ITI Quiz - 07-Feb-2026 06:24 PM

Q. ID: ITISKILL5459FX

February 2026 Question Paper

Duration: 30 Mins **Total Marks: 76** **ID: ITISKILL5459FX**

Student Name: _____ Roll No: _____

1. How the tyre height is calculated?

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

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

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

3. What is the effect of weak suspension?

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

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

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

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

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

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

7. How the tyre is specified?

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

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

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

9. What is the advantage of electronic power steering?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

18. Why light weight cars use low steering ratio?

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

19. Which is not the function of suspension system?

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

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

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

21. 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

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

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

23. Which advantage does not suit to wheel alignment?

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

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

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

25. Which facor affecting suspension?

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

26. Why tyre wear found abnormal in the vehicle?

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

27. What is the purpose of air suspension?

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

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

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

29. 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 maintanance cost

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

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

31. What is the impact of larger scrub radious?

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

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

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

33. 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) Increased spring life
D) Better riding comfort

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

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

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

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

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

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

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

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

38. 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) Strut type suspension
C) Coil spring suspension
D) Torsion bar suspension

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

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

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

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

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

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

42. 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) Leaf spring
D) Suspension spring

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

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

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

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

45. What is the advantage of coil spring?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A) Defective suspension system
B) Un equal load distribution

C) Under inflated tyre
D) Over inflated tyre

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

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

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

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

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

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

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

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

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

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

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

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

60. 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

61. What is the use of compact spare tyres?

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

62. 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

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

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

64. What is the cause of noise in steering?

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

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

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

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

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

67. Which is not the benefit of power steering?

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

68. Which system provided between axles and chassis frame?

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

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

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

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

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

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

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

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

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

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

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

74. 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

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

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

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

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