

Q.18	What are the uses of a diode?	(CO6)
Q.19	Explain what an induction motor is.	(CO5)
Q.20	What is stepper motor used for?	(CO6)
Q.21	List the main types of transistors.	(CO6)
Q.22	What is the purpose of a rectifier?	(CO7)

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3rd Year / Advance Diploma in Tool & Die Making

Subject:- Basics of Electrical and Electronics Engineering

Time : 3Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

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|-----|--|----|------------------|
| Q.1 | What is the unit of electrical current? (CO1) | | |
| a) | Volt | b) | Ampere |
| c) | Ohm | d) | Watt |
| Q.2 | Which of the following laws relates to the flow of current in a circuit? (CO2) | | |
| a) | Newton's Law | b) | Ohm's Law |
| c) | Bernoulli's Principle | d) | Hooke's Law |
| Q.3 | What does a transformer do? (CO4) | | |
| a) | Increase voltage | b) | Decrease voltage |
| c) | Change AC to DC | d) | Both a and b |

(Note : Course outcome/CO is for office use only)

Q.4 Which device allows current to flow in one direction only? (CO5)

- a) Resistor
- b) Capacitor
- c) Diode
- d) Inductor

Q.5 The back EMF in a DC motor helps to : (CO3)

- a) Increase speed
- b) Reduce speed
- c) Protect the motor
- d) None of the above

Q.6 An AC current varies: (CO1)

- a) Constantly
- b) Randomly
- c) Periodically
- d) Linearly

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The peak value of AC is always _____ than the RMS value . (CO1)

Q.8 In a DC circuit, the flow of current is _____. (CO2)

Q.9 A simple electric circuit requires a _____, a load, and a power source. (CO1)

Q.10 The main function of a diode is to allow current to flow in _____ direction(s). (CO5)

Q.11 The _____ measures the voltage in a circuit. (CO3)

Q.12 A motor converts electrical energy into _____ energy. (CO4)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 What is the difference between AC and DC? (CO1)

Q.14 State Ohm's Law in simple terms. (CO2)

Q.15 How does a transformer work? (CO4)

Q.16 What is electromagnetic induction? (CO3)

Q.17 Describe the basic working of a DC motor. (CO5)