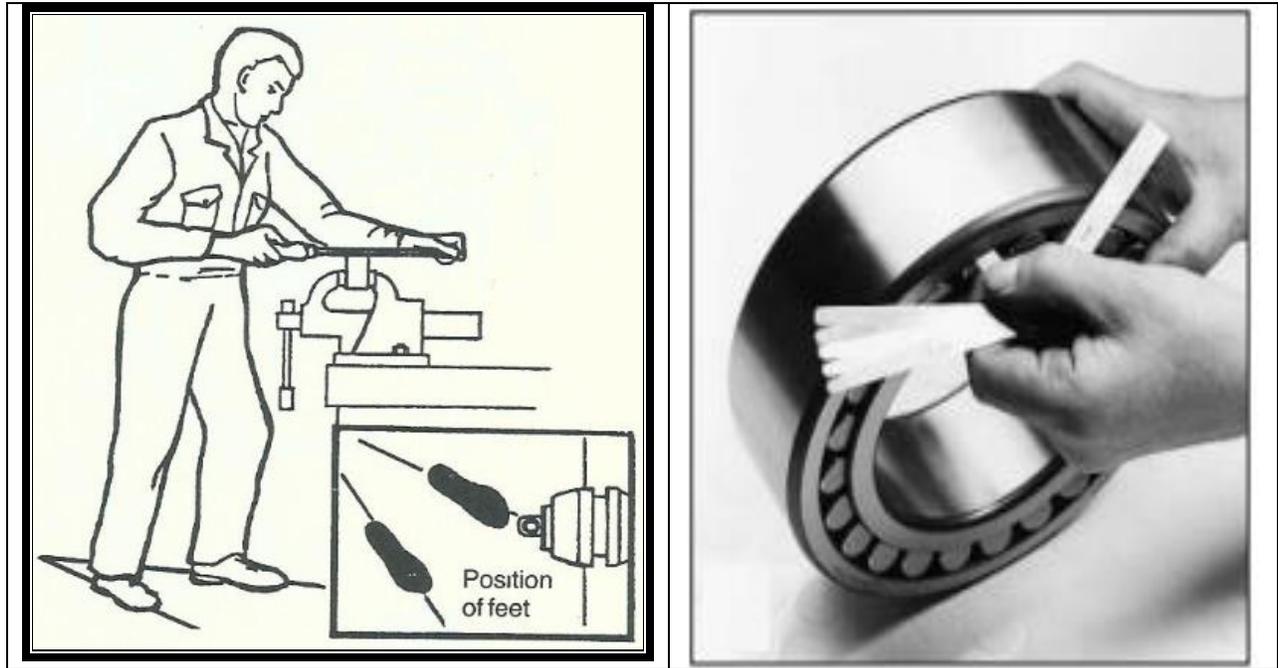


Question Bank

Not For Sale – For Internal Circulation only



Occupation **Power Plant Millwright Fitter**

Sub –Sector **Generation**

Sector **Power**

Reference ID: **PSC/ Q 0301**

Version **1.0**

Mark the right answer:-

- Q1. A cutting tool used to finish and enlarge a hole is known as
- Drill
 - Tap
 - Die
 - reamer
- Q2. Which one of the following metals does not require any coolant remaining?
- Aluminum
 - Cast iron
 - Copper
 - Steel
- Q3. A cutting tool used to cut outside thread is called
- Drill
 - Remer
 - Die
 - Tap
- Q4. Which one of the following is used to rectify damaged or rusted threads?
- Die nut
 - Circular split die
 - Two-piece die
 - Die plate
- Q5. What is used for removing a broken tap?
- Tap disposer
 - Tap wrench
 - Tap extractor
 - Tap nut
- Q6. The grooves provided on the entire length of the body of a twist drill are called
- Lips
 - Flutes
 - Margins
 - Webs
- Q7. The cutting action of a file depends upon
- The kind of cut and spacing of teeth
 - Arrangement of teeth on the file
 - Size and shape of the file
 - All of the above

1. Questions - Bearings

Mark the True or False on the followings:

- Q1: In case of rolling bearings friction resistance is considerably less than in plain bearings. (T/F)
- Q2: In case of ball bearings steel balls geometrically contact inner and outer race at a point. (T/F)
- Q3: In case of roller bearing as the number of rollers goes up the contact area increases. (T/F)
- Q4: In case of roller bearings the greater is the contact area result in greater load. (T/F)
- Q5: Thrust roller bearings are used in applications with significant thrust load. (T/F)

