

ITI Quiz - 07-Feb-2026

06:24 PM

Q. ID: ITISKILL5459FX

February 2026

Answer Key

Duration: 30 Mins

Total Marks: 76

Q.ID: ITISKILL5459FX

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

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

Answer: D) Thread radius

2. What is the advantage of electronic power steering?

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

Answer: D) Energy being consumed only while steering

3. 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

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

4. What is the impact of larger scrub radius?

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

Answer: C) Unequal braking on the front wheel

5. 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

Answer: C) Used for leveling purpose

6. Which factor affecting suspension?

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

Answer: A) Wornout spring

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

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

Answer: C) Tyre will wearout at centre

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

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

Answer: D) Eliminate need for spare tyre and jack

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

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

Answer: A) Unloading valve

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

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

Answer: D) Good braking efficiency in both rear wheels

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

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

Answer: C) Inner edge of tyre wear out faster

12. What is the use of compact spare tyres?

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

Answer: A) Used for breakdown

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

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

Answer: D) Torque sensor

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

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

Answer: A) Spring weight is less

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

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

Answer: D) Provide strength to tyre

16. 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) Hydraulic shock absorber
- C) Gas pressurised shock absorber
- D) Automatic load adjustable shock absorber

Answer: D) Automatic load adjustable shock absorber

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

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

Answer: B) Noise

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

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

Answer: B) Ply rating

19. Which system provided between axles and chassis frame?

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

Answer: C) Suspension system

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

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

Answer: D) Increase the tyre life

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

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

Answer: C) Improper pre load defective steering

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

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

Answer: D) Bolted to metal valve

23. Why tyre wear found abnormal in the vehicle?

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

Answer: B) Improper tol-in and tol - out

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

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

Answer: B) Holds the tyre in correct position

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

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

Answer: C) 11 : 1 to 24 : 1

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

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

Answer: C) Wrong flow control valve setting

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

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

Answer: A) Fiber composite springs

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

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

Answer: D) Improper camber

29. Which is not the benefit of power steering?

- A) Quick response
- B) Effort less steering
- C) Positive breaking system
- D) Absolute control during driving

Answer: C) Positive breaking system

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

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

Answer: D) Vibration damping is less effective

31. What is the name of distance between most protruding

portions on both sides of tyre?

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

Answer: B) Tyre width

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

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

Answer: A) Strut type suspension

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

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

Answer: C) Multiple - leaf spring

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

- A) Fill fluid to correct level and bleed the system
- B) Replace the with new fluid
- C) Replace the flow control valve
- D) Adjust the torsion bar linkage

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

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

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

Answer: C) Helical springs

36. Which advantage does not suit to wheel alignment?

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

Answer: A) Achieve easy torque transmission

37. 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

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

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

Answer: A) Vehicle pull to one side wheel

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

- A) Mechanical type
- B) Electrical type

- C) Pneumatic type
- D) Hydraulic type

Answer: A) Mechanical type

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

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

Answer: C) Wheel is caused to toe - in

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

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

Answer: B) Traction rating

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

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

Answer: D) Provide accurate rounds of rim

43. What is the effect of weak suspension?

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

Answer: A) Directional instability of vehicle

44. How the tyre is specified?

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

Answer: C) Shoulder width, Boad circle dia. Ply rating

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

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

Answer: D) Protect chassis frame from heavy jerk

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

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

Answer: B) Coil spring

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

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

Answer: D) 20% less than manual steering

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

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

Answer: D) 9 - 10 Degree

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

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

Answer: C) Ball joint

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

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

Answer: D) Fitting and removing time consuming

51. How the tyre height is calculated?

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

Answer: D) Tyre outer dia - Rim dia

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

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

Answer: B) Under inflated tyre

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

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

Answer: B) 120 to 125 PSI

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

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

Answer: D) Fail safe relay

55. 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

Answer: B) To observe braking and driving torque

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

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

Answer: A) King pin inclination

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

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

Answer: A) Combine high mechanical efficiency with smooth operation

58. What is the advantage of coil spring?

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

Answer: A) Low space requirement

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

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

Answer: A) Difference in pressure exceeds 30%

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

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

Answer: B) Shock absorber

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

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

Answer: B) Maintain directional stability and control

62. Which is not the function of suspension system?

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

Answer: A) It increase steering stability

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

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

Answer: C) Telescopic type

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

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

Answer: C) Vehicle pulling to one side

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

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

Answer: C) Tyre outer edge will wear out fast

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

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

Answer: B) Improper wheel alignment

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

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

Answer: C) Band axle beam

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

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

Answer: A) Between frame and vehicle axle

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

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

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

70. 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

71. What is the disadvantage of independent suspension system?

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

Answer: D) More maintenance cost

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

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

Answer: A) Electronic power steering

73. What is the cause of noise in steering?

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

Answer: B) Presence of air in the fluid

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

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

Answer: B) King pin wornout

75. Why light weight cars use low steering ratio?

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

Answer: A) To obtain large steering effect

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

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

Answer: B) Rotary control valve