

- Q.28 Define current and energy with its unit, explain the instrument by which it measure.
- Q.29 Draw a multimeter block diagram of a CRO.
- Q.30 Explain the principle of measurement of DC current.
- Q.31 Define semiconductor, explain in detail extrinsic semiconductor.
- Q.32 Define Digital electronics, explain binary and hexadecimal number.
- Q.33 Explain the general principle of D/A conversion techniques.
- Q.34 Explain EX and OR gate with its symbols.
- Q.35 What is PLC, Draw its block diagram.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Define electric motor, explain connection of three phase motor by star delta starter.
- Q.37 Explain :-
- Boolea Algebra
 - Demorgan Theorem
- Q.38 Define Foundation, also explain the various foundations using heavy and light machine.

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3rd Sem / Plastic Engineering Subject:- Engineering Fundamentals

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Name the instrument by which power is measured.
- Wattmeter
 - Energy meter
 - Voltemeter
 - Ammeter
- Q.2 An ammeter is an electrical instrument used to measure.
- Current
 - Voltage
 - Resistance
 - None of them
- Q.3 Current flow in a circuit.
- A switch is open
 - A switch is closed
 - Switch is neutral
 - There is no voltage
- Q.4 How many types of semiconductor are.
- 1
 - 2
 - 4
 - 3
- Q.5 Bridge rectifier is an alternative for.
- Full wave rectifier
 - Half wave rectifier

- c) Peak rectifier d) None of them
- Q.6 A zener diode has _____ Breakdown voltage.
- a) Undefined b) Sharp
- c) Zero d) None of them
- Q.7 Machine Foundation is subjected to.
- a) Dynamic Load b) Static Load
- c) Wind Load d) Both a and b
- Q.8 The current which change its direction is known as.
- a) Direct current b) Indirect current
- c) Steady direct current d) none of them
- Q.9 Electric motor converts electric energy in to _____ energy.
- a) Light b) Heat
- c) Chemical d) Mechanical
- Q.10 An auto transformer starter is suitable for.
- a) Star connected induction motor
- b) Delta connected induction motor
- c) Both a and b
- d) None of them

SECTION-B

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

- Q.11 Define electrical energy.

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- Q.12 Give the instrument by which energy measure.
- Q.13 What is the symbol of AND gate.
- Q.14 Define power.
- Q.15 How many types of vibration.
- Q.16 Write name of the different types of vibration.
- Q.17 Full form of PLC
- Q.18 Define starter
- Q.19 Define frequency.
- Q.20 Define Hexadecimal number.

SECTION-C

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

- Q.21 Define the following electrical quantities :-
- a) Electrical Energy
- b) Electrical Power with their units
- Q.22 Define motor, explain three phase motor with its application.
- Q.23 Explain full wave rectifier with neat sketch.
- Q.24 Define NOR and NOT gate with its symbol.
- Q.25 Define foundation and their salient features.
- Q.26 Write a short note on construction material.
- Q.27 Explain the general methods for alignment/ leveling of a machine.

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