

HYDRAULIC AND PNEUMATIC SYSTEMS

Q. ID: ITISKILL33103J

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Answer Key

Duration: 60 Mins

Total Marks: 26

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1. Which valve regulate the flow rate in hydraulic system?

- A) Delivery
- B) Non return
- C) Pressure relief
- D) By pass

Answer: A) Delivery

2. What is the reason for pneumatic brake failure?

- A) Less pedal play
- B) More pedal play
- C) Defective unloader valve
- D) Defective front wheel slack adjuster

Answer: C) Defective unloader valve

3. Which unit supplies a fine mist of oil in pneumatic system?

- A) Air service unit
- B) Pressure relief valve
- C) Actuator
- D) Control valve

Answer: A) Air service unit

4. Which law is applied in hydraulic brake system?

- A) Boyle's law
- B) Pascal's law
- C) Newton's law
- D) Charles law

Answer: B) Pascal's law

5. Which act as a seal in the external gear pump?

- A) Gear meshing
- B) Driven gear
- C) Drive gear
- D) Housing

Answer: A) Gear meshing

6. Which device converts mechanical energy into pneumatic energy?

- A) Actuator
- B) Compressor
- C) Generator
- D) Alternator

Answer: B) Compressor

7. Which is the power source of pneumatic system?

- A) Actuator
- B) Air Service unit
- C) Air Compressor
- D) Control value

Answer: C) Air Compressor

8. Which device transmit the pressure equally to all wheel cylinders in hydraulic brake?

- A) Booster cylinder
- B) Slave cylinder
- C) Master cylinder
- D) Servo cylinder

Answer: C) Master cylinder

9. Which type of pump used in the hydraulic jack?

- A) Plunger pump
- B) Gear pump
- C) Internal gear pump
- D) Vane pump

Answer: A) Plunger pump

10. Which valve save the pneumatic brake components against damage?

- A) Check valve
- B) Relay valve
- C) Brake valve
- D) Unloader valve

Answer: D) Unloader valve

11. Which part operates the brake shoe in the hydraulic brake system?

- A) Wheel cylinder
- B) Master cylinder
- C) Break drum
- D) Break pedal

Answer: A) Wheel cylinder

12. Which measure the liquid's resistance of flow?

- A) Elasticity
- B) Quality
- C) Gravity
- D) Viscosity

Answer: D) Viscosity

13. What is the direction of driven gear in an external gear pump?

- A) Opposite direction
- B) Inclined direction
- C) Perpendicular direction
- D) Same direction

Answer: A) Opposite direction

14. Which service unit act as filter, regulator and lubricator in the pneumatic system?

- A) Air service unit
- B) Valve unit
- C) Actuator unit
- D) Compressor unit

Answer: A) Air service unit

15. Which valve safe guards the hydraulics jack?

- A) Non return valve 1
- B) Non return valve 2
- C) Shut off valve
- D) Relief valve

Answer: D) Relief valve

16. What is the function of hydraulic oil in hydraulic system?

- A) Increase the heat
- B) Increase the volume

- C) Reduce the pressure D) Transmit power

Answer: D) Transmit power

17. Which component of air brake system converts pneumatic into mechanical energy?

- A) Compressor B) Brake chamber
C) Reservoir D) Brake valve

Answer: B) Brake chamber

18. What is the power flow of pneumatic system?

- A) Actuator - Control valve - Compressor B) Control valve - Compressor - Actuator
C) Compressor - Control valve - Actuator D) Compressor - Actuator - Control valve

Answer: C) Compressor - Control valve - Actuator

19. How many switching position in 4/2 directional control valve?

- A) One B) Three
C) Two D) Four

Answer: C) Two

20. Which law states that the pressure intensity of a static liquid equal in all direction?

- A) Newton's law B) Pascal's law
C) Boyle's law D) Charle's law

Answer: B) Pascal's law

21. Which part in the internal gear pump act as seal?

- A) Gears B) Gasket
C) Crescent-shaped spacer D) Sealing ring

Answer: C) Crescent-shaped spacer

22. What is the effect if the unloader valve is in open position?

- A) Continuously allow the air to the atmosphere B) Release the air to the brake valve
C) Maintain the required air pressure D) Allow the air in to the air tank

Answer: A) Continuously allow the air to the atmosphere

23. What is the type of inner drive gear used in the internal gear oil pump?

- A) Spiral gear B) Helical gear
C) Rotor gear D) Spur gear

Answer: D) Spur gear

24. What is the working media in pneumatic system?

- A) Oil B) Diesel
C) Air D) Stream

Answer: C) Air

25. Which device converts hydraulic energy into mechanical energy?

- A) Regulator B) Compressor
C) Control Valve D) Actuator

Answer: D) Actuator

26. Which valve is to be closed before lifting the load with hydraulic jack?

- A) Relief valve B) Non return valve-1
C) Shut of valve D) Non return valve-2

Answer: C) Shut of valve