

# HYDRAULIC AND PNEUMATIC SYSTEMS

Q. ID: ITISKILL4170VY

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

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

2. What is the power flow of pneumatic system?

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

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

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

4. What is the working media in pneumatic system?

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

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

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

6. Which device converts mechanical energy into pneumatic energy?

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

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

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

8. Which law is applied in hydraulic brake system?

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

9. Which device transmit the pressure equally to all wheel

cylinders in hydraulic brake?

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

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

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

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

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

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

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

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

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

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

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

15. What is the reason for pneumatic brake failure?

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

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

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

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

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

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

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

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

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

20. Which valve safe guards the hydraulics jack?

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

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

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

22. Which device converts hydraulic energy into mechanical energy?

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

23. Which is the power source of pneumatic system?

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

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

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

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

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

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

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