Select the right option from the choice given below

- Q1 In plain bearing the rotation has a _____ with the bearing which is holding stationary.
- Sliding contact
 - Moving contact
 - Fixed contact
 - None of the above
- Q2 In case of antifriction bearing due to _____ contact area rolling friction is much _____ than sliding friction. (Less, more, lesser, greater)
- Q3 In case of ball bearing the contact area between the mating parts is _____. (High, low, least)
- Q4 In plain bearing the starting resistance is much _____ than the _____ resistance due to absence of oil film between shaft and bearing. (Larger, running, lesser, stationery)

2. Questions - Lubrication

Mark the most suitable answer

- Q1 The mineral oil is used because
- Paraffinic
 - Readily available
 - Comparatively low cost
 - All of the above
- Q2 The factors determining the effectiveness of oil lubrication are
- Load , temperature & viscosity
 - Speed, alignment & oil flrae
 - Condition of the bearing surface , running clearances and purity of the lubricant
 - All of the above

3. Questions - Pumps

Tick the right answer from the choices given below

- Q1 The force developed by a motor in a pump overcomes
- Frictional forces from large quantities of fluids
 - Difference in static pressure between two locations
 - Develop desired velocity of fluid
 - All of the above
- Q2 Problems caused due to pump cavitations are
- Pump packing
 - Mechanical seal
 - Impeller casing and wear bends
 - All of the above

Answer the following in true & False

- Q1 In a positive suction system, pump draws the liquid from the suction tank located above the pump level (T/F)
- Q2 In negative suction system, liquid is lifted by pump from the suction well located below the level of the pump (T/F)

Q3 The lobe pumps is utilized for pumping of liquids containing soft or fragile solids, viscous liquids (T/F)

Q4 The reciprocating pumps deliver fluids at high pressure (high delivery head) . (T/F)

Fill in the blanks

Q1 The _____ is used were a flush _____ is required. (countersunk, surface, round head, Flat head)

Q2 The Plates that are to be joined are brought _____ to _____ such that an overlap exist. (Face, back, vertical)

Tick the right choice in (true/false)

Q1 A lap joint with two rows of rivets is known as a double riveted lap joint (true/false)

Q2 In butt joints rivet joints are formed between each of the plates and one or two cover plates.(True / False)

Q3 The diameter of the rivet must not be greater than the thickness of the plate in which it is to be inserted. (True / False)

4. Questions -Valves

Q1: A valve ball is made of

- a) Stainless steel.
- b) Titanium
- c) Brass or nickel
- d) all of the above.

Q2: In a linear motion valve the closer member has a

- a) linear displacement
- b) Transverse movement
- c) Circular rotation
- d) all of above

Mark on True or False from the following questions:

Q1: The ports are the passages that allow fluid to pass through the valve. (True/ False)

Fill In the Blanks

Q1 A mechanical shaft seal consists of two main component, a _____ part and a _____ part. (Rotating, stationery, Inner, outer)

5. Questions - Safety

Mark the right answer

Q1. How long a rescue breath needs to be?

- a) Delivered over 2 seconds
- b) Delivered over 1 second
- c) Long enough to make the chest rise
- d) A small puff of air

6. Questions - Basic Engineering Metals

Q1. Brass is an alloy of

- a. Copper and tin
- b. Lead and tin
- c. Copper and zinc
- d. Copper and silver

- Q2. Aluminium in its pure form is not used for engineering work because
- It is brittle
 - It is very light
 - It is costly
 - It lacks strength
- Q3. Which among the following is the lightest metal?
- Lead
 - Tin
 - Aluminium
 - Copper
- Q4. White metal is an alloy of
- Copper and tin
 - Copper, zinc and tin
 - Copper, lead, tin and antimony
 - Copper, zinc, tin and antimony
- Q5. Galvanized iron is coated with
- Tin
 - Zinc
 - Lead
 - Copper

Power Plant Millwright Fitter – Questions Bank(List – 2)

Q1. Write five safety precautions associated with use of wrenches.

- Always use a wrench that fits the nut properly
- It is better and safer to pull a wrench towards yourself than to push away from you
- If a wrench has developed burr, remove the same by grinding
- If possible, avoid using adjustable wrench by putting a pipe or handle.
- Don't increase the leverage of a wrench by putting a pipe or handle

Q2. Write five safety precautions associated with use of scrapers.

