

ITI Quiz - 20-Feb-2026

06:58 PM

Q. ID: ITISKILL1030XH

February 2026

Question Paper

Duration: 30 Mins

Total Marks: 50

ID: ITISKILL1030XH

Student Name: _____ Roll No: _____

1. What causes 'Air suction' in pump of hydraulic power steering system?

- A) High fluid level
- B) Steering wheel play
- C) Low pressure
- D) Noise

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

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

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

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

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

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

5. Which advantage does not suit to wheel alignment?

- A) Achieve self centering after turning
- B) Reduce driver effort
- C) Achieve easy torque transmission
- D) Minimise tyre wear

6. What is the disadvantage of excessive positive camber in the wheel alignment?

- A) Tyre outer edge will wearout fast
- B) Tyre tread wear out
- C) Tyre centre will wearout
- D) Tyre bleeding wire wear out

7. What will be the effect of negative scrub radius?

- A) Wheel is caused to toe - out
- B) The tyre centre portion wear out
- C) Wheel is kept in straight position
- D) Wheel is caused to toe - in

8. How the EBD (Electronic Brake Force Distribution) failure indicated to the driver?

- A) Indication lamp the dash board
- B) Glowing the parking lamp
- C) Peep sound in the cabin
- D) Flickering the tail lamp

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

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

10. What is the material constituent of semi metallic brake lining?

- A) Aluminium oxide
- B) Carbon composite
- C) Carbon fiber
- D) Fine polished steel wool

11. What will effect in case of over inflated tyres?

- A) Tyre will crack at centre
- B) Tyre will crack at edges
- C) Tyre will wear out at edges
- D) Tyre will wearout at centre

12. What is the role of recirculating balls in the integral power steering?

- A) Combine high mechanical efficiency with smooth operation
- B) Provide hard steering operation
- C) Prevent control in event of hydraulic failure
- D) Affect steering stability

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

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

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

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

15. What is the purpose of beads and plies provided in the tyre?

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

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

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

17. What is the aspect ratio in the tyre structure?

- A) Ratio between tyre width to Rim width
- B) Percentage ratio of tyre height to tyre width
- C) Ratio between tyre height to tyre dia
- D) Percentage ratio of tyre height to Rim width

18. What is the cause of 'Wheel wobbling'?

- A) Improper tyre pressure
- B) Wrong hose size
- C) Drop in pressure
- D) King pin wornout

19. What is the disadvantage of independent suspension system?

- A) More maintainance cost
- B) Shocks transmitted from one wheel to other
- C) Vibration damping is less effective
- D) Spring weight is more

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

21. What is the advantage of electronic power steering?

- A) Less occupation of space
- B) Energy being consumed only while steering
- C) Number of components are less
- D) Compact in size

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

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

23. Which part of electronic power steering revert back to manual steering in case of failure in power steering?

- A) Current controller
- B) Fail safe relay
- C) Phase compensator
- D) Solenoid valve

24. Which type of shock absorber maintain vehicle ride at a pre - set level according to the load placed over the rear axle?

- A) Automatic load adjustable shock absorber
- B) Gas pressurised shock absorber
- C) Mechanical shock absorber
- D) Hydraulic shock absorber

25. Why light weight cars use low steering ratio?

- A) To obtain no steering effect
- B) To obtain constant steering effect
- C) To obtain large steering effect
- D) To obtain low steering effect

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

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

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

- A) Stainless steel
- B) High carbon steel
- C) Special type castiron
- D) High speed steel

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

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

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

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

30. What is the reason of steering wheel play excess?

- A) Improper pre load defective steering
- B) Drop in pressure
- C) Wornout sealing rings
- D) Low oil level

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

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

32. Why vibration damper are not used inside the helical spring?

- A) No effect on load carrying capacity
- B) Not economical
- C) Possibility of stuck in one position
- D) Fitting and removing time consuming

33. Which system provided between axles and chassis frame?

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

34. What is the function of EBD (Electronic Brake - Force Distribution) in anti lock brake system?

- A) It control the slip of the front wheel
B) It controls the slip of the rear wheel
C) It increase brake pressure to the rear wheel
D) It improve directional stability of vehicle

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

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

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

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

37. Which device permits air to the air brake system?

- A) Hand control valve
B) System protection valve
C) Brake valve
D) Spring brake actuator

38. Which device in electronic power steering converts the steering torque input and its direction in to voltage signals?

- A) Temperature sensor
B) Hall effect sensor
C) Rotation sensor
D) Torque sensor

39. Which principle is applicable for hydraulic brakes?

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

40. What is the advantage of using non reactive suspension arrangement on multi-axle vehicles?

- A) Better riding comfort
B) Good braking efficiency in both rear wheels
C) Prevention of ratting
D) Increased spring life

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

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

42. Why tyre wear found abnormal in the vehicle?

- A) Improper tyre pressure
B) Improper tol-in and tol-out

- C) Improper linkage adjustment
D) Loose wheel nut

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

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

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

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

45. What is the purpose of 'G' sensor

- A) Detect wheel lock up condition
B) Reduce pressure at wheel cylinder
C) Measuring deceleration rate of vehicle
D) Locking pressure inside wheel cylinder

46. What is the function of traction control system?

- A) Reduce steering effort
B) Release the pressure to expansion tank
C) Prevent wheel spinning
D) Reduce the engine torque

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

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

48. Which part of coil spring allows angular movement of linkages?

- A) Lower control arm
B) Torsion bar
C) Stabiliser bar
D) Ball joint

49. Which device detect the driven wheel spin through sensor?

- A) ECU
B) EBD
C) ELSD
D) TCS

50. What is the purpose of air suspension?

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