

2020
CLASS - IX
ELECTRONICS & HARDWARE (Vocational)

Total marks : 50

Time : 2 hours

General instructions :

- i) All questions are compulsory except Q. nos.18 to 23 where general option is given.
- ii) The question paper consists of 23 questions.
- iii) 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 connection is used for domestic wiring?
 - (a) Open
 - (b) Parallel
 - (c) Closed
 - (d) Series
- ii. What is the S.I unit of Resistance?
 - (a) Watt
 - (b) Ampere
 - (c) Power
 - (d) Ohms
- iii. How many terminal electronic components a diode is said to have?
 - (a) 2
 - (b) 3
 - (c) 4
 - (d) 5
- iv. The principle of the working of a transformer is
 - (a) magnetic flux
 - (b) primary winding
 - (c) mutual induction
 - (d) electromagnetic induction
- v. Multi-Meter is also known as
 - (a) Tester
 - (b) Di-tester
 - (c) Dual tester
 - (d) Multi-tester
- vi. Who was the first person to successfully used chlorine to disinfect water supply?
 - (a) John Snow
 - (b) G.W Fuller
 - (c) William Soper
 - (d) Francis Bacon
- vii. Straight body posture is seen as
 - (a) tiredness
 - (b) nervousness
 - (c) boastfulness
 - (d) confidence
- viii. Planning concrete goals to be accomplished within a set timeframe.
 - (a) Time management
 - (b) Goal setting
 - (c) Team work
 - (d) Positive thinking
- ix. A bold project that is taken to fulfil the needs of society which no one has ever addressed is known as
 - (a) business
 - (b) entrepreneurship
 - (c) enterprise
 - (d) opportunity
- x. Which of the following is an example of non renewable resources?
 - (a) Coal
 - (b) Solar
 - (c) Wind
 - (d) Water

Answer the following questions in one word or one sentence:

- 2. What is a rectifier? 1
- 3. What does LED stand for? 1
- 4. What is TDS meter used for? 1
- 5. Who are considered the father of microscopy? 1
- 6. What is meant by water purification? 1
- 7. Write any two diseases caused by water pollution. 1
- 8. State any two qualities of successful entrepreneurs. 1
- 9. What is recycling? 1

Answer the following questions in 20-50 words:

- 10. Find the equivalent resistance, if three resistances of 10 Ohm each are connected in a series. 2
- 11. Mention any four basic electronic components. 2
- 12. Name any two types of diode and draw their symbols. 1+1=2
- 13. State any two advantages of digital meter over analog meter. 2
- 14. What is desoldering? Name any two desoldering tools. 1+1=2
- 15. Write any two steps of activating the filter. 2
- 16. Mention any four basic principles of professional communication skills. 2
- 17. List any four self management skills. 2

Answer any four from the following questions in 60-100 words:

- 18. Explain Kirchhoff Current Law with the help of diagram. 2+2=4
- 19. Draw the parallel and series circuit and explain it. 2+2=4
- 20. What is a capacitor? Briefly explain the two types of capacitor. 1+3=4
- 21. Name any four parts of a multi-meter and write their functions. 4
- 22. Explain any two techniques of water purification. 4
- 23. Explain any four uses of internet in our daily life. 4
