

Total number of printed pages : 2

NB-T/E(V)/1

2024

**Electronics (Vocational)**

Total marks: 50

Time : 2 hours

**General instructions:**

- i) Approximately 10 minutes is allotted to read the question paper and revise the answers.
- ii) All questions are compulsory.
- iii) The question paper consists of 21 questions.
- iv) Marks allocated to every question are indicated against it.
- v) Write the correct question number in your answer sheet to indicate the option being attempted.

**N.B:** Check that all pages of the question paper are complete as indicated on the top left side.

**1. Choose the correct answer from the given alternatives: 10x1=10**

- i. The strength of magnetic field is
  - (a) Volt
  - (b) Newton per coulomb
  - (c) Tesla
  - (d) Coulomb per second
- ii. With the circuit, a fuse is always connected in
  - (a) Parallel
  - (b) Series
  - (c) Both parallel and series
  - (d) Star
- iii. If the mixer grinder shuts down automatically, then it could be a problem of
  - (a) Loose blade
  - (b) Crack in the jar
  - (c) Faulty wiring
  - (d) Broken coupler
- iv. In a microwave oven, the cooking surface is generally made up of ceramic or
  - (a) Enamel
  - (b) Copper
  - (c) Silver
  - (d) Glass
- v. What is the safest distance to keep from all electrical panels?
  - (a) 3 feet
  - (b) 4 feet
  - (c) 5 feet
  - (d) 5 feet
- vi. Under which type of fire does cooking oils and fats come?
  - (a) Type A
  - (b) Type C
  - (c) Type D
  - (d) Type K
- vii. Stress generated by pent up worries; frustration and apprehension in inner self is called
  - (a) Internal stress
  - (b) Survival stress
  - (c) Environmental stress
  - (d) Work related stress
- viii. A recycled file will get stored in which folder?
  - (a) Downloads
  - (b) Document
  - (c) Recycle bin
  - (d) Pictures
- ix. Which of the following is not a characteristic of a successful entrepreneur?
  - (a) Self confident
  - (b) Risk taking
  - (c) Action oriented
  - (d) Indecisive
- x. Which of the following is a primary goal of sustainable development?
  - (a) Making government policies
  - (b) Economic growth
  - (c) School administration
  - (d) Weather forecast

**Answer the following questions in one word or one sentence:**

- 2. What is a motor? 1
- 3. What is the basic working principle of home appliances in house hold applications? 1
- 4. Name any two products with small energy rating label. 1
- 5. Write any two types of operating system in computer. 1
- 6. What is self awareness? 1
- 7. State one myth and reality of an entrepreneur. 1
- 8. What are electrical hazards? 1
- 9. Write one objective of sustainable development goals. 1

**Answer the following questions in 20-50 words:**

- 10. Differentiate between DC and AC fuses. 2
- 11. Write the steps to change rotary incher switch. 2
- 12. What is non verbal communication? Mention any two components of non verbal communication. 1+1=2
- 13. Name any two types of juicers and write their uses. 1+1=2
- 14. What is the problem if microwave appears dead? Write one factor that may cause this condition. 1+1=2
- 15. What are standard operating procedures (SOP)? Name a material that can be used to remind workers of chemical hazards. 1+1=2
- 16. 'Being able to act quickly in an emergency situation is paramount to an electrician's working life'. Justify the statement with two points. 2
- 17. State Fleming's Right Hand Rule. 2

**Answer the following questions in 60-100 words:**

- 18. (a) Explain briefly any two parts of motors. 4  

**Or**

  - (b) Explain briefly electromechanical relays and solid state relays.
- 19. Explain any two ways to clean mixer grinder. 4
  - 20. (a) Explain any four ways in which you can perform trouble shooting of micro oven. 4  

**Or**

  - (b) Explain any four ways to maintain microwave oven.
- 21. Write four ways to protect oneself from electrical hazards. 4

\*\*\*\*\*