

Duration: 120 Mins

Total Marks: 53

Q.ID: ITISKILL14710A

1. What is the working principle of clutch?

- A) Centripetal B) Screw and Nut
C) Friction D) Sliding

Answer: C) Friction

2. Which way the steering system increase the tire life?

- A) By maintaining proper angle between tyres B) By applying grease on the steering controls
C) Providing proper brake adjustment D) Providing adequate lubrication

Answer: A) By maintaining proper angle between tyres

3. What is the permitted range of pedal play observed in the heavy vehicle?

- A) 6 -10 mm B) 16 -20 mm
C) 15 -18 mm D) 2 -4 mm

Answer: A) 6 -10 mm

4. Which instrument is used to check the face out of the fly wheel?

- A) Dial indicator B) Inside micrometer
C) Bore dial gauge D) Outside micrometer

Answer: A) Dial indicator

5. Which part connects propeller shaft?

- A) Clutch shaft and fly wheel B) Crankshaft and final drive
C) Gear box and final drive D) Cam shaft and clutch shaft

Answer: C) Gear box and final drive

6. Why synchromesh action is needed in a gear box?

- A) Damage the gear teeth during gear change B) Prevent cushioning effect during gear shifting
C) Easy gear shifting when vehicle in motion D) Provide noise in gear shifting

Answer: C) Easy gear shifting when vehicle in motion

7. Which type of seal allows a controlled amount of fluid leakage to lubricant moving parts?

- A) Non - positive seal B) Static seal
C) Dynamic seal D) Positive seal

Answer: A) Non - positive seal

8. Which type of gear box can be operated even by unskilled driver?

- A) Constant mesh gear box B) Compound wheel mesh gear box
C) Synchromesh gear box D) Sliding mesh gear box

Answer: C) Synchromesh gear box

9. What is the possible reason for gear slip?

- A) Excessive end float of gear B) Wrong clutch engagement
C) Wrong selection gear shift lever D) Wornout clutch plate

Answer: A) Excessive end float of gear

10. What is the advantage of using single plate hydraulic clutch?

- A) Reduce the wear on the clutch plate B) Easy repair and maintenance
C) Minimize the force to operate the clutch D) Effective frictional force obtained

Answer: C) Minimize the force to operate the clutch

11. What is the permitted diffraction angle of pot joint?

- A) 18 Degree B) 26 Degree
C) 22 Degree D) 20 Degree

Answer: C) 22 Degree

12. Which system making the drive cabin comfortable for driving?

- A) HVAC system B) Starting system
C) Steering system D) Charging system

Answer: A) HVAC system

13. What is the advantage of mechanical actuated type clutches?

- A) Less pedal effort B) Less maintenance and repair
C) Easy to operate D) Smooth functioning

Answer: B) Less maintenance and repair

14. Which type of system is to isolate the vehicle body from road shock and vibration?

- A) Control system B) Steering system
C) Hydraulic system D) Suspension system

Answer: D) Suspension system

15. What is the permitted diffraction angle of double joint?

- A) 50 Degree B) 58 Degree
C) 62 Degree D) 72 Degree

Answer: A) 50 Degree

16. What is the advantage of using constant mesh gear box?

- A) Smooth power transmission B) Efficient lubrication possible
C) Quick change of gear obtained D) Wrong adjustment of gear will not affect the function

Answer: A) Smooth power transmission

17. Which part of dual mass fly wheel isolate the fly wheel mass system of the engine?

- A) Cam shaft B) Vibration damper
C) Crank shaft D) Gear box

Answer: B) Vibration damper

18. Which type of synchromesh gear box will produce torque more than three times of other types?

- A) Multi and Double cone B) Porche type
C) Baulk ring type D) Baulk type

Answer: A) Multi and Double cone

19. Which type of gear will not produce axial thrust while transmitting torque

- A) Spur gear B) Helical gears
C) Spiral bevel gear D) Worm gears

Answer: A) Spur gear

20. Which type of gear will not produce axial thrust but it neutralizes the axial thrust?

- A) Worm gear B) Herring bone gears
C) Spur gear D) Bevel gear

Answer: B) Herring bone gears

21. Which is noise free clutch?

- A) Diaphragm spring type clutch B) Single plate clutch
C) Multi plate clutch D) Dog clutch

Answer: A) Diaphragm spring type clutch

22. What is the battery system used for heavy vehicles?

- A) Provide caution to the driver B) 12 volts
C) 24 volts D) 6 volts

Answer: C) 24 volts

23. What is the name of seal used between two parts that do not move in relation to each other?

- A) Dynamic seal B) Square cut seal
C) Static seal D) Teflow seal

Answer: C) Static seal

24. What is the cause of hard gear shifting?

- A) Synchronizing unit stuck B) Fly wheel ring wornout
C) Bearing worn out D) Synchronizing unit damaged

Answer: D) Synchronizing unit damaged

25. What is the main feature of hydraulic actuated clutches?

- A) Pedal effort transmitted through fluid B) Pedal effort transmitted through linkage
C) Pedal effort transmitted through spring D) Pedal effort transmitted through coupling

Answer: C) Pedal effort transmitted through spring

26. How to rectify the hard gear shifting?

- A) Re - install springs B) Adjust clutch pedal free play
C) Lubricate the unit D) Check and realign

