

2025

Automotive (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 part of the wheel is used to inflate and deflate the tyres?
 - (a) Lug hole
 - (b) Valve system
 - (c) Wheel hub
 - (d) Wheel rim
- ii. The function of the lubrication system is to
 - (a) Remove additional heat
 - (b) Lower temperature
 - (c) Increase air flow
 - (d) Reduce friction
- iii. Which of the following tool is used in automobile workshop to check the vehicle status through the ECU of the vehicle?
 - (a) Diagnostic tool
 - (b) Battery hydrometers
 - (c) Bottle jack
 - (d) Nut splitters
- iv. A wrench that has one open end and one box end of the same size is called
 - (a) Adjustable wrench
 - (b) Socket wrench
 - (c) Combination wrench
 - (d) Allen wrench
- v. This filter is also called as primary oil filter
 - (a) Cartridge oil filter
 - (b) Fuel-flow oil filter
 - (c) Spin-on oil filter
 - (d) Spinner oil filter
- vi. Which of the following is not a good quality of good customer service in automotive workshop?
 - (a) Empathy
 - (b) Being impatient
 - (c) Active listening
 - (d) Having positive attitude
- vii. It enables secure communication between vehicles as well as vehicle and traffic infrastructure
 - (a) Internet of things
 - (b) Global positioning system
 - (c) Computer vision
 - (d) Engine control unit
- viii. Communication which enables us to share our thoughts with each other by using words are
 - (a) Non-verbal communication
 - (b) Verbal communication
 - (c) Visual communication
 - (d) Graphic communication
- ix. The act of performing something without expecting any apparent external rewards is known as
 - (a) Self-awareness
 - (b) Self-regulation
 - (c) Extrinsic motivation
 - (d) Intrinsic motivation

- x. Which of the following entrepreneurial function involves hiring people for various positions in the organization structure?
 - (a) Directing
 - (b) Staffing
 - (c) Controlling
 - (d) Coordination

Answer the following questions in one word or one sentence:

- 2. What is a chassis? 1
- 3. List any two uses of feeler gauge in automobile workshop. 1
- 4. Why is wax applied over the vehicle surface? 1
- 5. What is empathy in customer service? 1
- 6. State one use of GPS trackers in car navigation system. 1
- 7. What is non-verbal communication? 1
- 8. What is self-awareness? 1
- 9. List any two qualities of a successful entrepreneur. 1

Answer the following questions in 20-50 words:

- 10. What are tyres? Name the two types of tyres. 1+1=2
- 11. Write the steps to use scissor jack. 2
- 12. What is engine oil? Name the two main elements of engine oil. 1+1=2
- 13. Write two causes of coolant loss. 2
- 14. Who is an automobile salesperson? Mention one skill an automobile salesperson should possess. 1+1=2
- 15. What is hybrid vehicle? Name any two popular cars that offer hybrid vehicle technology. 1+1=2
- 16. What is antivirus software? Name one antivirus software. 1+1=2
- 17. Write any two main principles of sustainable development. 2

Answer the following questions in 60-100 words:

- 18.a. Explain briefly the working of four stroke IC engine. 4

Or

- b. Explain briefly any four common hand tools used to perform automotive service technician jobs.

- 19.a. Explain four types of engine oil. 4

Or

- b. Explain briefly four signs to identify if the air filter needs to be replaced or not.

- 20. Mention any four best practices to be followed by a good automobile salesperson. 4

- 21. Explain the working system of keyless entry and start system in vehicles. 4