- Don't scrap towards the body
- Don't hold the work in hand and scraper in the other to avoid stab wounds
- Store the scrapers properly away from other tools when not in use
- Use only correctly sharpened scrapers Occupation Health and Safety
- Protect the scrapers with wooden or leather sheath when carried in tool box.

Questions – Cutting Tools

Q1. Counter sink drill bits create a _____ Surface hole. (Cylindrical , Tapered, round)

Kindly answer the following in (true & false)

Q1. A pneumatic drill is hard to maintain since the moving parts are more, the maintenance is tough.(True / false)

Questions basic tools and instruments

Q1. In a metric micrometer, a complete revolution of thimble advances

- 0.01 mm
- 0.25 mm
- 0.50 mm
- 1.00 mm

Q2. The least count of metric micrometer is

- a. 0.01 mm
- b. 0.05 mm
- c. 0.10 mm
- d. 0.50 mm

Q3. 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 form the actual reading.

Q4. 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

Q5. The lease count of a vernier caliper is

- a. 0.10 mm
- b. 0.01 mm
- c. 0.05 mm
- d. 0.02 mm

Q6. Ratchet stop in the micrometer helps to

- a. Control the pressure
- b. Lock the spindle
- c. Adjust zero error
- d. Hold the workpiece

Q7. 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

Q8. The most count of a vernier outside micrometer is

- a. 0.10 mm
- b. 0.01 mm
- c. 0.001 mm
- d. 0.0001 mm

Q9. The least count of vernier height gauge is

- a. 0.1 mm
- b. 0.02 mm
- c. 0.05 mm
- d. 0.10 mm

Q10. What is the major point of difference between marking and surface plate?
Q11. Why is Prussian blue put on the surface plate and not on the surface of the job?
Q12. A groove is made in the front end of the base in the universal surface gauge. Why?
Q13. Cast iron is used for manufacturing of surface plates. Write three advantages of using cast iron. (i) Easy to cast and machine (ii) Cheap (iii) Less wear and tear.
Q14. Write any three characteristics of a granite surface plate. (i) Granite is dense and stable material. (ii) It retains high accuracy. (iii) It is rust proof.
Q15. 'V' blocks are available in grades of a) 0 & 1 b) 1 & 2 c) A1 & A2 d) A & B
Q16. A hole, which is not made through full depth of the component is known as a. Core hole b. Blind hole c. Pin hole d. Bore hole
Q17. The cutting angle of a flat chisel for chipping aluminum is a. 35° b. 55° c. 60° d. 70°
Q18. Which one among the following scrapers is used for scraping on bearing bush? a. Flat scraper b. Triangular scraper c. Half round scraper d. Round scraper
Q19. Which one of the following coolants is used for reaming aluminum workpiece? a. Kerosene b. Water c. Air pressure d. Lard oil
Q20. Which one of the following materials is used for making a grinding wheel? a. Silicon carbide b. Granite c. Sand d. Calcium carbonate

Q21. The distance a drill advances into the job in one complete revolution is known as

- a. R.p.m.
- b. Cutting speed
- c. Feed
- d. Machine speed

Q22. The material of twist drill is generally

- a. H.S.S.
- b. Carbide steel
- c. Diamond
- d. Cast steel

Question Bank M

Mark the right answer:-

Q1: The striking face, claw, eye, face, cheek are parts of a hammer. (T or F) –

Q2. 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

Q3. 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

Q4. Which one of the following designations does NOT denote the grade of a file?

- a. Bastard
- b. First cut
- c. Second cut
- d. Smooth

1. Questions - Bearings

Mark the True or False on the followings:

Q1: All bearings are provided some lubrication arrangement to reduce friction between shaft and bearing. (T/F)

- Q2: The roller bearings are capable of carrying higher radial loads. (T/ F)
- Q3: In case of double groove ball bearing the radial load decreases. (T/F)
- Q4: The angular contact bearings are used for high radial and thrust load applications.(T/F)

Select the right option from the choice given below

- Q1 Ball and roller bearing are more suitable to drive subject to frequent starting and stopping as they save _____ power. (More, less, increase)
- Q2. Permissible limit for alignment of fans in power plant is
- a. + - .05 mm
 - b. + - .08 mm
 - c. + - 1.05 mm
 - d. + - 1.02 mm
- Q3. Permissible limit for alignment of coal mills in the plant is
- a. + - .05 mm
 - b. + - .08 mm
 - c. + - 1.05 mm
 - d. + - 1.02

