical circuit of Air conditioner. (CO3)
- Q.18 What are the factors affecting selection of motor for a particular load. (CO4)
- Q.19 Explain composite system of Track electrification. (CO5)
- Q.20 State advantages of electric traction system. (CO5)
- Q.21 What are the Advantages of electric Braking system? (CO5)
- Q.22 Define Glare, Shadow. (CO1)

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SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Draw Block diagram of electric locomotive. Explain function of various components of electric locomotive. (CO5)
- Q.24 What is induction heating? Explain coreless type induction heating process with neat diagram. (CO2)
- Q.25 Draw and explain Sodium vapour lamp. (CO1)

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