ITI Quiz - 04-Feb-2026 07:11 PM

February 2026 **iti** Answer Key

Duration: 180 Mins **Total Marks: 76** **Q.ID: ITISKILL0468UH**

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

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

Answer: B) Vehicle pull to one side wheel

2. What is the disadvantage of independent suspension system?

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

Answer: D) More maintanance cost

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

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

Answer: C) Provide strength to tyre

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

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

Answer: B) Multiple - leaf spring

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

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

Answer: A) Ball joint

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

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

Answer: B) Improper camber

7. What is the advantage of coil spring?

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

Answer: C) Low space requirement

8. Which system provided between axles and chassis frame?

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

Answer: A) Suspension system

9. 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, Boad circle dia. Ply rating

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

10. Which is not the benefit of power steering?

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

Answer: A) Positive breaking system

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

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

Answer: D) Inner edge of tyre wear out faster

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

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

Answer: C) 9 - 10 Degree

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

A) Thread radious
B) Tyre height
C) Tyre outer diameter
D) Tyre width

Answer: D) Tyre width

14. 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

15. Which rating indicate the braking capablities of the tire to

the consumer?

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

Answer: C) Traction rating

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

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

Answer: C) Electronic power steering

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

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

Answer: D) King pin inclination

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

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

Answer: C) Ply rating

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

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

Answer: A) Rotary control valve

20. 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) Conventional suspension
C) Coil spring suspension
D) Torsion bar suspension

Answer: A) Strut type suspension

21. What will be the effect of negative scrub radious?

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

Answer: A) Wheel is caused to toe - in

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

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

Answer: B) Wrong flow control valve setting

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

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

Answer: B) Shock absorber

24. What is the purpose of air suspension?

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

Answer: B) Used for leveling purpose

25. 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

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

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

Answer: D) Betweeen frame and vehicle axle

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

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

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

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

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

Answer: C) Fitting and removing time consuming

29. 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

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

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

Answer: D) Noise

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

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

Answer: D) Band axle beam

32. What is the effect of weak suspension?

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

Answer: D) Directional unstability of vehicle

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

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

Answer: B) Provide accurate rounds of rim

34. What is the cause of noise in steering?

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

Answer: D) Presence of air in the fluid

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

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

Answer: C) Spring weight is less

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

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

Answer: D) Increase the tyre life

37. 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

Answer: B) 01:02

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

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

Answer: A) 11 : 1 to 24 : 1

39. 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 distribute the load evanly
D) To observe braking and driving torque

Answer: D) To observe braking and driving torque

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

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

Answer: B) Maintain directional stability and control

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

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

Answer: D) Fail safe relay

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

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

Answer: C) Bolted to metal valve

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

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

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

44. 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

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

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

Answer: A) Split wheel

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

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

Answer: A) Vehicle pulling to one side

47. Why tyre wear found abnormal in the vehicle?

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

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

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

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

Answer: D) Under inflated tyre

49. 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 pay load smoothly
D) Transfer the load equaly

Answer: B) Protect chassis frame from heavy jerk

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

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

Answer: D) Fiber composite springs

51. Which type of suspension spring can not transfer wheel guidence forces?

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

Answer: C) Helical springs

52. 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

Answer: D) Mechanical type

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

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

Answer: A) Good braking efficiency in both rear wheels

54. 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

Answer: D) Holds the tyre in correct position

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

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

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

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

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

Answer: C) Eliminate head for spare tyre and jack

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

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

Answer: D) 20% less than manual steering

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

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

Answer: B) Improper pre load defective steering

59. Which facor affecting suspension?

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

Answer: B) Wornout spring

60. 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

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

A) Thread radious
B) Tyre width
C) Rim width
D) Thread width

Answer: A) Thread radious

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

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

Answer: D) Difference in pressure exceeds 30%

63. Why light weight cars use low steering ratio?

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

Answer: D) To obtain large steering effect

64. How the tyre height is calculated?

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

Answer: C) Tyre outer dia - Rim dia

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

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

Answer: A) Combine high mechanical efficiency with smooth operation

66. What is the use of compact spare tyres?

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

Answer: D) Used for breakdown

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

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

Answer: C) 120 to 125 PSI

68. What is the disadvantage of excessive positive camber in the wheel aslignment?

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

Answer: A) Tyre outer edge will wearout fast

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

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

Answer: A) Unloading valve

70. What is the advantage of electronic power steering?

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

Answer: B) Energy being consumed only while steering

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

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

Answer: A) Improper wheel alignment

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

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

Answer: A) Torque sensor

73. What is the impact of larger scrub radious?

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

74. 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

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

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

Answer: D) Coil spring

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

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

Answer: C) King pin wornout