1. Questions - Lubrication

Mark the most suitable answer

- Q1 The thinner fluids are used for
- a. Lighter load
 - b. Faster speeds
 - c. Both A& b
 - d. None of the above

Tick the true or false from the below mentioned Questions

- Q1 Sliding and rolling materials are not separated by a thin film in rolling bearing (true/False)
- Q2 In case of plane journal bearing a continuous film of the lubricant is developed while machine is running (true/false)
- Q3 The viscosity of the fuel is the fuel ability to resist motion (True/False)
- Q4 Loss of oil film is due to reduction in viscosity results in excessive wear (True/False)

1. Questions - Pumps

Tick the right answer from the choices given below

- Q1 Series pumping is done to

- a) Increase the head of pump
- b) Head developed by each pump
- c) Decrease desired flow of pump
- d) All of above

1. Questions - Fasteners& Rivets

Mark the right answer

- Q1 Stud is a Short rod with threads on ____
- a) Both end
 - b) One end
 - c) Middle
 - d) None of the above
- Q2 The function of lock washer is to _____
- a) Prevent the fastener from loosening
 - b) Bite into the fastener
 - c) Reduce mechanical looseness causing vibration
 - d) All of the above
- Q3 Completely threaded long rod is also known as _____
- a) Bolt
 - b) Stud
 - c) Screw
 - d) None of the above

Fill in the blanks

- Q1 The _____ is most widely used were the joint must be as strong as possible. (round head or snap head, Countersunk head, Flat head)

Mark on True or False from the following questions:

Q1: A disc or valve member is a movable obstruction inside the stationary body of valve (T/F)

1. Question (Seals& Gasket)

- Q1 A labyrinth seal is a type of mechanical seal (True/false)
- Q2 A rubber faced phenol material is commonly used for the gasket to avoid any electrical conduction through the bolt. (True/false)
- Q3 Fasteners should be selected to insure that they do not exceed their elastic limit at the required tension during tightening them. (True/False)
- Q4 While cutting full faced gasket, the bolt holes should be cut first, followed by the gasket outer and inner diameter. (True/false)

Fill In the Blanks

- Q1 the _____ shell of the seal holds the seal in its place. (Outer, inner, center)

Questions (Jigs & Fixtures)

Answer the following answer in True & False

- Q1 Cap screws and dowel pins hold fabricated parts together. (True/False)
- Q2 Pins, pads and recesses used to locate the work piece on the Jig. (True/false)

Select the right Answer from the choices given below

- Q1 What make the fixture unique?
- a) Parts & shape
 - b) Bits
 - c) Cutting tools
 - d) None of the above
- Q 2 jigs & fixtures increases the productivity by eliminating the individual
- a) Marking,
 - b) positioning
 - c) frequent checking
 - d) all of the above

Fill in the Blanks

- Q 1 The simplest type of drill jig consists of a plate with _____ to _____ the drills.
(Plate, holes, guide, position)
- Q 2 Clamps counter act forces from the feed of the _____ and _____ of the cutter. (Table, rotation, location, base)

1. Questions - Safety

Mark the right answer

- Q1. Which one of the following is not the cost due to an accident?
- (a) Cost due to damage to machine, tools, material and property
 - (b) Cost of lost time of the injured person.
 - (c) Cost of compensation and medical aid
 - (d) Cost due to increase in production
- Q2. While grinding one must use
- (a) dark glass screen
 - (b) mask
 - (c) safety goggles
 - (d) sun goggles

1. Questions - Basic Engineering Metals

- Q1. Gun metal is an alloy of copper,
- a. Tin and zinc
 - b. Lead and zinc
 - c. Zinc and nickel
 - d. Lead and nickel
- Q2. Generally, bearing bushes are made of
- a. Copper
 - b. Brass

- c. White metal
 - d. Gun metal
- Q3. The filaments of lamp bulbs are made of
- a. Nickel
 - b. Chromium
 - c. Tungsten
 - d. Tin
- Q4. Cast iron is used for manufacturing machine beds because
- a. It can resist more compressive stress
 - b. It is heavy in weight
 - c. It is cheaper metal
 - d. It is a brittle metal

Power Plant Millwright Fitter – Questions Bank (List – 2)

Questions General - 125

Q1. Write five safety precautions associated with use of vices

Keep the hands clear of the jaws when closing the same.

