Question Bank for Pipe Fitter:

1. Easy Questions:

A. Multiple Selection Type:

Q1 what is the base unit of length as per SI (international system)
   a) Foot
   b) Meter
   c) Centimeter
   d) Yard

Q2 what is the value (approx) of one inch
   a) 1.5 cm
   b) 10.5 cm
   c) 2.54 cm
   d) 25 cm

Q3. Steel rule is made of
   a) Brass
   b) Zinc
   c) Stainless steel
   d) Cast iron

Q4. The minimum measurement that can be read with the help of a steel rule is
   a) 0.01 mm
   b) 0.02 mm
   c) 0.05 mm
   d) 0.50 mm

Q5. Try square is used to check up an angle of
   a) 30°
   b) 45°
   c) 60°
   d) 90°

Q6. In a metric micrometer, a complete revolution of thimble advances
   a) 0.01 mm
   b) 0.25 mm
   c) 0.50 mm
   d) 1.00 mm
Q7. The least count of metric micrometer is
   a) 0.01 mm
   b) 0.05 mm
   c) 0.10 mm
   d) 0.50 mm

Q8. The least count of a vernier caliper is
   a) 0.10 mm
   b) 0.01 mm
   c) 0.05 mm
   d) 0.02 mm

Q9. Vernier depth gauge is used for measuring
   a) External dimensions
   b) Internal dimensions
   c) Step, depth of blind hole
   d) Pitch diameter

Q10. The least count of vernier height gauge is
      a) 0.1 mm
      b) 0.02 mm
      c) 0.05 mm
      d) 0.10 mm

Q11. A divider is used for
      a) Scribing circles
      b) Scribing arcs
      c) Transferring and stepping of distances
      d) All of the above

Q12. Scriber is made of
      a) Copper
      b) High carbon steel
      c) Mild steel
      d) Cast iron

Q13 What is the accuracy of steel rule ______.
       a) 0.02mm
       b) 0.75mm
       c) 0.05mm
       d) 0.04mm

Q14. Chisel is normal size is from ______ Long?
     a) 2" to 10"
     b) 5" to 8"
     c) 10" to 15"
d) None of the above

Q15. A tool used to put finishing touches on a machined work piece is called ____?
   a) Chisel
   b) Tap
   c) File
   d) Scraper

Q.16 Galvanized iron is coated with
   a) Tin
   b) Zinc
   c) Lead
   d) Copper

Q17. A cutting tool used to finish and enlarge a hole is known as
   a) Drill
   b) Tap
   c) Die
   d) reamer

Q18. The commonly used standard length of hacksaw blade is
   a) 100 mm
   b) 150 mm
   c) 200 mm
   d) 250 mm

Q19. The material of twist drill is generally
   a) H.S.S.
   b) Carbide steel
   c) Diamond
   d) Cast steel

Q20 Stud is a Short rod with threads on ____
   a) Both end
   b) One end
   c) Middle
   d) None of the above

Q21 Completely threaded long rod is also known as _____
   a) Bolt
   b) Stud
   c) Screw
   d) None of the above

Q22: The functions of valves are:
   a) Starting or stopping or diverting flow.
   b) Controlling flow rate & preventing back flow.
   c) Controlling or relieving pressure.
d) All of the above.

Q23: The main parts of a valve are;
a) Body, ports, seat.
b) Stem, disc, packing.
c) Handle or hand wheel, bonnet, and gland nut.
d) All of above.

Q24: Pliers is a tool used for:
a) Holding a small job.
b) Cutting wires.
c) Turning wires.
d) All of the above.

Q25. A cutting tool used to finish and enlarge a hole is known as
a) Drill
b) Tap
c) Die
d) reamer

B. Medium Questions:

Q26 Name the instrument to be used for measurement of length 23 meter in one step
a) Canvas tape rule
b) Flexible ruler
c) Folding ruler
d) Steel tape

Q27. Steel rule is a
a) Marking instrument
b) Precision instrument
c) Checking instrument
d) Direct reading measuring instrument

Q28. Which of the following is a direct measuring tool?
a) Try square
b) Steel rule
c) Straight edge
d) Ring gauge

Q29. The minimum measurement that can be correctly read with a vernier caliper is called
a) Zero reading
b) Least count
c) Main scale reading
d) Actual reading minus zero error
Q30. A micrometer has a negative error of 0.03 mm. What is the correct reading when the micrometer measures 40.53 mm?
   a) 40.50 mm  
   b) 40.56 mm  
   c) 40.46 mm  
   d) 40.59 mm

Q31. A depth micrometer can be used to measure wide range of sizes because
   a) It is equipped with a number of extension rods  
   b) It has a lengthy spindle  
   c) It has a lengthy sleeve  
   d) Is has an adjustable

Q32. While laying out, the vernier height gauge must be used on the
   a) Surface plate  
   b) Vee block  
   c) Machine bed  
   d) Any flat surface

Q33. The angle which is less than 90° is called as
   a) Obtuse angle  
   b) Acute angle  
   c) Right angle  
   d) None of the above

Q34. Which of the following is not the part of a combination set?
   a) Stock  
   b) Protractor head  
   c) Square head  
   d) Centre head

