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

Q. ID: ITISKILL6246DP

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Answer Key

**Duration: 30 Mins** **Total Marks: 76** **Q.ID: ITISKILL6246DP**

**1.** What is the advantage of coil spring?

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

**Answer: C) Low space requirement**

**2.** 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) Coil spring
D) Multiple - leaf spring

**Answer: D) Multiple - leaf spring**

**3.** 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**

**4.** 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**

**5.** What is the advantage of using independent suspension system?

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

**Answer: A) Spring weight is less**

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

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

**Answer: C) 9 - 10 Degree**

**7.** What is the function of Rim in the wheel construction?

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

**Answer: B) Holds the tyre in correct position**

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

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

**Answer: D) Electronic power steering**

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

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

**Answer: A) Fitting and removing time consuming**

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

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

**Answer: A) Incorrect toe - in and toe - out**

**11.** What is the advantage of electronic power steering?

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

**Answer: D) Energy being consumed only while steering**

**12.** What is the disadvantage of independent suspension system?

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

**Answer: D) More maintanance cost**

**13.** What is the cause of noise in steering?

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

**Answer: B) Presence of air in the fluid**

**14.** 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) Torsion bar suspension

C) Coil spring suspension D) Strut type suspension

**Answer: D) Strut type suspension**

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

A) Increase steering stability B) Vehicle will not move

C) Vehicle pull to one side wheel D) Driver have to use less effort on steering

**Answer: C) Vehicle pull to one side wheel**

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

A) Monoleaf springs B) Fiber composite springs

C) Coil springs D) Multiple leaf springs

**Answer: B) Fiber composite springs**

**17.** 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**

**18.** What is the use of compact spare tyres?

A) Withstand heavy load B) Used for high altitude

C) Used for breakdown D) Withstand high temperature

**Answer: C) Used for breakdown**

**19.** What is the purpose of castor in wheel alignment?

A) Reduce abnormal vibration B) Reduce tyre wear

C) Convert steering torque input into voltage signal D) Maintain directional stability and control

**Answer: D) Maintain directional stability and control**

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

A) Fail safe relay B) Current controller

C) Phase compensator D) Solenoid valve

**Answer: A) Fail safe relay**

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

A) Tyre thread wear out B) Tyre outer edge will wearout fast

C) Tyre centre will wearout D) Tyre bleeding wire wear out

**Answer: B) Tyre outer edge will wearout fast**

**22.** Which part of tyre referred as 'Crown'?

A) Tyre width B) Thread radious

C) Thread width D) Rim width

**Answer: B) Thread radious**

**23.** What is the cause of 'Wheel wobbling'?

A) King pin wornout B) Wrong hose size

C) Improper tyre pressure D) Drop in pressure

**Answer: A) King pin wornout**

**24.** What is the advantage of using nitrogen in the tyres?

A) Provide positive road grip B) Provide cusioning effect on the vehicle

C) Increase the tyre life D) Oberve shocks and vibration

**Answer: C) Increase the tyre life**

**25.** 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) Increased spring life D) Prevention of ratting

**Answer: A) Good braking efficiency in both rear wheels**

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

A) Steering wheel play B) High fluid level

C) Noise D) Low pressure

**Answer: C) Noise**

**27.** 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 evanly

**Answer: C) To observe braking and driving torque**

**28.** How the tyre is specified?

A) Shoulder width, Tyre thickness B) Shoulder width, Boad circle dia. Ply rating

C) Ply rating, tyre inner circle dia, shoulder width D) Shoulder dia, Bead circle dia, Ply rating

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

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

A) Over inflation B) Improper caster

C) Under inflation D) Improper camber

**Answer: D) Improper camber**

**30.** What will effect in case of over inflated tyres?

A) Tyre will crack at edges B) Tyre will wearout at centre

C) Tyre will wear out at edges D) Tyre will crack at centre

**Answer: B) Tyre will wearout at centre**

**31.** What causes the deffect of ?Hard steering? in the

hydraulic power steering system?

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

**Answer: B) Band axle beam**

**32.** Which advantage does not suit to wheel alignment?

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

**Answer: D) Achieve easy torque transmission**

**33.** What is the advantage of using run flat tyres?

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

**Answer: D) Eliminate head for spare tyre and jack**

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

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

**Answer: D) King pin inclination**

**35.** Which is not the benefit of power steering?

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

**Answer: A) Positive breaking system**

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

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

**Answer: C) Improper wheel alignment**

**37.** What is the purpose of air suspension?

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

**Answer: C) Used for leveling purpose**

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

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

**Answer: B) Split wheel**

**39.** 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**

**40.** 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**

**41.** Which facor affecting suspension?

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

**Answer: B) Wornout spring**

**42.** Why light weight cars use low steering ratio?

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

**Answer: C) To obtain large steering effect**

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

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

**Answer: C) Protect chassis frame from heavy jerk**

**44.** 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**

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

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

**Answer: C) 20% less than manual steering**

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

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

**Answer: C) Ply rating**

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

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

**Answer: B) Provide strength to tyre**

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

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

**Answer: D) Torque sensor**

**49.** Why tyre wear found abnormal in the vehicle?

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

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

**50.** 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**

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

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

**Answer: C) Difference in pressure exceeds 30%**

**52.** 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

**Answer: D) Tyre width**

**53.** What is the effect of weak suspension?

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

**Answer: A) Directional unstability of vehicle**

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

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

**Answer: D) Mechanical type**

**55.** 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) Ratio between tyre width to Rim width
D) Percentage rartio of tyre height to Rim width

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

**56.** 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**

**57.** What will be the result of improper brake adjustment?

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

**Answer: A) Vehicle pulling to one side**

**58.** 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 outer edge of tyre
D) Wear on the centre part of tyre

**Answer: A) Unequal braking on the front wheel**

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

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

**Answer: C) 11 : 1 to 24 : 1**

**60.** 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**

**61.** Which is the heart of integral power steering system?

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

**Answer: D) Rotary control valve**

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

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

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

**63.** Which system provided between axles and chassis frame?

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

**Answer: A) Suspension system**

**64.** Where the airbags are located in the air suspension system?

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

**Answer: A) Betweeen frame and vehicle axle**

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

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

**Answer: C) Traction rating**

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

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

**Answer: C) Coil spring**

**67.** What will be the effect of negative scrub radious?

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

**Answer: B) Wheel is caused to toe - in**

**68.** 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**

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

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

**Answer: D) Automatic load adjustable shock absorber**

**70.** Which is not the function of suspension system?

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

**Answer: B) It increase steering stability**

**71.** 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**

**72.** What is the purpose of spokes provided in the wheel?

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

**Answer: B) Provide accurate rounds of rim**

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

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

**Answer: D) 01:02**

**74.** What is the reason of steering wheel play excess?

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

**Answer: C) Improper pre load defective steering**

**75.** 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**

**76.** How the tyre height is calculated?

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

**Answer: D) Tyre outer dia - Rim dia**