

- Q.25 Explain different types of earthing. (CO3)
 Q.26 Explain the principle of mutual induction in the transformer. (CO2)
 Q.27 Write a note on AC on a pure capacitor. (CO1)
 Q.28 Difference between DC series and shunt motor. (CO1)
 Q.29 Write the different applications of AC motors. (CO2)
 Q.30 Write the EMF equation for the transformer. (CO2)
 Q.31 Explain the various types of wiring. (CO4)
 Q.32 Define electric welding and explain its types. (CO3)
 Q.33 Explain the working principle of moving coil instruments. (CO5)
 Q.34 Write a note BJT. (CO6)
 Q.35 State the difference between analog and digital circuits. (CO6)

SECTION-D

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

- Q.36 Explain the construction, working of the squirrel cage induction motor. Also write its applications. (CO2)
 Q.37 Why CE amplifiers are used over CB and CC. Explain its working principle. (CO6)
 Q.38 Classify and describe various methods of earthing with their diagram. (CO4)

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3rd Year / Advance Diploma in Tool and Die Making
Subject:- Electrical and Electronics Engineering

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 The positively charged ions are known as (CO1)
 a) Protons b) holes
 c) anions d) cations
 Q.2 A transistor has _____ terminals (CO6)
 a) 1 b) 2
 c) 3 d) 4
 Q.3 Two resistance of 4 ohm and 4 ohm are connected in series. Total resistance will be. (CO1)
 a) 2 ohm b) 6 ohm
 c) 4/3 ohm d) 8 ohm
 Q.4 The street lighting bulbs are connected in _____ (CO3)
 a) Parallel b) Series
 c) Invested series d) none
 Q.5 The primary and secondary of a transformer are _____ coupled but _____ connected. (CO2)
 a) magnetically, not electrically
 b) electrically, not magnetically

- c) magnetically, also magnetically
d) electrically, also electrically
- Q.6 EMF induced in secondary winding of transformer is _____ (CO2)
- a) Statically induced EMF
 - b) Self induced EMF
 - c) Mutual induced EMF
 - d) Dynamically induced EMF
- Q.7 The most modern methods for food processing is _____ (CO3)
- a) Eddy current heating
 - b) Dielectric heating
 - c) Induction heating
 - d) Resistance heating
- Q.8 Which configuration is used in the amplifier? (CO6)
- a) common-emitter b) common-base
 - c) common-collector d) all of the above
- Q.9 Logic gates are the circuits which allow _____ (CO6)
- a) Only 0 or 1 to pass through
 - b) HI voltage and LOvolt to pass through
 - c) Truth and false values
 - d) All of the above
- Q.10 Earth wire or ground wire is made of _____ (CO4)
- a) copper b) aluminum
 - c) iron d) galvanized steel

SECTION-B

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

- Q.11 Give any two applications of DC series motors. (CO2)
- Q.12 Unit of resistance is _____ (CO1)
- Q.13 UJT stands for _____ (CO6)
- Q.14 The resistance of earth wire should be _____ (CO4)
- Q.15 Starting torque of a DC series motor is _____ (CO2)
- Q.16 Dielectric heating is used to heat _____ materials. (CO3)
- Q.17 Wattmeter is used for _____ (CO5)
- Q.18 Draw symbol of transistor. (CO6)
- Q.19 Name two thyristor family devices. (CO6)
- Q.20 Frequency of DC is _____. (CO1)

SECTION-C

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

- Q.21 Define time period, average value, peak factor. (CO1)
- Q.22 Explain the different types of starting of the induction motor. (CO2)
- Q.23 Write a note on transistor diodes. (CO6)
- Q.24 Explain the universal gates and truth table. (CO6)