

# Mechanic Motor Vehicle

Q. ID: ITISKILL4552UW

February 2026

Loyola ITI

Question Paper

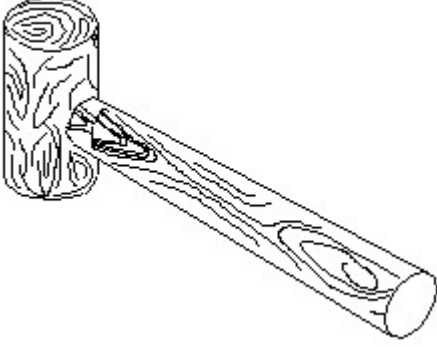
Duration: 30 Mins

Total Marks: 50

ID: ITISKILL4552UW

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

1. Identify the name of tool? | ಉಪಕರಣದ ಹೆಸರನ್ನು ಗುರುತಿಸುವುದೇ?



- A) Cross pein hammer | ಕ್ರಾಸ್ ಪೀನ್ ಸುತ್ತಿಗೆ  
B) Mallet | ಮ್ಯಾಲೆಟ್  
C) Ball pein hammer | ಬಾಲ್ ಪೀನ್ ಸುತ್ತಿಗೆ  
D) Straight pein hammer | ಸ್ಟ್ರೈಟ್ ಪೀನ್ ಸುತ್ತಿಗೆ

2. Which type of spring suspension responds quickly to road shocks? |

- A) Compression spring  
B) Helical spring  
C) Transverse spring  
D) Coil spring

3. What is the working principle of alternator?

- A) Electromagnetic induction  
B) Law of resistance  
C) Lenz's law  
D) Ohms law

4. What is the effect of defective injector?

- A) High oil pressure  
B) Engine does not start  
C) High fuel pressure  
D) Engine over heated

5. Which principle is applicable for hydraulic brakes?

- A) Newton's law of motion  
B) Boyle's law  
C) Pascal's law  
D) Hooke's law

6. Which system provided between axles and chassis frame?

- A) Steering system  
B) Braking system  
C) Suspension system  
D) Cooling system

7. What is the reason of faster wear out of tyre edges?

- A) Defective suspension system  
B) Under inflated tyre  
C) Un equal load distribution  
D) Over inflated tyre

8. Which rating indicate the braking capabilities of the tire to the consumer?

- A) Ply rating  
B) Tyre rating  
C) Traction rating  
D) Temperature rating

9. Which steering system will provide assistance even when the engine is not running?

- A) Electronic power steering  
B) Manual steering  
C) Linkage power steering  
D) Integral power steering

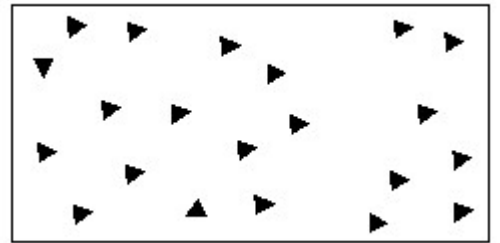
10. What is to be checked up if the engine overheats?

- A) Fuel level  
B) Hydraulic fluid level  
C) Electrolyte level  
D) Coolant level

11. Which affects the centre of gravity of the object

- A) Density  
B) Weight  
C) Shape  
D) Mass

12. Identify the conventional symbol of material? | ವಸ್ತುವಿನ ಕನ್ವೆಷನಲ್ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ?



- A) Glass | ಗಾಜು  
B) Steel | ಸ್ಟೀಲ್  
C) Wood | ಮರ  
D) Concrete | ಕಾಂಕ್ರೀಟ್

13. Which type of shock absorber absorbs shocks with the help of friction disc and spring?

- A) Electrical type  
B) Hydraulic type  
C) Mechanical type  
D) Pneumatic type

14. What is the purpose of air suspension?

- A) Increase the directional stability  
B) Reduce the space occupation  
C) Used for leveling purpose  
D) Reduce the suspension weight

15. What is the brake pedal free play range permitted while adjusting?

- A) 4 mm to 8 mm  
B) 13 mm to 18 mm  
C) 6 mm to 12 mm  
D) 8 mm to 10 mm

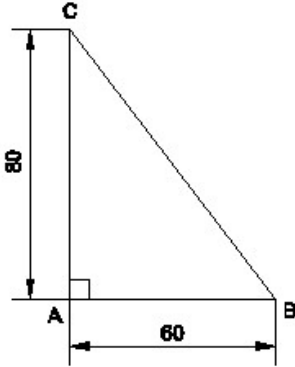
16. Which angle helps in self centering of wheels after negotiating a turn?

