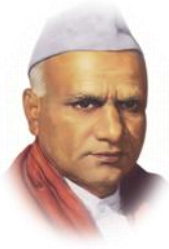


"ज्ञान, विज्ञान आणि सुसंस्कार यासाठी शिक्षण प्रसार"



शिक्षणमहर्षी- डॉ साळुंखे बापूजी .

**Shri Swami Vivekanand Shikshan Sanstha's**  
**Dattajirao Kadam Arts, Science &**  
**Commerce College, Ichalkaranji**  
**Department of Physics**



## Question Bank

### “COC-I - Maintenance and Repairs of Domestic Appliances”

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#### Fill in the blanks.

- 1) \_\_\_\_\_ is the S. I unit of resistor.
- 2) Electric kettle is working on the principle of \_\_\_\_\_ effect.
- 3) Potential difference is directly proportional to \_\_\_\_\_; this is known as Ohms law.
- 4) The frequency of A.C current in India is commonly \_\_\_\_\_ Hz.
- 5) Voltmeter is used to measure the \_\_\_\_\_

#### Multiple choice questions (MCQ)

1. Which of the following is the standard voltage for household appliances in India?
  - a) 110V
  - b) 230V
  - c) 415V
  - d) 12VAnswer: b) 230V
2. What is the purpose of a fuse in electrical appliances?
  - a) To increase current flow
  - b) To provide an alternative power source
  - c) To protect appliances from overcurrent

d) To step down voltage

Answer: c) To protect appliances from overcurrent

3. Earthing is used in electrical appliances to:

a) Increase the voltage

b) Prevent electric shocks

c) Improve efficiency

d) Reduce noise

Answer: b) Prevent electric shocks

4. Which tool is commonly used to check voltage in electrical appliances?

a) Ammeter

b) Multimeter

c) Voltmeter

d) Oscilloscope

Answer: b) Multimeter

5. The primary function of a circuit breaker is to:

a) Convert AC to DC

b) Protect circuits from overload

c) Provide constant voltage

d) Reduce resistance

Answer: b) Protect circuits from overload

6. What type of motor is commonly used in ceiling fans?

a) DC motor

b) Synchronous motor

c) Induction motor

d) Stepper motor

Answer: c) Induction motor

7. The efficiency of a transformer depends on:

a) The type of core material

b) The frequency of the AC supply

c) The turns ratio

d) All of the above

Answer: d) All of the above

8. Which part of an electric motor is responsible for producing the rotating magnetic field?

- a) Rotor
- b) Stator
- c) Brushes
- d) Commutator

Answer: b) Stator

9. The step-down transformer reduces:

- a) Power
- b) Current
- c) Voltage
- d) Resistance

Answer: c) Voltage

10. The brushes in a DC motor are made of:

- a) Copper
- b) Aluminum
- c) Carbon
- d) Plastic

Answer: c) Carbon

11. Which heating element is commonly used in electric irons?

- a) Nichrome wire
- b) Copper wire
- c) Tungsten wire
- d) Aluminum foil

Answer: a) Nichrome wire

12. In a geyser, which component is responsible for heating water?

- a) Thermostat
- b) Heating coil
- c) Copper tube
- d) Fuse

Answer: b) Heating coil

13. The thermostat in an electric iron controls:

- a) The voltage applied
- b) The pressure applied
- c) The temperature setting
- d) The weight of the iron

Answer: c) The temperature setting

14. What happens if the heating coil of a geyser breaks?

- a) The water will be heated more
- b) The water will not heat
- c) The current will increase
- d) The geyser will work normally

Answer: b) The water will not heat

15. Which appliance does not use a heating coil?

- a) Electric heater
- b) Refrigerator
- c) Electric kettle
- d) Toaster

Answer: b) Refrigerator

16. The working principle of a refrigerator is based on:

- a) Joule's law
- b) Second law of thermodynamics
- c) Ohm's law
- d) Faraday's law

Answer: b) Second law of thermodynamics

17. The refrigerant used in modern refrigerators is:

- a) Ammonia
- b) Freon (R-134a)
- c) Carbon dioxide
- d) Oxygen

Answer: b) Freon (R-134a)

18. The compressor in a refrigerator is used to:

- a) Cool the refrigerant

- b) Increase the pressure of the refrigerant
- c) Reduce noise
- d) Control temperature

Answer: b) Increase the pressure of the refrigerant

19. What is the function of the evaporator coil in a refrigerator?

- a) Heats the refrigerant
- b) Compresses the gas
- c) Absorbs heat from the food items
- d) Converts refrigerant to liquid

Answer: c) Absorbs heat from the food items

20. What is the typical operating temperature range of a domestic refrigerator?

- a)  $-10^{\circ}\text{C}$  to  $0^{\circ}\text{C}$
- b)  $0^{\circ}\text{C}$  to  $10^{\circ}\text{C}$
- c)  $-18^{\circ}\text{C}$  to  $5^{\circ}\text{C}$
- d)  $10^{\circ}\text{C}$  to  $20^{\circ}\text{C}$

Answer: c)  $-18^{\circ}\text{C}$  to  $5^{\circ}\text{C}$

### **Short Answer type questions.**

- 1) Explain types of electrical iron.
- 2) Discuss the safety precaution sin shock treatments.
- 3) What is the difference between the AC and DC voltage?
- 4) What are the different types of loud speakers?
- 5) Define Ohms law.
- 6) What are the types of Resistors?

### **Long answer type questions.**

- 1) Discuss the power amplifier and its uses.
- 2) Explain the mechanism of CRO.
- 3) What are different types of capacitors?
- 4) Explain Tube light with circuit diagram.

- 5) write a note on construction and principle of Electrical room heater.
- 6) Explain the construction, principle and working of transformers.
- 7) Discuss the construction and principles of electrical stoves.
- 8) Explain the construction, principle and working electric bell, buzzers.
- 9) What are LC filter, RC filter, and PHI filter?
- 10) Discuss the Alternating and Direct current.