# MMV 2nd YEAR

Q. ID: ITISKILL4465JO

January 2026 | **Loyola ITI** | Answer Key

**Duration: 30 Mins** | **Total Marks: 44** | **Q.ID: ITISKILL4465JO**

**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.** What is the safe stress if the ultimate stress of a material is 35 kg/mm<sup>2</sup> and factor of safety is 5?

A) 7
B) 0.143
C) 0.7
D) 1.43

**Answer: A) 7**

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

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

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

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

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

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

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

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

**Answer: D) Strut type suspension**

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

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

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

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

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

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

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

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

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

**9.** 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 air pressure regulator and front axle
D) Between brake tank and vehicle axle

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

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

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

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

**11.** 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

**Answer: A) Improper wheel alignment**

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

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

**Answer: C) Rotary control valve**

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

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

**Answer: A) Tyre width**

**14.** 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**

**15.** 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**

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

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

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

**17.** Which force acts on rivets?

A) Bending force
B) Shear force
C) Compressive force
D) Tensile force

**Answer: B) Shear force**

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

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

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

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

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

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

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

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

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

**21.** What is the impact of larger scrub radious?

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

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

**22.** What is the maximum percentage of stretch of its original length is allowable for elastic materials?

A) 400%
B) 100%
C) 200%
D) 300%

**Answer: D) 300%**

**23.** 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**

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

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

**Answer: D) Wrong flow control valve setting**

**25.** What is the term used for maximum stress attained by a material before rupture?

A) Ultimate stress
B) Working stress
C) Compressive stress
D) Tensile stress

**Answer: A) Ultimate stress**

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

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

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

**27.** 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**

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

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

**Answer: C) Low space requirement**

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

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

**30.** 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

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

**31.** Where the non-return valve is located in the centre feed master cylinder?

A) On the bypass port
B) On the cylinder head
C) On the reservoir
D) On the pistons head

**Answer: D) On the pistons head**

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

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

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

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

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

**Answer: A) Suspension system**

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

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

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

**35.** What is the ratio between ultimate stress to working stress?

A) Factor of safety
B) Young's modulus
C) Bulk modulus
D) Modulus of rigidity

**Answer: A) Factor of safety**

**36.** What is the material used to make brake drum?

A) Stainless steel
B) High carbon steel
C) Special type castiron
D) High speed steel

**Answer: C) Special type castiron**

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

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

**Answer: D) Thread radious**

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

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

**Answer: D) Split wheel**

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

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

**Answer: A) Traction rating**

**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 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**

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

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

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

**43.** Which part of integral power steering reduce fluid pressure?

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

**Answer: B) Unloading valve**

**44.** What is the unit of strain?

A) No unit
B) Metre
C) Newton/metre<sup>2</sup>
D) Kg/cm<sup>2</sup>

**Answer: A) No unit**