

- Q.25 State and explain Faraday's Law of Electro-depositon.
- Q.26 What is anodising and write its applications
- Q.27 State the different factors affecting electro-deposition.
- Q.28 Describe Eco-Friendly Refrigerant.
- Q.29 Explain Vapour compressor refrigeration cycle.
- Q.30 Explain speed time curve of electric locomotive.
- Q.31 Enlist any five characteristic of electric traction system.
- Q.32 Compare Group drive and Individual drive.
- Q.33 Explain Regenerative braking.
- Q.34 Explain Laws of Illumination.
- Q.35 Write short note on fluorescent lamp.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Draw the block diagram of Electric locomotive and explain it in detail.
- Q.37 Draw and explain the electrical circuit used in Refrigerator.
- Q.38 Explain the construction principle and working of AJAX Wyatt furnace and also give its application.

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6th Sem / Branch : Elect. Power Station Engg., Elect & Eltx. Engg.
Sub.: Utilization of Electrical Energy

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 The most modern method for food processing is
 a) Eddy current heating b) Dielectric heating
 c) Induction heating d) Resistance heating
- Q.2 For Arc welding DC is produced by
 a) Regulator b) Transformer
 c) Motor generator set d) None of the above
- Q.3 Which of the following is not an application of electroplating?
 a) Decorative purposes b) Coating of metal
 c) Metal protection d) Corrosion prevention
- Q.4 _____ motor is a constant speed motor.
 a) Synchronous b) Universal
 c) DC d) Schrage
- Q.5 IN a refrigeration system, the expansion device is connected between the
 a) Compressor and condenser
 b) Condenser and receiver

- c) Receiver and evaporator
 d) Evaporator and compressor
- Q.6** An ideal traction system should have
 a) Easy speed control
 b) High starting tractive effort
 c) Equipment capable of withstanding large temporary loads
 d) All of the above
- Q.7** Which of the following breaking systems on the locomotives is costly?
 a) Regenerative braking on electric locomotives
 b) Vacuum braking on diesel locomotives
 c) Vacuum braking on steam locomotives
 d) All braking systems are equally costly
- Q.8** AJAX WYATT furnace is used for melting of
 a) Ferrous metal b) Non ferrous metal
 c) Steel d) None
- Q.9** The unit of luminous Flux is
 a) Lux b) Lumen
 c) Candela d) Steradian
- Q.10** Which of the following will need the highest level of illumination?
 a) Railway platforms b) Hospital wards
 c) Bed rooms d) Proof reading

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Human eye is most sensitive to a wavelength of _____.
- Q.12 MIG stands for _____.
- Q.13 The Positively charged ions are known as _____.
- Q.14 The gas or fluid used in the refrigerator is called _____.
- Q.15 For traction work, the best suited motor is _____.
- Q.16 _____ is used as return conductor in electric traction system.
- Q.17 Insulating material is heated by _____ heating.
- Q.18 Name ANY one ECO friendly refrigerant.
- Q.19 A mercury vapour lamp gives _____.
- Q.20 One Angstrom is _____.

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Enlist any five advantages of electric heating.
- Q.22 Explain the different methods of heat transfer.
- Q.23 Compare Resistance and Arc Welding.
- Q.24 Differentiate TIG and MIG welding.