Q35 What is tapping?
   a) Cutting Holes  
   b) It is a process of cutting internal threads In holes  
   c) Cutting and polishing of jobs  
   d) None of the above

Q36. What is the function of reamer?
   a) It is used to produce holes  
   b) It is used to cut bigger size hole  
   c) It is used to produce accurate size of hole after using drill  
   d) None of the above

Fill in the blanks
Q37 Calipers have two legs joined with ________.
   a) Rivet  
   b) Spring leaf  
   c) Nut& bolt  
   d) all of the above
Q38 Calipers are generally used for ______ size.
   a) 6” & 8”
   b) 18” & 20”
   c) 10” & 12”
   d) 14” & 16”

Q39 Which type of calipers is used to set the sizes quickly ______.
   a) Rivet jointed calipers
   b) inside caliper
   c) spring joint calipers
   d) outside calipers

Q40. A chisel is a ______ cutting tool that can be used for cutting?
   a) Wooden
   b) Steel
   c) Hard steel
   d) Plastic

Q41. Which one of the following metals does not require any coolant remaining?
   a) Aluminium
   b) Cast iron
   c) Copper
   d) Steel

Q42. A cutting tool used to cut outside thread is called ______
   a) Drill
   b) Remer
   c) Die
   d) Tap

Q43. Hacksaw blade teeth get dull due to ______
   a) High speed and pressure
   b) Pressure not released during return stroke
   c) Coolant not used
   d) Any one of the above

Q44. Zero error in micrometer means ______
   a) There is negligible gap between the spindle and the anvil
   b) Micrometer is true
   c) Zero mark on the thimble is not visible
   d) Zero on thimble and datum line on sleeve do not coincide when measuring faces are contact

Q 45 Rivet is short cylindrical rod having a ____.
   a) Head & Tapered tail
   b) Head and a cylindrical tail
   c) Head and a long circular tail
   d) None of the above

Q46 The Screws can have a _____
   a) Button or dome head
b) Round head
c) Oval or raised head
d) All of the above

Q47: A valve ball is made of
a) Stainless steel.
b) Titanium
c) Brass or nickel
d) all of the above.

Q48. Which one of the following metals does not require any coolant remaining?
   a) Aluminium
   b) Cast iron
c) Copper
d) Steel

Q49. It is process of removing very small chips from metal surfaces by means of a sharp-edged tool. What is this tool called as?
   a) Scraper
   b) Chisel
c) Hacksaw
d) Reamer

C. Hard Questions:

Q50. An outside micrometer has a negative error. The correct reading can be taken by
   a) Adding the negative error in the actual reading
   b) Deducting the negative error from the actual reading.
c) Adding twice the negative error in the actual reading
d) Deducting twice the negative error from the actual reading.

Q51. Ratchet stop in the micrometer helps to
   a) Control the pressure
   b) Lock the spindle
c) Adjust zero error
d) Hold the work piece

Q52 Caliper meant for the measuring the width of a slot is ________.
a) odd leg calipers
b) outside calipers
c) jenny calipers
d) inside calipers

Q53. Which one of the following is used to rectify damaged or rusted threads?
   a) Die nut
   b) Circular split die
c) Two-piece die
d) Die plate

Q54. What is used for removing a broken tap?
   a) Tap disposer
b) Tap wrench  
c) Tap extractor  
d) Tap nut  

Q55. The cutting action of a file depends upon  
   a) The kind of cut and spacing of teeth  
   b) Arrangement of teeth on the file  
   c) Size and shape of the file  
   d) All of the above  

Q56: In a linear motion valve the closer member has a  
   a) linear displacement  
   b) Transverse movement  
   c) Circular rotation  
   d) all of above  

2. Questions with selection of (True/False):  

A. Easy Question:  

Q1 A labyrinth seal is a type of mechanical seal (True/False)  

Q2 Gasket is mechanical seal which fills the space between two or mating surfaces. (True/False)  

Q3 gaskets are commonly produced by cutting from sheet materials (True/False)  

Q4 Mating flanges should be of the same type and correctly aligned. (True/False)  

Q5 Fasteners and/or gaskets should never be reused. (True/False)  

Q6 Gasket should be kept as thin as possible as per requirement of the system. (True/False)  

Q7 While cutting full faced gasket, the bolt holes should be cut first, followed by the gasket outer and inner diameter. (True/False)  

Q8 Gasket should be tightened evenly in at least three or four stages using an opposed pattern (True/False)  

Q9: During Installation of valve prepare suitable gaskets for flanges connection and put them between the connecting flanges. (True/False)  

Q10: After installation of valves, checks for leaks and operating tests (True/False)
Q11 A nut is a type of fastener with a threaded hole. (True/False)

Q12 Bolt is a form of threaded fastener. (True/False)

Q13 A washer is a thin plate of disc shaped with a hole in the middle (True/False)

Q 14. We should hold the portable disc grinder firmly when the off/on switch is turned on. (True/False)

Q15. A jack is a mechanical device used as a lifting device to lift heavy loads. (True/False)

Q16. The spanners and screwdrivers are dismantling & assembling tool. (True/False)