- A) Castor angle  
B) Included angle  
C) Camber angle  
D) King pin inclination

17. Which part of tyre referred as 'Crown'?

- A) Thread width  
B) Tyre width  
C) Thread radius  
D) Rim width

18. Identify the name of the triangle? | ತ್ರಿಕೋನದ ಹೆಸರನ್ನು ಗುರುತಿಸುವುದೇ?



- A) Isosceles triangle | ಸಮದ್ವಿಭಾಹು ತ್ರಿಕೋನ  
B) Right angle triangle | ಬಲ ಕೋನ ತ್ರಿಕೋನ  
C) Equilateral triangle | ಸಮಕೋನ ತ್ರಿಕೋನ  
D) Scalene triangle | ಸ್ಕೇಲಿನ್ ತ್ರಿಕೋನ

19. What does the no: 14PR denotes in the tyre specification 9? x 14 - 14PR?

- A) Bead circle dia  
B) Ply rating  
C) Tyre thickness  
D) Shoulder width

20. Where the centre of gravity of a circle lies?

- A) Any where on its diameter  
B) Any where on its circumference  
C) Any where on its radius  
D) At its centre

21. Which type of wheel consist two separate discs are clamped together?

- A) Wire wheel  
B) Split wheel

- C) Heavy vehicle  
D) Disc wheel

22. What is the possible cause of high fuel consumption?

- A) High fuel in the tank  
B) Wrong injection timing  
C) High compression pressure  
D) Low fuel in the tank

23. How the tyre height is calculated?

- A) Thread width + Tyre width  
B) Tyre outer dia - Rim dia  
C) Rim dia - tyre outer dia  
D) Tyre width + Bead circle dia

24. What is the steering linkage ratio if the pitman arm length twice of steering arm length?

- A) 02:03  
B) 02:01  
C) 02:01  
D) 01:02

25. What is the advantage of using run flat tyres?

- A) Resist vibration  
B) Less cost and maintance  
C) Eliminate head for spare tyre and jack  
D) Provide equal distribution of load

26. Why a diesel engine starts but not running idle?

- A) No air in fuel system  
B) Low fuel level in tank  
C) Low charged battery  
D) Clogged nozzle

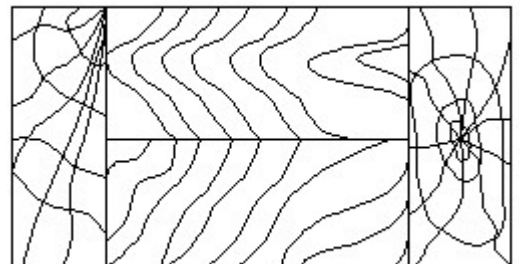
27. What is the purpose of ?V? pulley in the charging system?

- A) Drive the crank shaft  
B) Support rectifier mounting plates  
C) Rotate the alternator rotor  
D) Drive the cam shaft

28. What is the average power steering gear ratio followed in general?

- A) 20% less than manual steering  
B) 10% more than manual steering  
C) 40% less than manual steering  
D) Equal to manual steering

29. Identify the conventional symbol of material? | ವಸ್ತುವಿನ ಕನ್ವೆಷನಲ್ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ?