- (ii) Don't open jaws beyond their capacity to avoid the movable jaw filling out
- (iii) When holding a heavy piece, prop it up with a piece of wood to avoid it from slipping down
- (iv) Don't hammer the handle for closing the jaws
- (v) Protect the screw of the vice from any chips etc. getting into it.

Q2. Write five safety precautions associated with use safe material handling.

- (i) Make sure that it is within your capacity before lifting a heavy load
- (ii) Lift heavy load with your leg muscles not with your back
- (iii) Don't walk carrying a heavy load which obstructs the view
- (iv) Don't grip on sharp edges or on slippery faces
- (v) If the load is carried by more than one person, there must be perfect understanding and coordination among them and all of them must follow instructions of the leader.

Q3. Write five safety precautions associated with use of hacksaws.

- (i) Use correct type and size of blade for the job**
- (ii) Screw the blade firmly on the frame**
- (iii) Fix the job tightly in a vice before hacksawing**
- (iv) Don't exert too much pressure**
- (v) Use correct cutting speed. The blade may break if the speed is too fast.**

Q1: The motor used in corded drill is often a _____ motor. (d.c. series, shunt , Universal.)

Q2. A shorter drill bit will be _____. (stronger, weaker, thinner, thicker)

Kindly answer the following in (true & false)

Q1. Cordless drill is an electric drill which uses rechargeable batteries. (True/false)

Q2. A pneumatic drill, also called a jackhammer. (True / False)

Questions basic tools and instruments

Q1. 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

Q2. 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

Q3. 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

Q4. Vernier depth gauge is used for measuring

- a. External dimensions
- b. Internal dimensions
- c. Step, depth of blind hole
- d. Pitch diameter

Q5. The angle which is less than 90° is called as

- a. Obtuse angle
- b. Actual angle

- c. Right angle
- d. None of the above

Q6. What material is marking plate made of?

Q7. What material is surface plate made of?

Ans: Hardened steel, granite stone or well-seasoned cast iron.

Q 8. Which of the following is not the part of a combination set?

- a) Stock
- b) Protractor head
- c) Square head
- d) Centre head

Q9. Double tip off set screwdriver has _____ blades (2,3,6,4)

Q10. Why is wooden top used on a workbench?

Q11. Why is wooden top used on a workbench?

Q12. What coolant is recommended for tapping copper or aluminium?

- a. Kerosene
- b. Lard oil
- c. Soda water
- d. Dry

Q13. Which one among the following materials can be cut with rasp cut file?

- a. Steel
- b. Cast iron
- c. Wood
- d. Bronze

Q14. Both sides of a flat bastard file have

- a. No cut
- b. Single cut teeth
- c. Double cut teeth
- d. Wavy teeth

Q15. The length of hacksaw blade is measured from

- a. One end of the toothed portion to the other end
- b. Centre of one pin hole to the centre of other in hole
- c. End to end blade
- d. End to one hole to the end of the other pin hole

Q16. The new hacksaw blade should not be used in the blind saw cut made by old blade because

- a. The space is not enough to run the blade
- b. The blade is costly
- c. The new blade has sharp teeth
- d. None of the above

Q17. The most suitable pitch of the hacksaw blade for cutting thin section tubes is

- a. 0.8 mm
- b. 1.0 mm
- c. 1.4 mm
- d. 1.8 mm

Q18. The suitable pitch hacksaw for cutting solid brass is

- a. 0.8 mm
- b. 1.0 mm
- c. 1.4 mm
- d. 1.8 mm

Q19. The commonly used standard length of hacksaw blade is

- a. 100 mm
- b. 150 mm
- c. 200 mm
- d. 250 mm

Q20. For grinding carbide materials

- a. Aluminium oxide wheel is used
- b. Silicon carbide wheel is used
- c. Diamond wheel is used
- d. Corundum wheel is used

Q21. In case of a single cut file, the teeth are cut on the file face at an angle of

- a. 45° to the centre line of the file
- b. 60° to the centre line of the file

- c. 750 to the centre line of the file
- d. 800 to the centre line of the file

Q22. Balancing of wheel is done to

- a. Make the sides of the wheel parallel
- b. Make the outside diameter concentric with the bore
- c. Equalize the weight in every position of the wheel
- d. None of the above

Q23. A die is

- a. External thread cutting tool
- b. Internal thread cutting tool
- c. Square thread cutting tool
- d. Acme thread cutting tool

Q24. Which one the following drilling machines is used for drilling holes where electricity is not available?

