

PNEUMATICS HYDRAULICS
TRAINING COURSE

PRE/POST TEST

NAME: _____

COMPANY: _____

ATTEMPT ALL QUESTIONS

1. Why are pneumatic systems used?

2 What develops the *PRESSURE* in a pneumatic system?

3.State three units of *PRESSURE*

A. _____

B. _____

C. _____

4. What is "*ABSOLUTE PRESSURE*"?

5. What is “**Boyles Law**”?

6. What is “**Charles Law**”?

7. Name two functions that are produced when air is compressed?

A. _____

B. _____

8. State two units of compressed air flow?

A. _____

B. _____

9. What is the maximum flow rate that can be achieved in a pneumatic system?

10. State three sources of contamination in a compressed air system?

A. _____

B. _____

C. _____

11. State three types of “Positive Displacement” air compressors?

A. _____

B. _____

C. _____

12. What is used to produce compressed air at high pressure.

13. What equipment is used to store compressed air?

14. What is used to control the temperature of compressed air?

15. State two types of devices used to control the temperature of compressed air?

A.

B.

16. What is an intercooler?

17. State the three functions that pneumatic valves control?

A.

B.

C.

18. State two means in which the flow of compressed air to an actuator can be achieved?

A.

B.

19. How is compressed air pressure controlled to a particular part of a pneumatic system?

20. State the three types of pneumatic actuators?

A. _____

B. _____

C. _____

21 State the three factors to be considered in a pneumatic circuit diagram?

A. _____

B. _____

C. _____

22. Draw the symbol that represents the supply of compressed air?

23. Draw the symbol that represents an air receiver?

24. Draw the symbol that represents a double acting pneumatic cylinder?

25. Draw the symbol that represents 3/2 manually operated spring offset valve?

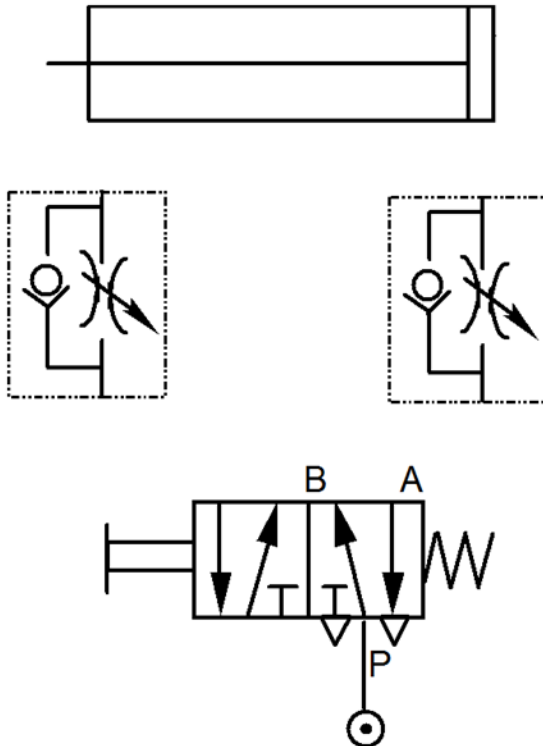
26. Draw the symbol that represents a flow regulator c/w a reverse flow check valve?

27. Draw the symbol that represents a shuttle valve?

28. Draw the symbol that represents a pressure gauge?

29. Draw the symbol that represents an air filter?

30. Connect the following components to enable compressed air to extend and retract the cylinder?



31. To enable the performance and diagnosis of a pneumatic system to be assessed the state three sources of information and knowledge required?

A. _____

B. _____

C. _____

32. When undertaking the fault diagnosis of a pneumatic system what four factors have to be determined prior to the tests commencing?

A. _____

B. _____

C. _____

D. _____

33. Prior to commencing the fault diagnostic process state three items of consideration should that should be given to preparing the system for the inclusion of test equipment?

A. _____

B. _____

C. _____

D. _____

34. State Four external influences that should be checked initially when fault finding a pneumatic system?

A. _____

B. _____

C. _____

D. _____

35. If external checks do not reveal the fault, what are the 4 factors that have to be considered when undertaking the logical fault finding of a pneumatic system?

A. _____

B. _____

C. _____

D. _____

36. After a fault has been rectified state four factors that should be observed before re-starting the system?

A. _____

B. _____

C. _____

D. _____