

Duration: 30 Mins**Total Marks: 44****Q.ID: ITISKILL4465JO**

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

- A) Split wheel B) Heavy vehicle
C) Wire wheel D) Disc wheel

Answer: A) Split wheel

2. Which force acts on rivets?

- A) Tensile force B) Shear force
C) Bending force D) Compressive force

Answer: B) Shear force

3. What is the cause of 'Poor self centering' in a vehicle?

- A) Filter choked B) Low oil level
C) Loose wheel level D) Improper wheel alignment

Answer: D) Improper wheel alignment

4. What is the purpose of castor in wheel alignment?

- A) Convert steering torque input into voltage signal B) Reduce tyre wear
C) Reduce abnormal vibration D) Maintain directional stability and control

Answer: D) Maintain directional stability and control

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

- A) 12 - 15 Degree B) 9 - 10 Degree
C) 5 - 8 Degree D) 15 - 18 Degree

Answer: B) 9 - 10 Degree

6. What will be the effect of negative camber excessive in the wheel alignment?

- A) Inner edge of tyre wear out faster B) Outer edge of tyre wearout faster
C) Centre of tyre wearout faster D) Cracks developed in the tyre tread

Answer: A) Inner edge of tyre wear out faster

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

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

Answer: C) Thread radius

8. How the tyre height is calculated?

- A) Tyre outer dia - Rim dia B) Rim dia - tyre outer dia

- C) Thread width + Tyre width D) Tyre width + Bead circle dia

Answer: A) Tyre outer dia - Rim dia

9. What is the function of Rim in the wheel construction?

- A) Distribute the load equally B) Support the axle
C) Provides balancing of vehicle D) Holds the tyre in correct position

Answer: D) Holds the tyre in correct position

10. What is the advantage of using independent suspension system?

- A) Spring weight is less B) Maintenance cost is less
C) Shocks are transmitted from one wheel to other D) This is simple arrangement

Answer: A) Spring weight is less

11. Why rubber buffer is provided in the main spring of suspension system?

- A) Protect chassis frame from heavy jerk B) Provide steering control stability
C) Transfer the load equally D) Transfer payload smoothly

Answer: A) Protect chassis frame from heavy jerk

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

- A) Tyre height B) Tyre outer diameter
C) Thread radius D) Tyre width

Answer: D) Tyre width

13. What is the safe stress if the ultimate stress of a material is 35 kg/mm² and factor of safety is 5?

- A) 7 B) 0.143
C) 0.7 D) 1.43

Answer: A) 7

14. What is the disadvantage of rigid axle suspension system?

- A) Maintenance cost is more B) This is a complicated arrangement
C) Vibration damping is less effective D) Spring weight is less

Answer: C) Vibration damping is less effective

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

- A) Special type cast iron B) Stainless steel

- C) High carbon steel D) High speed steel

Answer: A) Special type castiron

16. Which system provided between axles and chassis frame?

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

Answer: B) Suspension system

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

- A) Between brake tank and vehicle axle B) Between high control valve and frame
C) Between air pressure regulator and front axle D) Between frame and vehicle axle

Answer: D) Between frame and vehicle axle

18. What is the cause of noise in steering?

- A) Defective torsion bar B) Defective flow control valve
C) Presence of air in the fluid D) High fluid level

Answer: C) Presence of air in the fluid

19. Which part of integral power steering reduce fluid pressure?

- A) Unloading valve B) Rotary valve
C) Flow control valve D) Torsion bar

Answer: A) Unloading valve

20. What is the main cause for wear on one side of tyre?

- A) Over inflation B) Under inflation
C) Improper camber D) Improper caster

Answer: C) Improper camber

21. What is the term used for maximum stress attained by a material before rupture?

- A) Ultimate stress B) Working stress
C) Tensile stress D) Compressive stress

Answer: A) Ultimate stress

22. What is the advantage of coil spring?

- A) High steering and stability B) Good load carrying capacity
C) Provide greater pay load D) Low space requirement

Answer: D) Low space requirement

23. What is the purpose of beads and plys provided in the tyre?

- A) Prevent tyre slip B) Resist vibration
C) Provide grippness on the surface D) Provide strength to tyre