Answer: B) Adjust clutch pedal free play

27. What is the permitted diffraction angle of tripod joint?

- A) 18 Degree B) 26 Degree
C) 13 Degree D) 32 Degree

Answer: B) 26 Degree

28. Which gear will produce clicking noise during teeth contact?

- A) Helical gear B) Bevel gear
C) Worm gear D) Spur gear

Answer: D) Spur gear

29. Which part of heavy vehicle deals with static and dynamic loads without deflection or distortion?

- A) Engine B) Chassis and frames
C) Control system D) Power trains

Answer: B) Chassis and frames

30. Which type of gear converts rotary motion in to linear motion and vice versa?

- A) Rack and Pinion B) Helical gears
C) Bevel gear D) Spur gear

Answer: A) Rack and Pinion

31. Which type of synchromesh gear box used for heavy commercial vehicles?

- A) Porche type B) Multi and double cone type
C) Baulk ring type D) Baulk type

Answer: B) Multi and double cone type

32. What is the advantage of dual mass fly wheel?

- A) Reduction of gear box and body noises
B) Reduce the possibility of clutch slip
C) Prevent wrong clutch engagements
D) Transmit the torque with less effort

Answer: A) Reduction of gear box and body noises

33. What will be the result of defective clutch?

- A) Gear clash during shifting
B) Gear slip
C) Gear locked in one gear
D) Noise in gear shifting

Answer: D) Noise in gear shifting

34. What causes noisy gear box in neutral position?

- A) Synchronizer defective
B) Bearing worn out or dry
C) Synchronizer worn-out
D) Synchronizing unit stuck

Answer: B) Bearing worn out or dry

35. Which type of joint permit small diffraction angle and linear variations?

- A) Flexible discs
B) Pot joint
C) Double joint
D) Tripod joint

Answer: A) Flexible discs

36. What is the function of clutch?

- A) Reduce the noise during engine running
B) Connect and disconnect power flow engine to gear box
C) Prevent malfunctioning of fly wheel
D) Increase and decrease the RPM of engine

Answer: B) Connect and disconnect power flow engine to gear box

37. What is the function of steering system?

- A) To control the braking system
B) To guide the vehicle
C) To control the fuel system
D) To increase the engine RPM

Answer: B) To guide the vehicle

38. Which part provides flexible connection and permits smooth transfer of torque from gear box to the rear axle?

- A) Universal joint
B) Clutch shaft
C) Half shaft
D) Fly wheel

Answer: A) Universal joint

39. Which type of gear teeth are straight and parallel to the gear axis

- A) Bevel gear
B) Spur gear
C) Worm gear
D) Helical gear

Answer: B) Spur gear

40. Which type of drive line used in high gears and high speed applications?

- A) Center wheel drive line
B) Rear wheel drive line
C) All wheel drive line
D) Front wheel drive line

Answer: C) All wheel drive line

41. Which type of gear will have more than one tooth in contact at the same time

- A) Spur gear
B) Helical gear
C) Rack and Pinion
D) Spur bevel gear

Answer: B) Helical gear

42. What is the necessity of square cut seals?

- A) Prevent the seal rolling in groove
B) Provide cushioning effect
C) Withstand radial movement
D) Prevent fluid leakage

Answer: A) Prevent the seal rolling in groove

43. What is the advantage of dog clutch?

- A) Easy maintenance and repair
B) More frictional area
C) No possibility of slip
D) Less pedal force to operate

Answer: C) No possibility of slip

44. Which system deals with alternator?

- A) HVAC system
B) Charging system
C) Starting system
D) Steering system

Answer: B) Charging system

45. Which system not connected with electrical system?

- A) Suspension system
B) Steering system
C) Transmission system
D) Charging system

Answer: C) Transmission system

46. What is the reason of gear locked in one gear position?

- A) Synchronizing unit stuck
B) Gear teeth wornout
C) In adequate lubrication
D) Synchronizer wornout

Answer: A) Synchronizing unit stuck

47. What is the role of ABS brakes?

- A) Reduce the brake failures
B) Prevents skidding of vehicles
C) Provide positive braking
D) Increase frictional power

Answer: B) Prevents skidding of vehicles

48. Which type of gear box eliminates the defect of gear wheels move on the shaft to mesh with each other?

- A) Compound wheel mesh gear box
B) Constant mesh gear box
C) Sliding mesh gear box
D) Synchromesh gear box

Answer: D) Synchromesh gear box

49. Which type of clutch provides more frictional area and simple in construction?

- A) Multi plate clutch
- B) Dog clutch
- C) Cone clutch
- D) Diaphragm spring clutch

Answer: C) Cone clutch

50. What is the advantage of using power steering system?

- A) To turn and control vehicle with less effort
- B) To increase the engine power
- C) To enhance the fuel efficiency
- D) To reduce the fuel consumption

Answer: A) To turn and control vehicle with less effort

51. Which factor does not affect the torque transmission by clutch?

- A) Size of clutch plat
- B) Number of clutch plates used
- C) Axial load on the clutch
- D) Co-efficient of friction

Answer: C) Axial load on the clutch

52. Which system provides DC power source for the various units of the vehicles?

- A) Storage system
- B) Steering system
- C) Lighting system
- D) Charging system

Answer: A) Storage system

53. Which type of gear box provided with helical gears?

- A) Auto synchromesh gear box
- B) Sliding mesh gear box
- C) Constant mesh gear box
- D) Synchromesh gear box

Answer: C) Constant mesh gear box
