Q.25 State Faraday's Law of Electro-deposition.

Q.26 What is galvanising and write its application.

Q.27 Enlist the various application of electrolysis.

Q.28 Define refrigerant and state its desirable properties.

Q.29 Explain Vapour compressor refrigeration cycle.

Q.30 Compare Group drive and Individual drive.

Q.31 Discuss the role of flywheel with an electric drive.

Q.32 Differentiate CFL and LED lamps.

Q.33 Explain different categories of Railway services.

Q.34 Enlist any five advantages of electric traction system

Q.35 Write short note on mercury vapour lamp.

SECTION-D

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

Q.36 Explain Laws of Illumination.

Q.37 Draw the block diagram of Electric locomotive and explain it in detail.

Q.38 Draw and explain the electrical circuit used in water cooler.

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6th Sem / Elect, Power Station Engg., Elect & Eltx Engg.

Subject:- Utilization of Electrical Energy

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Induction heating process is based on

a) Electro-magnetic induction principle
b) Resistance heating principle
c) Thermal ion release principle
d) Nucleate heating principle

Q.2 The metal surface for resistance welding should be

a) Moisturized b) Cleaned
c) Lubricated d) rough

Q.3 Where does pure metal gets deposited after passing current?

a) Cathode b) Anode
c) Electrolyte d) Negative pole

Q.4 Which of the following motors are preferred for traction motor

a) Universal motor
b) DC Series motor
c) Synchronous motor
d) Three phase induction motor

Q.5 The bank of tubes at the back of domestic refrigerator is

a) Condenser tubes
b) Evaporator tubes
c) Refrigerant cooling tubes
d) Capillary tubes

Q.6 The reversal of rotation of motor for electric braking is known as

a) Regenerative braking
b) Plugging
c) Dynamic braking
d) none

Q.7 In individual drive the operator has_____ control of his machine

a) No b) Less
c) Complete d) Constant

Q.8 Which of the following happens in Kando system?

a) Three phase A.C is converted into D.C.
b) Single phase A.C is converted into D.C.
c) Single phase supply is converted into three phase system
d) None of the above

Q.9 Candela is the unit of which of the following?

a) Wavelength b) Luminous intensity
c) Luminous flux d) Frequency

Q.10 A solid angle is expressed in terms of_____

a) Radian/meter b) Steradian
c) radians d) degree

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Define coefficient of utilization.

Q.12 TIG stands for_____.

Q.13 The Negatively charged ions are known as_____

Q.14 One TON is equal to_____ kilo calories per hour.

Q.15 Dielectric heating is used for heating of_____ materials.

Q.16 Direction of DC series motor can be reversed by_____.

Q.17 Most popular current collector is_____

Q.18 Name any one ECO-friendly refrigerant.

Q.19 The colour of sodium vapour discharge lamp is_____

Q.20 The initial cost of individual Drive is_____ than Group Drive.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Enlist any five desirable properties of heating element material.

Q.22 Explain principle of Dielectric heating.

Q.23 Compare TIG and MIG Welding.

Q.24 Differentiate AC and DC electric welding.