

Q.20 What are the laws of electrolysis. Explain their significance. (CO3)

Q.21 Explain the process of dielectric heating and write down its advantages. (CO2)

Q.22 What is the role of motors in electric drives. (CO4)

SECTION-D

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

Q.23 Describe the process of electro deposition and its industrial application. (CO3)

Q.24 Draw and explain the electrical circuit used in Air conditioner. (CO4)

Q.25 Explain field control method used for starting and speed control of traction motor. (CO5)

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4th Semester/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 The speed time curve is used in electric traction to study (CO5)

- a) Acceleration
- b) Power consumption
- c) Speed variation over time
- d) Braking system

Q.2 Candela is the unit of: (CO1)

- a) Flux
- b) Luminous intensity
- c) Illumination
- d) Luminance

- Q.3 Lamp efficiency is measured in (CO3)
 a) Lumen/Watt b) Lumen Lux
 c) Candela/Watt d) Lux/Watt
- Q.4 Which type of motor has high starting torque? (CO4)
 a) Synchronous motor b) Induction motor
 c) Stepper motor d) DC series motor
- Q.5 Which of the following methods of heating is independent of supply frequency? (CO2)
 a) Electric heating
 b) Induction heating
 c) Electric resistance heating
 d) Dielectric heating
- Q.6 Electric arc welding is a type of? (CO3)
 a) Resistance welding b) Fusion welding
 c) Solidstate welding d) Pressure welding

SECTION-B

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

- Q.7 Define anodizing process. (CO3)

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- Q.8 The starting Torque of a squirrel cage motor is _____ (CO5)
- Q.9 _____ Switch is used to control the Temperature. (CO1)
- Q.10 Pantograph is employed in railways for the collection of _____ from trolley wires. (CO4)
- Q.11 An electric drive consist of a motor and a _____. (CO4)
- Q.12 Dielectric heating is some time called _____. (CO2)

SECTION-C

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

- Q.13 Write a short note on Resistance welding. (CO2)
- Q.14 Compare electric welding with other methods of welding. (CO3)
- Q.15 Explain laws of electrolysis. (CO3)
- Q.16 Draw electrical circuit of household refrigerator. (CO3)
- Q.17 Write down advantages of Electric drives. (CO3)
- Q.18 State and explain the principle of anodizing. (CO1)
- Q.19 What are the laws of illumination flux and luminous efficiency? (CO1)

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