

# HYDRAULIC AND PNEUMATIC SYSTEMS

Q. ID: ITISKILL33103J

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Question Paper

Duration: 60 Mins

Total Marks: 26

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Student Name: _____	Roll No: _____
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1. Which valve save the pneumatic brake components against damage?

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

2. Which device converts mechanical energy into pneumatic energy?

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

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

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

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

- A) Transmit power
- B) Increase the heat
- C) Increase the volume
- D) Reduce the pressure

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

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

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

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

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

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

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

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

9. What is the type of inner drive gear used in the internal

gear oil pump?

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

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

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

11. What is the reason for pneumatic brake failure?

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

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

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

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

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

14. Which device converts hydraulic energy into mechanical energy?

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

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

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

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

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

17. What is the direction of driven gear in an external gear

pump?

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

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

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

19. Which is the power source of pneumatic system?

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

20. What is the working media in pneumatic system?

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

21. Which law is applied in hydraulic brake system?

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

22. What is the power flow of pneumatic system?

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

23. Which valve safe guards the hydraulics jack?

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

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

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

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

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

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

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