

- Q.25 State and explain Faraday's Law of Electro-deposition.
- 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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Roll No.

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 braking 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) Proofreading

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.