- a. Bench drilling machine
- b. Pillar drilling machine
- c. Radial drilling machine
- d. Ratched drilling machine

Q25. Which of the following reamers is particularly suitable for reaming holes having keyway grooves?

- a. Straight fluted reamer
- b. Helical fluted reamer
- c. Taper reamer
- d. Pilot reamer

Q26. Which among the following is NOT the cause for loading of grinding wheel?

- a. Dense structure
- b. Fed to fine
- c. Wheel speed more than recommended
- d. Proper grain size and grade of wheel

Q27. What is the cause of a grinding wheel becoming glazed in a grinding machine?

- a. Grinding wheel's grade is too soft.
- b. Grinding wheel's grade is too large
- c. Feed and traverse are less
- d. Grinding wheel's speed is too high and work speed is low

Q28. Dressing and truing of a grinding wheel are

- a. Exactly the same operation
- b. Done with the same equipment
- c. Done only for coarse grinding wheels
- d. Only for form grinding wheels

Q29. You have to select a grinding wheel with suitable abrasive to grind glass. What is the type of abrasive you will select?

- a. Diamond
- b. Emery
- c. Quartz
- d. Silicon carbide

Q30. Which one of the following cutting fluids is used during grinding mild steel?

- a. Mineral oil
- b. Non-synthetic cutting oil
- c. Soluble oil
- d. Paraffin

Q31. Grinding with a balanced grinding wheel will make possible to achieve the required

- a. Dimensional accuracy with surface finish
- b. Positional tolerance surface finish only
- c. Positional tolerance
- d. Pattern of lay

Q32. Oil grooves are to be cut in brass half bearings. Which is one of the following chisels is suitable?

- a. Flat chisel
- b. Cross cut chisel
- c. Half-round nose chisel
- d. Web chisel

Q33. Which is the possible cause when a twist drill produce a rough hole on the job?

- a. The clearance angle is too big
- b. The clearance angle is too small
- c. The cutting speed is too small
- d. Feed rate is too high

7. Questions - Basic Tools

Mark the right answer:-

- Q 1: Screw drivers are generally used for
- (a) cutting metals into pieces

- (b) driving or removing screws or bolt with slotted, recessed or special heads.
- (c) putting to rotate bolts into holes
- (d) none of the above.

Q2: Winch is a tool specially designed to:

- (a) Rotate the whole body of an equipment
- (b) tighten or loosen nuts or bolts, nuts, studs and pipes
- (c) remove broken bolts/ screws etc.
- (d) all of the above.

Mark true or false against the following questions:

Q1: The spanners and screwdrivers are dismantling & assembling tool . (T or F) –

Q2: Plier is a tool used for :

- (a) Holding a small job.
- (b) Cutting wires .
- (c) Turning wires.
- (d) All of the above.

1. Questions - Bearings

Q1: The support for a shaft is known as Bearing. (True/False).

8. Questions - Lubrication

Mark the most suitable answer

Q1 The basic function of lubricant is to reduce

- a. Friction between moving parts of a machine in contact
- b. Heat produced due to friction
- c. Cooling of machine
- d. A& B above

Q2 The proper lubrication is done to

- a. Avoid the damage moving part of machine
- b. Reduce wear and tear of machine
- c. Increase the efficiency of machine
- d. All of the above

Q3 The lubricants on rolling bearings serve the function

- a) Separate the rolling and sliding contact surfaces
- b) Protect highly finished bearing surface from corrosion
- c) Provide a heat transfer medium
- d) All of the above

1. Questions - Pumps

Q1 the drive mechanism for a pump is

- a) Electric motor
- b) Steam turbine
- c) Gears
- d) All of above

Q2 the components of a pump are

- a) Pump shaft
- b) Impeller or piston
- c) Shaft and bearing
- d) All of the above

9. Questions - Fasteners& Rivets

Mark the right answer

Q 1 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

Q2 The Screws can have a _____

- a) Button or dome head
- b) Round head
- c) Oval or raised head
- d) All of the above

Q 3 Riveting is a process whereby two _____ are joined with the help of a _____ (Plates, Bodies, Rivet, and Screw).

Tick the right choice in (true/false)

Q1 A nut is a type of fastener with a threaded hole. (True/ false)

Q2 Bolt is a form of threaded fastener. (true/false)

Q3 A washer is a thin plate of disc shaped with a hole in the middle (True/ false)

10. Questions -Valves

Q1: 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.

