

ITI Quiz - 07-Feb-2026

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Q. ID: ITISKILL7343ZU

February 2026

Answer Key

Duration: 50 Mins

Total Marks: 76

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1. Which factor affecting suspension?

- A) Abnormal tyre wear
- B) More shocks, uncomfortable riding
- C) Wornout spring
- D) Damaged chassis frame

Answer: C) Wornout spring

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

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

Answer: B) Tyre width

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

- A) Steering wheel play
- B) Vehicle pulling to one side
- C) Hard steering
- D) Wheel wobbling

Answer: B) Vehicle pulling to one side

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

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

Answer: A) Vehicle pull to one side wheel

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

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

Answer: C) Vibration damping is less effective

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

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

Answer: B) Noise

7. What is the effect of weak suspension?

- A) Vibration damping is more effective
- B) Carrying excessive payload of vehicle
- C) Unequal weight distribution of weight
- D) Directional instability of vehicle

Answer: D) Directional instability of vehicle

8. Which is not the benefit of power steering?

A) Absolute control during driving

B) Quick response

C) Effort less steering

D) Positive braking system

Answer: D) Positive braking system

9. What is the advantage of coil spring?

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

Answer: A) Low space requirement

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

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

Answer: A) 9 - 10 Degree

11. Which system provided between axles and chassis frame?

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

Answer: B) Suspension system

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

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

Answer: A) Improper camber

13. 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

Answer: C) To obtain large steering effect

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

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

Answer: C) Increase the tyre life

15. What is the range of steering ratio available in general?

- A) 8 : 2 to 22 : 2
- B) 11 : 2 to 22 : 2
- C) 10 : 1 to 18 : 1
- D) 11 : 1 to 24 : 1

Answer: D) 11 : 1 to 24 : 1

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

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

Answer: A) Spring weight is less

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

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

Answer: D) 01:02

18. Which type of suspension spring can not transfer wheel guidance forces?

- | | |
|------------------------|--------------------|
| A) Leaf springs | B) Helical springs |
| C) Compression springs | D) Coil springs |

Answer: B) Helical springs

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

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

Answer: C) Fail safe relay

20. 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 |

Answer: A) Improper pre load defective steering

21. Which type of suspension spring made of fibre glass, laminated and bonded together by tough polyester resins?

- | | |
|---------------------|----------------------------|
| A) Monoleaf springs | B) Multiple leaf springs |
| C) Coil springs | D) Fiber composite springs |

Answer: D) Fiber composite springs

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

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

Answer: C) Difference in pressure exceeds 30%

23. 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

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

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

Answer: D) Coil spring

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

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

Answer: B) Between frame and vehicle axle

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

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

Answer: C) Split wheel

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

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

Answer: D) Wheel is caused to toe - in

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

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

Answer: A) Ply rating

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

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

Answer: B) Automatic load adjustable shock absorber

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

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

Answer: B) Ball joint

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

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

Answer: A) Tyre outer edge will wearout fast

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

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

Answer: A) King pin inclination

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

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

Answer: D) Maintain directional stability and control

34. What is the purpose of spokes provided in the wheel?

- A) Provide accurate rounds of rim B) Support the chassis frame of vehicle
C) Distribute pre load evenly D) Provide directional stability of vehicle

Answer: A) Provide accurate rounds of rim

35. Where the tyre pressure sensor secured in the wheel assembly?

- A) Bolted to metal valve B) Bolted to the rim centre
C) Secured in the wheel hub D) Secured in the tyre outer edges

Answer: A) Bolted to metal valve

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

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

Answer: B) Holds the tyre in correct position

37. What is the purpose of air suspension?

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

Answer: C) Used for leveling purpose

38. 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

Answer: B) Energy being consumed only while steering

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

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

Answer: B) Good braking efficiency in both rear wheels

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

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

Answer: A) King pin wornout

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

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

Answer: C) 20% less than manual steering

42. What causes the defect of 'Hard steering' in the hydraulic power steering system?

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

Answer: A) Band axle beam

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

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

Answer: C) Rotary control valve

44. What is the use of compact spare tyres?

- A) Withstand high temperature B) Used for high altitude
C) Used for breakdown D) Withstand heavy load

Answer: C) Used for breakdown

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

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

Answer: A) Eliminate need for spare tyre and jack

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

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

Answer: C) Provide strength to tyre

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

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

Answer: C) Wrong flow control valve setting

48. 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

Answer: D) Strut type suspension

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

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

Answer: A) Electronic power steering

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

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

Answer: B) Inner edge of tyre wear out faster

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

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

Answer: A) Percentage ratio of tyre height to tyre width

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

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

Answer: C) Unloading valve

53. Which advantage does not suit to wheel alignment?

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

Answer: B) Achieve easy torque transmission

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

- A) Fitting and removing time consuming
- B) Not economical

- C) No effect on load carrying
- D) Possibility of stuck in one position

Answer: A) Fitting and removing time consuming

55. How the tyre height is calculated?

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

Answer: C) Tyre outer dia - Rim dia

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

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

Answer: B) Traction rating

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

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

Answer: B) Combine high mechanical efficiency with smooth operation

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

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

Answer: C) To observe braking and driving torque

59. Which is not the function of suspension system?

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

Answer: A) It increase steering stability

60. What is the impact of larger scrub radius?

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

Answer: A) Unequal braking on the front wheel

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

- A) 100 to 115 PSI
- B) 180 to 210 PSI
- C) 200 to 215 PSI
- D) 120 to 125 PSI

Answer: D) 120 to 125 PSI

62. What is the disadvantage of independent suspension system?

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

Answer: D) More maintenance cost

63. How the tyre is specified?

- A) Ply rating, tyre inner circle dia, shoulder width
- B) Shoulder width, Tyre thickness
- C) Shoulder dia, Bead circle dia, Ply rating
- D) Shoulder width, Bead circle dia, Ply rating

Answer: D) Shoulder width, Bead circle dia. Ply rating

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

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

Answer: D) Under inflated tyre

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

- A) Leaf spring
- B) Air bags in the system
- C) Shock absorber
- D) Suspension spring

Answer: C) Shock absorber

66. Which type of spring will have good load carrying capacity and do not have noise in the suspension system?

- A) Fibre composite springs
- B) Multiple - leaf spring
- C) Monoleaf springs
- D) Coil spring

Answer: B) Multiple - leaf spring

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

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

Answer: A) Torque sensor

68. 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

Answer: C) Improper wheel alignment

69. How to rectify the defect of noise in hydraulic steering?

- A) Replace the flow control valve
- B) Fill fluid to correct level and bleed the system

- C) Replace the with new fluid
- D) Adjust the torsion bar linkage

Answer: B) Fill fluid to correct level and bleed the system

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

- A) Telescopic type
- B) Vane type
- C) Piston type
- D) Mechanical type

Answer: A) Telescopic type

71. What is the cause of noise in steering?

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

Answer: A) Presence of air in the fluid

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

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

Answer: A) Tyre will wearout at centre

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

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

Answer: B) Mechanical type

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

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

Answer: B) Thread radius

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

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

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

76. Why tyre wear found abnormal in the vehicle?

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

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