Q17. The striking face, claw, eye, face, cheek are parts of a hammer. (True/False)

B. Medium Questions:

Questions with selection of (True/False):

Q18 Seals prevent the ingress of dirt, pollution and environmental damage (True/False)

Q19 Seals reduces leakage between the pump and the surrounding to an absolute minimum. (True/False)

Q20 Fasteners should be selected to insure that they do not exceed their elastic limit at the required tension during tightening them. (True/False)

Q21: The ports are the passages that allow fluid to pass through the valve. (True/False)

Q22: A handle is used to manually control a valve from outside the valve body. (True/False)

Q23: A disc or valve member is a movable obstruction inside the stationary body of valve. (True/False)

Q24: While dismantling do not remove the old gland packing from the bonnet stuffing box. (True/False)

Q25 A lap joint with two rows of rivets is known as a double riveted lap joint (True/False)

Q26 In butt joints rivet joints are formed between each of the plates and one or two cover plates. (True/False)

Q27 The diameter of the rivet must not be greater than the thickness of the plate in which it is to be inserted. (True/False)

Q28. The portable grinder is a Heavyweight, machine-operated tool. (True/False)
Q29. A pneumatic drill, also called a jackhammer. (True/False)

Q30. A pneumatic drill is hard to maintain since the moving parts are more, the maintenance is tough. (True/False)

C. **Hard Questions:**

Q31 A rubber faced phenol material is commonly used for the gasket to avoid any electrical conduction through the bolt. (True/False)

Q 32. Hydraulic pumps are sources of power for many dynamic machines (True/False)
3. Interview descriptive questions:

A. Easy Questions:

Q1. What are isolating valves?
Q2. What are regulation valves?

Q3. What are non-return valves?
Q4. What is relief valve?
Q5. What is safety valve?

Q6. What are instrument categories fixed on pipelines?
Q7. Which instruments are handled by piping department?
Q8. What are basic functions of instruments?
Q9. What are the types of flow measuring devices?
Q10. What is piping and instrument scope of supply for orifice meter?
Q11. What are types of level measurement?
Q12. What are direct methods of level measurement?
Q13. What is pressure instruments used in chemical industries?
Q14. What are manometers?
Q15. What are temperature measuring instruments?
Q16. What is minimum pipe size required for thermowell installation?
Q17. What factors affect pipe span in pipe rack?
Q18. How much extra space required in rack for future additions?
Q19. What facing is required on a steel flange that will be bolted to a cast iron flange and why?

Q20. How is cast iron flange attached to steel pipe?
Q21. What is the pipe size range in which all flanges are standard?
Q22. What is the pipe size range in which flanges are not provided?
Q23. What is the most common body style for control valves?

B. Medium Questions:

Q24. Where blind flange is used?
Q25. What are functions of valves?
Q26. What are special valves?
Q27. What are available valve operators?
Q28. What are two types of ball valve?
Q29. Why ball valves are normally flanged?
Q30. What are butterfly valve types?
Q31. What are types of check valve?
Q32. Where diaphragm valves are used?
Q33. What is Throttling valve?
Q34. What is Vacuum breaker?
Q35. What is Quick acting valve?
Q36. Where diaphragm assembly is used?
Q37. Why control valves are usually flanged?
Q38. Where butterfly control valve is used?
Q39. How bypass valve in control station should be located?
Q40. How control station should be supported?
Q41. Why and where drain should be located in control valve assembly?
Q42. Where reducer shall be located in control valve assembly?

Q43. How breakup flanges for control valve should be located?
Q44. How orifice flange taps should be oriented?
Q45. What are straight run requirements for vortex meters?
Q46. Where restriction orifice plates are used?

Q47. What are types of bourdon tubes?
Q48. What thermocouple metals normally used?
Q49. How resistance thermocouples work?
Q50. How filled system temperature element work?
Q51. How bimetallic thermocouple work?

Q52. What are design considerations for pipe rack?
Q53. What are steps in rack design?
Q54. What are spandrels?
Q55. Which lines placed where in rack?
Q56. What insulating materials are used?
Q57. What is the technical term used for the sag in pipe caused by gravity and how does affect piping design?
Q58. If one 4” carbon steel pipe is schedule 40 and another 4” carbon steel pipe is schedule 80. Which has the greater sag and why?

C. Hard Questions:

Q59. What are the steps in selection of valve?
Q60. What materials are used for construction of valves?
Q61. What are non-slam check valves?
Q62. Where stop check valve is used?
Q63. In what order do you arrange the pipes in the Pipe rack and why? How much % of area should be reserved for Future expansion? Specify a range.
Q64. Why block valve is used at the root of an instrument like pressure indicator?
Q65. Where and why bleed valve is used in instruments?
Q66. Where ball control valve is used?
Q67. How control valve block valves should be located?
Q68. How TSO valve should be installed?
Q69. What are straight run requirements of orifice plate?

Q70. What are inferential methods of level measurement?
Q71. What is hydrostatic head type level transmitter?
Q72. How to route steam lines on rack?

Q73. Which weighs more and why?
Q74. Which requires fewer support point and why?