

ITI Quiz - 02-Apr-2026

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Q. ID: ITISKILL7309VO

April 2026

Answer Key

Duration: 30 Mins

Total Marks: 53

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

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

Answer: A) Rack and Pinion

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

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

Answer: D) HVAC system

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

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

Answer: A) Spur gear

4. What is the function of steering system?

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

Answer: D) To guide the vehicle

5. What is the advantage of dog clutch?

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

Answer: A) No possibility of slip

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

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

Answer: B) Less maintenance and repair

7. What is the necessity of square cut seals?

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

Answer: D) Prevent the seal rolling in groove

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

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

Answer: D) Reduction of gear box and body noises

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

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

Answer: C) Storage system

10. What is the cause of hard gear shifting?

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

Answer: D) Synchronizing unit damaged

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

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

Answer: B) Helical gear

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

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

Answer: A) Easy gear shifting when vehicle in motion

13. What is the possible reason for gear slip?

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

Answer: B) Excessive end float of gear

14. 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

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

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

Answer: D) 50 Degree

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

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

Answer: B) Axial load on the clutch

17. Which is noise free clutch?

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

Answer: D) Diaphragm spring type clutch

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

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

Answer: D) Static seal

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

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

Answer: B) Spur gear

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

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

Answer: B) Constant mesh gear box

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

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

Answer: B) Multi and Double cone

22. Which system deals with alternator?

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

Answer: C) Charging system

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

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

Answer: A) Herring bone gears

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

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

Answer: A) Pedal effort transmitted through spring

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

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

Answer: A) Dial indicator

26. What will be the result of defective clutch?

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

Answer: A) Noise in gear shifting

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

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

Answer: D) Spur gear

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

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

Answer: C) Synchromesh gear box

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

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

Answer: A) Flexible discs

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

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

Answer: C) Minimize the force to operate the clutch

31. What is the function of clutch?

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

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

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

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

Answer: D) 22 Degree

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

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

Answer: A) Synchronizing unit stuck

34. What causes noisy gear box in neutral position?

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

Answer: D) Bearing worn out or dry

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

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

Answer: D) Multi and double cone type

36. Which system not connected with electrical system?

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

Answer: B) Transmission system

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

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

Answer: D) Suspension system

38. 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) Synchromesh gear box
- C) Constant mesh gear box
- D) Sliding mesh gear box

Answer: B) Synchromesh gear box

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

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

Answer: C) Cone clutch

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

- A) To increase the engine power
- B) To enhance the fuel efficiency

C) To reduce the fuel consumption

D) To turn and control vehicle with less effort

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

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

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

Answer: D) 24 volts

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

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

Answer: A) All wheel drive line

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

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

Answer: A) Vibration damper

44. How to rectify the hard gear shifting?

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

Answer: B) Adjust clutch pedal free play

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

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

Answer: A) By maintaining proper angle between tyres

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

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

Answer: A) Non - positive seal

47. What is the working principle of clutch?

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

Answer: B) Friction

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

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

Answer: A) Universal joint

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

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

Answer: B) Smooth power transmission

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

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

Answer: D) 6 -10 mm

51. What is the role of ABS brakes?

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

Answer: B) Prevents skidding of vehicles

52. Which part connects propeller shaft?

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

Answer: C) Gear box and final drive

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

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

Answer: A) Chassis and frames