- A) Wood | ಮರ

- B) Glass | ಗಾಜು

C) Lead | ಲೀಡ್

D) Paper | ಪೇಪರ್

C) 9 - 10 Degree

D) 15 - 18 Degree

30. What is the permitted brake pedal travel in the hydraulic brake system?

A) 9 to 12 mm

B) 2 to 12 mm

C) 6 to 12 mm

D) 7 to 12 mm

31. What is the maximum air pressure supplied by the compressor in the air suspension system?

A) 120 to 125 PSI

B) 100 to 115 PSI

C) 180 to 210 PSI

D) 200 to 215 PSI

32. Which type of shock absorber is easy for replacement and handling?

A) Telescopic type

B) Mechanical type

C) Vane type

D) Piston type

33. What is the name of the point at which all the weight of the body concentrated?

A) Central point

B) Initial point

C) Centroid

D) Centre of gravity

34. Which state of equilibrium's example is, A cone resting on its base?

A) Neutral

B) Un-stable

C) Stable

D) Both A and B

35. Which device in the air suspension system observe vibration of low amplitude and high frequency?

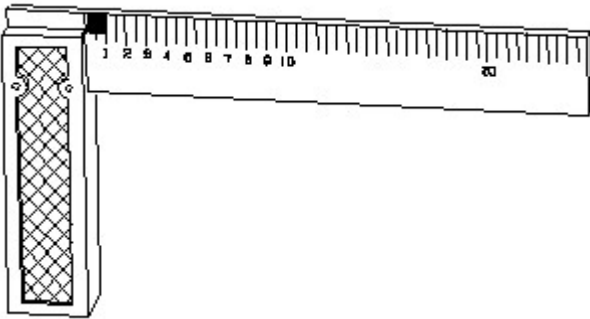
A) Shock absorber

B) Leaf spring

C) Air bags in the system

D) Suspension spring

36. 1). Identify the name of tool? | ಉಪಕರಣದ ಹೆಸರನ್ನು ಗುರುತಿಸುವುದೇ?



A) Feeler gauge | ಫೀಲರ್ ಗೇಜ್

B) Surface gauge | ಮೇಲ್ಮೈ ಮಾಪಕ

C) Steel rule | ಸ್ಟೀಲ್ ರೂಲ್

D) Try square | ಟ್ರೈ ಸ್ಕ್ವೇರ್

37. What is the recommended valve of combined angle in the steering system?

A) 12 - 15 Degree

B) 5 - 8 Degree

38. Where the airbags are located in the air suspension system?

A) Between frame and vehicle axle

B) Between high control valve and frame

C) Between air pressure regulator and front axle

D) Between brake tank and vehicle axle

39. What is the advantage of using nitrogen in the tyres?

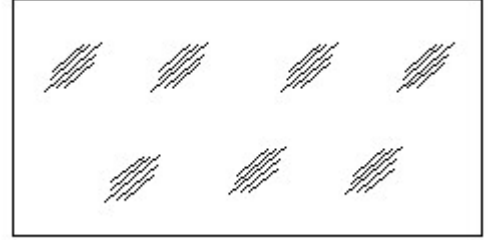
A) Observe shocks and vibration

B) Provide cushioning effect on the vehicle

C) Provide positive road grip

D) Increase the tyre life

40. Identify the conventional symbol of material? | ವಸ್ತುವಿನ ಕನ್ವೆಷನಲ್ ಚಿಹ್ನೆಯನ್ನು ಗುರುತಿಸಿ?



A) Concrete | ಕಾಂಕ್ರೀಟ್

B) Glass | ಗಾಜು

C) Wood | ಮರ

D) Steel | ಸ್ಟೀಲ್

41. What is the material used to make brake drum?

A) High carbon steel

B) Stainless steel

C) High speed steel

D) Special type cast iron

42. How the tyre is specified?

A) Shoulder width, Boad circle dia. Ply rating

B) Shoulder width, Tyre thickness

C) Ply rating, tyre inner circle dia, shoulder width

D) Shoulder dia, Bead circle dia, Ply rating

43. What is the use of compact spare tyres?

A) Withstand heavy load

B) Withstand high temperature

C) Used for breakdown

D) Used for high altitude

44. How the alternator field terminal is connected to the battery?

A) By voltage regulator

B) By indicator lamp

C) By charge indicator

D) By ignition switch

45. What is the name of distance between most protruding portions on both sides of tyre?

A) Tyre outer diameter

B) Thread radius

C) Tyre height

D) Tyre width

A)  $h/4$

B)  $h/3$

C)  $h/2$

D)  $h/5$

46. What will be the result of improper brake adjustment?

A) Steering wheel play

B) Vehicle pulling to one side

C) Wheel wobbling

D) Hard steering

47. What is the centre of gravity of a sphere?

A) At the diameter

B) At the radius

C) On the circumference

D) At the centre

48. What is the centre of gravity of a right circular cone from its base?

49. What is the disadvantage of independent suspension system?

A) Vibration damping is less effective

B) Shocks transmitted from one wheel to other

C) Spring weight is more

D) More maintenance cost

50. What is the advantage of coil spring?

A) Provide greater payload

B) Good load carrying capacity

C) Low space requirement

D) High steering and stability