ITI Quiz - 07-Feb-2026 06:29 PM

Q. ID: ITISKILL1308WG

February 2026 Question Paper

Duration: 30 Mins **Total Marks: 76** **ID: ITISKILL1308WG**

Student Name: _____ Roll No: _____

1. Which is not the benefit of power steering?

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

2. What is the purpose of air suspension?

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

3. Why light weight cars use low steering ratio?

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

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

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

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

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

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

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

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

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

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

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

9. What is the cause of noise in steering?

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

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

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

11. 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

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

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

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

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

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

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

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

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

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

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

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

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

18. 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) 200 to 215 PSI
D) 100 to 115 PSI

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

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

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

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

21. 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) Solenoid valve
D) Fail safe relay

22. 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

23. What is the impact of larger scrub radious?

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

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

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

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

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

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

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

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

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

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

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

29. What is the use of compact spare tyres?

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

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

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

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

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

32. 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 exceeds 30%
D) Difference in pressure more than 20%

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

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

34. 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

35. How the tyre is specified?

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

36. 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) Betweeen frame and vehicle axle
D) Between brake tank and vehicle axle

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

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

38. 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

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

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

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

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

41. 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 observe braking and driving torque
C) To provide cusioning effect
D) To distribute the load evanly

42. 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

43. What is the disadvantage of independent suspension system?

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

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

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

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

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

46. Which system provided between axles and chassis frame?

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

47. Which is not the function of suspension system?

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

48. 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

49. 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

50. 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 edges
D) Tyre will crack at centre

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

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

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

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

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

A) Prevention of ratting
B) Better riding comfort

C) Good braking efficiency in both rear wheels
D) Increased spring life

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

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

55. How the tyre height is calculated?

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

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

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

57. Which facor affecting suspension?

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

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

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

59. 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

60. What is the advantage of coil spring?

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

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

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

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

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

63. 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

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

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

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

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

66. 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

67. 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

68. 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) Hydraulic shock absorber
D) Mechanical shock absorber

69. What is the advantage of electronic power steering?

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

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

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

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

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

72. 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

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

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

74. 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 unstability of vehicle

75. 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

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

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