

Sample Question Paper- Automobile Mechanic Level 4

Instruction

There are 16 multiple choice questions & essay type questions which cover all 16 modules included for NVQ Level 4 qualification.

But, the common question paper contains 25 multiple choice questions (1.5 marks for each question) & several essay type questions (62.5 marks) which covers all 16 modules of NVQ Level 4 qualification.

Multiple Choice Questions

Underline **most suitable** answer.

- 1) Which is the advantage of using coolant than water?
 - i. Able to identify when leaking.
 - ii. Avoid rusting
 - iii. Avoid evaporation
 - iv. Above all

- 2) What is the suitable lubrication oil to be use for very new petrol engine?
 - i. SAE 40
 - ii. SAE 30
 - iii. DS 30
 - iv. DS 40

- 3) What is the purpose of needle valve & floater in a carburetor?
 - i. Control the speed of fuel flow.
 - ii. Give required fuel for high speed.
 - iii. Control fuel limit when engine is cold.
 - iv. Control the flow of fuel into floating chamber.

- 4) What is the correct fuel injection position in diesel engine?
- i. When suction stroke in bottom dead center.
 - ii. When compression stroke in top dead center.
 - iii. When compression stroke in before top dead center.
 - iv. When power stroke in after top dead center.
- 5) How wire winding in ignition coil?
- i. Primary winding in thin wire with many rounds.
 - ii. Secondary winding in thick wire with fewer rounds.
 - iii. Primary winding in thick wire with fewer rounds.
 - iv. Secondary winding in thick wire with many rounds.
- 6) Correct way of fixing the bolts in cylinder head?
- i. From center to sideways.
 - ii. From sideways to center.
 - iii. Spirally
 - iv. As per the workshop manual.
- 7) Brass cone in a gear box?
- i. Temporary separate engine & gear box.
 - ii. Equal the speed between gear wheel & sliding sleeve.
 - iii. Minimize the space between gear wheel & sliding sleeve.
 - iv. Stop the disengage of gear wheel & sliding sleeve.
- 8) What are the factors affected to change the gear in Automatic gear box?
- i. Engine load & vehicle load.
 - ii. Engine speed & vehicle load.
 - iii. Engine load & vehicle speed.
 - iv. Vehicle load & vehicle speed.

9) In a vehicle the rotated speed of crown wheel is 1000 revolutions per minute. If it's left wheel which is rotated with the live axle, rotates the speed of 1000 revolution per minutes. What is the it's right wheel speed?

- i. 500
- ii. 1000
- iii. 1500
- iv. 2000

10) How operates brake booster in brake system?

- i. Hydraulic presser.
- ii. Air presser
- iii. Air vacuum.
- iv. Not from all.

11) What type of lubrication oil is used in manual steering box?

- i. SAE 140
- ii. SAE 40
- iii. SAE 50
- iv. SAE 30

12) If tyre pressure is high in a vehicle?

- i. Waste in both sides of tyre.
- ii. Waste of inner side line of tyre
- iii. Waste in the middle of tyre.
- iv. Waste in outside line of tyre.

13) The standard position of the front wheels of front wheel drive vehicle is?

- i. Toe out
- ii. Toe in
- iii. Parallel
- iv. Horizontal

14) What instrument use to measure battery specific gravity ?

- i. Multimeter
- ii. Hydrometer
- iii. Ammeter
- iv. Dynamometer.

15) What is the rail pressure of common rail diesel system?

- i. 600 – 700 bar
- ii. 900 – 1000 bar
- iii. 1500 – 2400 bar
- iv. Above 2400 bar

16) Which Sensor does not included in ABS system?

- i. Air Temperature Sensor
- ii. Water Temperature Sensor
- iii. Fuel Temperature Sensor
- iv. Above all

Essay Questions.

01.

i. Name the parts in following ignition system.

ii. What is Dwell Angel?

iii. Why ignition knock happens. Give reasons?

02. I. Name the parts in following suspension system?

ii. How to test condition of shock absorber, explain briefly?

03.A. What is the formula use to find cylinder volume?

B. A four stroke four cylinder engine speed is 2600rpm. Its bore diameter is 80mm. If its stroke is 100mm, calculate engine capacity in (m³)?

04. Which data obtain from following sensors and also give the electronic systems?

Number	Sensor	Data obtained	Related Electronic system
01	Crank sensor	Ex. Give Engine RPM	Ex. EGR, EFI, Common Rail
02	Knock sensor		
03	Steering angle sensor		
04	Hall effect sensor		
05	Tyre air Pressure Sensor		

05. Stall test is done for Automatic gear box.

i. When this test done for an Automatic gear box?

- ii. What are the safety procedures taken within this test?
- iii. List out the way of doing this test?

06.

- i. Draw valve timing diagram & name its stages?
- ii. What is the mean of 165/65 R/4 in a tyre?
- iii. Write down chemical formula of lead acid battery charging?