Q2: The main parts of a valve are;

- a) Body, ports, seat.
- b) Stem, disc, packing.
- c) Handle or hand wheel, bonnet, gland nut.
- d) All of above.

Mark on True or False from the following questions:

Q1: A handle is used to manually control a valve from outside the valve body. (True /False)

Q2: While dismantling do not remove the old gland packing from the bonnet stuffing box.(T/F)

Q3: During Installation of valve prepare suitable gaskets for flanges connection and put them between the connecting flanges. (True/False)

Q4: After installation of valves, checks for leaks and operating tests (True/False)

1. Question (Seals& Gasket)

Q1 Seals prevent the ingress of dirt, pollution and environmental damage (True/false)

Q2 Seals reduces leakage between the pump and the surrounding to an absolute minimum. (True/False)

Q3 Gasket is mechanical seal which fills the space between two or mating surfaces. (True/false)

- Q4 gaskets are commonly produced by cutting from sheet materials (True/false)
- Q5** Mating flanges should be of the same type and correctly aligned. (True/False)
- Q6 Fasteners and/or gaskets should never be reused. (True/false)
- Q7 Gasket should be kept as thin as possible as per requirement of the system. (true/false)
- Q8 Gasket should be tightened evenly in at least three or four stages using an opposed pattern (True/False)

Fill In the Blanks

- Q1 Seals are components or assemblies which _____ the passage of fluids between the moving parts of a machine. (prevent, dirt, egress)

1. Questions (Jigs & Fixtures)

Answer the following answer in True & False

- Q 1 Jig is a device that holds the work and locates the path of the tool. (True/ False)
- Q2 Fixture is a device fixed to the work table of a machine and locates the work in an exact position not related to the cutting tool. (true/ false)
- Q 3 Jig guides the cutting tool also. (true/false)
- Q4 Jig body holds the various parts of a jog assembly. (True / false)
- Q5 the jigs are heavier while fixtures are lighter in construction. (True/false)
- Q6 Jigs & Fixtures should be as light in weight as possible and easy to handle. (True/False)

Select the right Answer from the choices given below

- Q1** The basic components of Jigs are
- a) Clamps, shucks, vices and Bushing
 - b) Clamps, rods, bolt and nut
 - c) Shucks , vice, stud and bolt
 - d) None of the above
- Q2** The Jigs are special tools particularly for operation of
- a) Drilling
 - b) Boring
 - c) Reaming
 - d) All of the above

Fill in the Blanks

Q 1 For assembly purpose jig locate separate component parts and _____ them rigidly in their correct positions. (Hold, hang, stand)

1. Questions - Safety

Mark the right answer

- Q1. An accident is
(a) unplanned event
(b) non-controlled event
(c) undesirable event
(d) all of the above
- Q2. The safe way of working is
(a) An effective and right way of working
(b) An ancient way of working
(c) A way of handling the work in hurry
(d) A way of normal working
- Q3. The best way of avoiding accident is by
(i) Doing work in ancient way
(ii) doing work in one's own way
(iii) observing safety rules related to job, machine and workplace
(iv) using safety equipment
- Q4. In case of an accident, the victim should immediately be
(a) asked to take rest
(b) enquired about the accident
(c) attended to immediately
(d) left to himself without treatment
- Q5. An oily floor should be cleaned by
(a) cotton waste
(b) putting water
(c) putting saw dust
(d) spraying carbon dioxide or sand
- Q6. In case of arc welding, one should protect his eyes by using
(a) dark glass screen
(b) sun goggles
(c) mask
(d) clear glasses
- Q7. A hammer with loosely fitted handle will
a) fly away and cause accident
b) absorb shock
c) have easy swing
d) convey more leverage

11. Questions - Basic Engineering Metals

- Q1. The chief chemical property of aluminum is that it is
- Soft
 - Brittle
 - Strong
 - Touch

Power Plant Millwright Fitter – Questions Bank(List – 2)

Questions General – 125

Q.1. Write five safety precautions associated with use of screwdrivers.

- Don't hold the work in your hand while using a screw driver
- Use proper screw driver that fits the screw head correctly.
- Don't hammer the handle of a screw driver
- Don't grind the tip of a screw driver to a chisel edge
- If it is not possible to hold the work in a vice or clamp, follow the rule: Never get any part of your body in front of the screwdriver tip.

Q2. Write five safety precautions associated with use of hammers.

