

# ITI Quiz - 20-Feb-2026

## 06:58 PM

Q. ID: ITISKILL1030XH

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Question Paper

Duration: 30 Mins

Total Marks: 50

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

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

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

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

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

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

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

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

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

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

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

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

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

7. What is the function of traction control system?

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

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

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

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

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

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

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

11. Which advantage does not suit to wheel alignment?

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

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

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

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

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

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

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

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

- A) Improper pre load defective steering
- B) Low oil level

C) Drop in pressure                      D) Wornout sealing rings

**16.** What is the disadvantage of independent suspension system?

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

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

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

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

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

**19.** Which system provided between axles and chassis frame?

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

**20.** What is the purpose of air suspension?

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

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

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

**22.** What is the advantage of using independent suspension system?

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

**23.** Why tyre wear found abnormal in the vehicle?

- A) Loose wheel nut
- B) Improper tyre pressure
- C) Improper linkage adjustment
- D) Improper toe-in and toe-out

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

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

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

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

**26.** Where the airbags are located in the air suspension system?

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

**27.** Which is the heart of integral power steering system?

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

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

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

**29.** What is the material used to make brake drum?

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

**30.** Which principle is applicable for hydraulic brakes?

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

**31.** 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) Torsion bar suspension
- C) Conventional suspension
- D) Strut type suspension

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

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

**33.** 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

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

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

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

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

36. What is the purpose of 'G' sensor

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

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

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

38. 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

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

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

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

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

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

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

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

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

43. What is the advantage of electronic power steering?

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

44. What is the disadvantage of excessive positive camber in the wheel asignment?

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

45. Why light weight cars use low steering ratio?

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

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

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

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

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

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

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

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

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

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

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