

**Duration: 30 Mins**

**Total Marks: 25**

**Q.ID: ITISKILL1734IH**

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

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

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

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

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

**Answer: D) Improper camber**

3. What is the advantage of TCS/ELSD brake circuit of wheel?

- |  |   |
|--|---|
| A) Reduce the pressure at wheel cylinder                   | B) Reduce fluid pressure                    |
| C) Automatic adjustment of engine torque to the grip rates | D) Avoid wheel lockup by releasing pressure |

**Answer: C) Automatic adjustment of engine torque to the grip rates**

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

- |                  |                        |
|------------------|------------------------|
| A) Thread radius | B) Tyre outer diameter |
| C) Tyre height   | D) Tyre width          |

**Answer: D) Tyre width**

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

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

**Answer: A) Mechanical type**

6. Which is not the function of suspension system?

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

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

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

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

**Answer: A) Ball joint**

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

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

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

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

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

**Answer: D) Combine high mechanical efficiency with smooth operation**

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

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

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

11. Why light weight cars use low steering ratio?

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

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

12. How the EBD (Electronic Brake Force Distribution) failure indicated to the driver?

- |                             |                                   |
|-----------------------------|-----------------------------------|
| A) Flickering the tail lamp | B) Glowing the parking lamp       |
| C) Peep sound in the cabin  | D) Indication lamp the dash board |

**Answer: B) Glowing the parking lamp**

13. What will be the effect of negative scrub radius?

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

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

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

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

**Answer: C) 120 to 125 PSI**

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

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

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

**16.** 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**

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

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

**Answer: C) Under inflated tyre**

**18.** What is the material constituent of semi metallic brake lining?

- A) Aluminium oxide      B) Fine polished steel wool  
C) Carbon fiber      D) Carbon composite

**Answer: B) Fine polished steel wool**

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

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

**Answer: B) King pin inclination**

**20.** What is the disadvantage of excessive positive camber in the wheel alignment?

- A) Tyre centre will wearout      B) Tyre bleeding wire wear out

- C) Tyre outer edge will wearout fast      D) Tyre thread wear out

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

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

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

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

**22.** What is the function of EBD (Electronic Brake - Force Distribution) in anti lock brake system?

- A) It controls the slip of the rear wheel      B) It control the slip of the front wheel  
C) It improve directional stability of vehicle      D) It increase brake pressure to the rear wheel

**Answer: A) It controls the slip of the rear wheel**

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

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

**Answer: C) Between frame and vehicle axle**

**24.** What is the permitted brake pedal travel in the hydraulic brake system?

- A) 2 to 12 mm      B) 7 to 12 mm  
C) 6 to 12 mm      D) 9 to 12 mm

**Answer: B) 7 to 12 mm**

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

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

**Answer: A) King pin wornout**