

Total number of printed pages : 2

NB-XII/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.

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. Which of the following implies using ears to receive the sound created in the form of speech?
 - (a) Sharing
 - (b) Hearing
 - (c) Focus
 - (d) Filtering
 - ii. Promotions, incentives, rewards are examples of
 - (a) Intrinsic motivation
 - (b) Self-motivation
 - (c) Extrinsic motivation
 - (d) Self-reflection
 - iii. File, edit, view, insert are options available in
 - (a) Tool bar
 - (b) Menu bar
 - (c) Formula bar
 - (d) Status bar
 - iv. Which of the following is not a part of solid waste management?
 - (a) Recycling
 - (b) Composting
 - (c) Waste to energy conversion
 - (d) Water treatment
 - v. A protective device used in electrical circuit to protect against electric shock is
 - (a) AFCI
 - (b) GFCI
 - (c) GMI
 - (d) TPS
 - vi. An electromechanical device installed to protect the circuit against overload, overcurrent or short circuit is called
 - (a) Transformer
 - (b) Generator
 - (c) Fuse
 - (d) Capacitor
 - vii. Which of the following material is used to manufacture an enclosure of load centre?
 - (a) Iron
 - (b) Copper
 - (c) Wood
 - (d) Galvanized steel
 - viii. Which of the following is not the control scheme of the VFD?
 - (a) Scalar control
 - (b) Vector control
 - (c) Direct torque control
 - (d) Indirect torque control
 - ix. The rotating part of a motor is the
 - (a) Starter
 - (b) Carbon brush
 - (c) Armature
 - (d) Stator
 - x. Class C extinguisher is used to extinguish fire caused by
 - (a) Gasoline, gas
 - (b) Plastic, paper
 - (c) Combustible metal
 - (d) Electrical cables, wires

Answer the following questions in one word or one sentence:

- 2. What is the role of flanges in a busway? 1
- 3. Define earthing. 1
- 4. What is panel board? 1
- 5. What is the use of slip ring in induction motors? 1
- 6. What does PLC stand for? 1
- 7. What are energy meters? 1
- 8. What is self-motivation? 1
- 9. State one use of spreadsheet. 1

Answer the following questions in 20-50 words:

- 10. What is bus bar? List the materials from which standard bus bar are made up. 1+1=2
- 11. Mention any two stages of active listening. 2
- 12. Differentiate between lighting and appliance panel board and power panel board. 2
- 13. What is a switch board? Where is it used? 1+1=2
- 14. State Flemming's left hand rule. 2
- 15. What is human machine interference (HMI)? Name any two basic types of HMI. 1+1=2
- 16. What is potential transformer? Write its uses. 1+1=2
- 17. Write any two characteristics of an entrepreneur. 2

Answer the following questions in 60-100 words:

- 18.(a) What is a transformer? Explain briefly any three parts of a transformer. **1+3=4**
Or
(b) Explain briefly the concept of a three phase transformer. (4)
- 19. Explain the working principle of a fuse. 4
- 20. Explain briefly any four components of a load centre. 4
- 21. (a) Explain briefly three parts of electrical drive and state one application. **3+1=4**
Or
(b) List any four electrical rescue techniques under hazards and solutions. (4)

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NB-XII/AG(V)/1

2024

Agriculture (Vocational)

Total marks: 50

Time: 2 hours

General instructions:

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- ii) All questions are compulsory.
- iii) The question paper consists of 21 questions.
- iv) Marks allocated to every question are indicated against it.

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. Which of the following is a vital component of building communication skills?
 - (a) Active listening
 - (b) Understanding
 - (c) Selective listening
 - (d) Evaluating
 - ii. In a spreadsheet, a formula must always begin with
 - (a) A greater than
 - (b) A less than
 - (c) An equal sign
 - (d) A % sign
 - iii. A business that has just begun to operate is called
 - (a) Services
 - (b) Firms
 - (c) Schemes
 - (d) Start up
 - iv. Which of the following produce goods or services that conserve natural resources or benefit the environment?
 - (a) Eco club
 - (b) Green club
 - (c) Green jobs
 - (d) Green tourism
 - v. Which irrigation technique distributes water to crops using a network of mainlines?
 - (a) Pulley system
 - (b) Drip irrigation
 - (c) Sprinkler system
 - (d) Surface irrigation
 - vi. The utilization of pests natural enemies is known as
 - (a) Cultural method
 - (b) Biological method
 - (c) Chemical control
 - (d) Physical control
 - vii. Which of the following is the fastest growing grass species?
 - (a) Blue grass
 - (b) Rye grass
 - (c) Bent grass
 - (d) Bermuda grass
 - viii. Growing a variety of plants in pots from the windowsill is called
 - (a) Indoor gardening
 - (b) Window gardening
 - (c) Miniature gardening
 - (d) Hanging gardening
 - ix. A fragrant, low growing creeper that can be used in cooking or as a substitute for grass
 - (a) English ivy
 - (b) Thyme
 - (c) Periwinkle
 - (d) Pachysandra
 - x. Kiwis, blackberries and grapevines are examples of
 - (a) Ornamental plants
 - (b) Trailing plants
 - (c) Hedge plants
 - (d) Vine plants

Answer the following questions in one word or one sentence:

- 2. What is manure? 1
- 3. What are pests? 1
- 4. Define mulching. 1
- 5. Which is the fastest technique of preparing a lawn? 1
- 6. What is arboretum? 1
- 7. Name any two ornamental plants. 1
- 8. What is self-motivation? 1
- 9. Name any two electronic spreadsheet. 1

Answer the following questions in 20-50 words:

- 10. Differentiate between service and business entrepreneurs. 2
- 11. State any two advantages of sprinkler system. 2
- 12. Differentiate between selective and non-selective herbicide. 2
- 13. What is pruning? Write one benefit of pruning. 1+1=2
- 14. Write any two operations performed for maintaining lawns. 2
- 15. Write any two scopes of landscaping. 2
- 16. Differentiate between climbers and creepers. 2
- 17. Write any two actions involved in active listening. 2

Answer the following questions in 60-100 words:

- 18. (a) Explain briefly the different methods of applying fertilizers. 4

Or

(b) What is a lawn? State three importance's of maintaining a lawn. (1+3=4)
- 19. (a) List any four damages by pests or insects. 4

Or

(b) Explain briefly any four common weeds of ornamental crops. 4
- 20. List any four importance's of garden design. 4
- 21. Explain briefly any four advantages of using creepers and climbers in landscaping. 4
