

**Student: GD**

**Score: 25/50 (50.00%)**

**Code: 4963**

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

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

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

- A) 02:01 (Incorrect)  
 B) 02:01  
 C) **01:02**  
 D) 02:03

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

- A) Percentage ratio of tyre height to Rim width (Incorrect)  
 B) Ratio between tyre height to tyre dia  
 C) **Percentage ratio of tyre height to tyre width**  
 D) Ratio between tyre width to Rim width

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

- A) Thread width (Incorrect)  
 B) Rim width  
 C) Tyre width  
 D) **Thread radius**

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

- A) Tyre outer diameter (Incorrect)  
 B) Tyre height  
 C) **Tyre width**  
 D) Thread radius

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

- A) **Split wheel (Correct)**  
 B) Wire wheel  
 C) Disc wheel  
 D) Heavy vehicle

7. Which advantage does not suit to wheel alignment?

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

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

- A) Solenoid valve  
 B) Phase compensator (Incorrect)  
 C) **Fail safe relay**  
 D) Current controller

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

- A) Rotation sensor  
 B) **Torque sensor**  
 C) Hall effect sensor  
 D) Temperature sensor (Incorrect)

10. What is the advantage of electronic power steering?

- A) Compact in size  
 B) **Energy being consumed only while steering (Correct)**  
 C) Less occupation of space  
 D) Number of components are less

11. 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) **Combine high mechanical efficiency with smooth operation (Correct)**  
 D) Provide hard steering

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

- A) Flow control valve  
 B) **Rotary control valve**  
 C) Pressure relief valve  
 D) Unloading valves (Incorrect)

13. Which system provided between axles and chassis frame?

- A) Braking system  
 B) **Suspension system (Correct)**  
 C) Steering system  
 D) Cooling system

14. Why light weight cars use low steering ratio?

- A) To obtain low steering effect  
 B) **To obtain large steering effect (Correct)**  
 C) To obtain constant steering effect  
 D) To obtain no steering effect

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

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

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

- A) Torsion bar suspension  
 B) **Strut type suspension**

C) Coil spring suspension  
D) Conventional suspension (Incorrect)

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

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

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

A) Compression spring (Incorrect)  
C) Helical spring  
B) **Coil spring**  
D) Transverse spring

19. 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  
C) **Automatic load adjustable shock absorber (Correct)**  
B) Hydraulic shock absorber  
D) Mechanical shock absorber

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

A) Hydraulic type  
C) **Mechanical type (Correct)**  
B) Electrical type  
D) Pneumatic type

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

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

22. What is the purpose of air suspension?

A) **Used for leveling purpose**  
C) Increase the directional stability (Incorrect)  
B) Reduce the suspension weight  
D) Reduce the space occupation

23. What is the disadvantage of independent suspension system?

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

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

A) This is simple arrangement  
B) Shocks are transmitted from one wheel to other (Incorrect)

C) **Spring weight is less**  
D) Maintance cost is less

25. Which rating indicate the braking capabilities of the tire to the consumer?

A) Ply rating (Incorrect)  
C) **Traction rating**  
B) Tyre rating  
D) Temperature rating

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

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

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

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

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

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

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

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

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

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

31. What will be the effect of negative scrub rarious?

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

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

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

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

- A) Improper camber (Correct)**  
B) Improper caster  
C) Over inflation  
D) Under inflation

34. 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 cushioning effect  
**C) To observe braking and driving torque (Correct)**  
D) To distribute the load evenly

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

- A) Filter choked  
B) **Improper wheel alignment (Correct)**  
C) Loose wheel level  
D) Low oil level

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

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

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

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

38. Why tyre wear found abnormal in the vehicle?

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

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

- A) Noise**  
B) High fluid level  
C) Low pressure  
D) Steering wheel play (Incorrect)

40. Which principle is applicable for hydraulic brakes?

- A) Pascal's law (Correct)**  
B) Boyle's law  
C) Newton's law of motion  
D) Hooke's law

41. Which device permits air to the air brake system?

- A) Hand control valve  
B) Spring brake actuator  
C) System protection valve (Incorrect)  
**D) Brake valve**

42. What is the material constituent of semi metallic brake

lining?

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

43. What is the material used to make brake drum?

- A) Stainless steel  
B) High carbon steel  
**C) Special type castiron (Correct)**  
D) High speed steel

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

- A) On the reservoir  
B) On the cylinder head  
C) On the bypass port  
**D) On the pistons head (Correct)**

45. What is the brake pedal free play range permitted while adjusting?

- A) 4 mm to 8 mm  
B) 8 mm to 10 mm  
**C) 6 mm to 12 mm (Correct)**  
D) 13 mm to 18 mm

46. What is the purpose of 'G' sensor

- A) Locking pressure inside wheel cylinder  
B) **Measuring deceleration rate of vehicle (Correct)**  
C) Reduce pressure at wheel cylinder  
D) Detect wheel lock up condition

47. Which device detect the driven wheel spin through sensor?

- A) EBD  
B) **ECU (Correct)**  
C) TCS  
D) ELSD

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

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

49. What is the function of traction control system?

- A) Prevent wheel spinning**  
B) Release the pressure to expansion tank (Incorrect)  
C) Reduce the engine torque  
D) Reduce steering effort

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

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