Answer: D) Provide strength to tyre

24. What is the ratio between ultimate stress to working stress?

- A) Young's modulus B) Bulk modulus
C) Factor of safety D) Modulus of rigidity

Answer: C) Factor of safety

25. What is the cause of ? low pressure? in the hydraulic power steering system?

- A) Wornout sealing ring B) Air in the system
C) Wrong flow control valve setting D) Low oil level

Answer: C) Wrong flow control valve setting

26. When the driver is warned of difference in tyre pressure?

- A) Difference in pressure exceeds 30% B) Difference in pressure exceeds 40%
C) Difference in pressure more than 10% D) Difference in pressure more than 20%

Answer: A) Difference in pressure exceeds 30%

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

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

Answer: D) Traction rating

28. What causes abnormal tyre wear, tyre slip and poor steering stability?

- A) Presence of air in the break fluid B) Malfunctioning of torsion bar
C) Incorrect toe - in and toe - out D) Front axle bend/twist

Answer: C) Incorrect toe - in and toe - out

29. What is the advantage of coil spring?

- A) Provide greater pay load B) High steering and stability
C) Low space requirement D) Good load carrying capacity

Answer: C) Low space requirement

30. When the driver is warned of difference in tyre pressure?

- A) Difference in pressure more than 20% B) Difference in pressure exceeds 30%
C) Difference in pressure exceeds 40% D) Difference in pressure more than 10%

Answer: B) Difference in pressure exceeds 30%

31. What causes the deffect of ?Hard steering? in the hydraulic power steering system?

- A) Tie rod loose fitting B) Band axle beam
C) Improper position of drop arm D) Improper size of tyre

Answer: B) Band axle beam

32. Which is the heart of integral power steering system?

- A) Pressure relief valve
- B) Flow control valve
- C) Unloading valves
- D) Rotary control valve

Answer: D) Rotary control valve

33. Which is the heart of integral power steering system?

- A) Rotary control valve
- B) Pressure relief valve
- C) Unloading valves
- D) Flow control valve

Answer: A) Rotary control valve

34. What is the maximum percentage of stretch of its original length is allowable for elastic materials?

- A) 200%
- B) 100%
- C) 300%
- D) 400%

Answer: C) 300%

35. Which type of independent suspension system simple in construction and allow more deflection of the front wheel without effect on the steering?

- A) Torsion bar suspension
- B) Conventional suspension
- C) Strut type suspension
- D) Coil spring suspension

Answer: C) Strut type suspension

36. What is the purpose of air suspension?

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

Answer: D) Used for leveling purpose

37. What is the unit of strain?

- A) Kg/cm²
- B) No unit
- C) Newton/metre²
- D) Metre

Answer: B) No unit

38. What is the cause of noise in steering?

- A) Presence of air in the fluid
- B) Defective flow control valve
- C) Defective torsion bar
- D) High fluid level

Answer: A) Presence of air in the fluid

39. Where the non-return valve is located in the centre feed master cylinder?

- A) On the bypass port
- B) On the cylinder head
- C) On the reservoir
- D) On the pistons head

Answer: D) On the pistons head

40. Why the alternate spokes are screwed to slope forward and backward towards the rim in the wire wheel?

- A) To observe braking and driving torque
- B) To take the uneven load
- C) To distribute the load evenly
- D) To provide cushioning effect

Answer: A) To observe braking and driving torque

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

- A) Increase the tyre life
- B) Provide positive road grip
- C) Observe shocks and vibration
- D) Provide cushioning effect on the vehicle

Answer: A) Increase the tyre life

42. Which is not the function of suspension system?

- A) It maintains body level
- B) It transfer braking torque to the chassis
- C) It gives cushioning effects
- D) It increase steering stability

Answer: D) It increase steering stability

43. What is the impact of larger scrub radius?

- A) Wear on the centre part of tyre
- B) Wear on the outer edge of tyre
- C) Bending of steering linkage point
- D) Unequal braking on the front wheel

Answer: D) Unequal braking on the front wheel

44. What will be effect of unequal castor in the vehicle?

- A) Increase steering stability
- B) Driver have to use less effort on steering
- C) Vehicle pull to one side wheel
- D) Vehicle will not move

Answer: C) Vehicle pull to one side wheel