- Never use hammer as pry bar
- Discard the hammer that is chipped
- Make sure that the handle fits tightly in the head
- Never use a hammer having a split handle
- Don't strike hardened steel surface with a hammer.

Q3. Write five safety precautions associated with use of files.

- Use a file only if is equipped with tight fitting handle
- Grip the file firmly at all times
- Never use the file as a pry bar
- Learn left-hand fitting when filling on lathe
- Keep your hands and the file clear of the jaws.

4. Write five safety precautions associated with use of chisels.

- Make sure that the head of the chisel is free from burrs.
- Use clip guards if there is risk of chips flying off
- Preferably wear safety goggles
- Keep the faces of the chisel free from oil and grease
- Hold the chisel firmly.

Questions – Cutting Tools

Q: Fill in the blanks with suitable words:

Q1. A drill is a tool fitted with a _____ or _____ attachment. (Driving tool, cutting tool, filing tool, finishing tool)

Q2. Drills are commonly used in _____, _____ and _____. (cutting, woodworking, breaking, joining, assembling, construction)

Q3. The drill bit is tighten by rotating the chuck key to all _____ holes in the chuck.
(three, two, one)

Kindly answer the following in (true & false)

Q1. The rotary hand drill is also known as rotary piston. (True/ False)

Q2. A key is used to tighten or loose the clamping mechanism. (True / false)

Q3. The portable grinderis a Heavyweight, machine-operated tool.(True/False)

Q4. We should hold the portable disc grinder firmly when the off/on switch is turned on. (True / false)

Questions basic tools and instruments

Q1. Steel rule is a

- a. Marking instrument
- b. Precision instrument
- c. Checking instrument
- d. Direct reading measuring instrument

Q2. Steel rule is made of

- a. Brass
- b. Zinc
- c. Stainless steel
- d. Cast iron

Q3. Which of the following is a direct measuring tool?

- a. Try square
- b. Steel rule
- c. Straight edge
- d. Ring gauge

Q4. Try square is used to check up an angel of

- a. 30°
- b. 45°
- c. 60°
- d. 90°

Q5. 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

Q6. Name any four kinds of marking media.

Ans: (i) Whitewash

(ii) Prussian blue

(iii) Copper sulphate

(iv) Cellulose lacquer.

Q7. Write any two common uses of 'V' block.

Ans: (i) For marking

(ii) For setting up the job on machine.

Q8. What is the purpose of spirit level attached to the protractor head of combination set?

Q9. The tool, which is used for laying out large circles is

a) Trammel

b) Divider

c) Jenny caliper

d) Scriber

Q10. Which type of rule is used for marking and measuring patterns and hot jobs handled by blacksmith?

a) Narrow rule

b) Shrink rule

c) Hook rule

d) Short rule

Q11. 'V' block is used to hold round bars. It has a Vee groove which is usually

a) 30°

b) 90°

c) 90°

d) 120°

Q12. The slots are provided on angle plate for

a) Accommodating bolts

b) Hanging with hooks

c) Reducing weight

d) Aligning the work

Q13. A divider is used for

a) Scribing circles

b) Scribing arcs

c) Transferring and stepping of distances

d) All of the above

Q14. Scriber is made of

a) Copper

b) High carbon steel

c) Mild steel

d) Cast iron

Q15. 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

Q16. What is the function of Die?

- a) To cut external thread on the surface of bolt or rod
- b) To polish the external surface of bolt & rod
- c) To make holes on the job
- d) None of the above

Q17. 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

Q1. A chisel is a _____ cutting tool that can be used for cutting ?

- a) Wooden
- b) Steel
- c) Hard steel
- d) Plastic

Q2. Chisel is normal size is from _____ Long?

- a) 2" to 10 "
- b) 5" to 8"
- c) 10" to 15 "
- d) None of the above

Q3. A tool used to put finishing touches on a machined work piece are called _____?

- a) Chisel
- b) Tap
- c) File
- d) Scrapper

Q4. Vice is used for holding a job _____ for the purpose of carrying out various operations.
(Strongly, safely & loosely)

Q5. Heavy duty clamps are used by machinist to hold _____ together for drilling etc . (Steel plates , tools, round jobs_)

Q14: Plier is a tool used for:

- (a) Holding a small job.
- (b) Cutting wires.
- (c) Turning wires.
- (d) All of the above.

Q15. The safe edge of file is used to

- a. Give best finishing
- b. Protect the adjacent sides

- c. Finish flat surface only
- d. Cut metal very quickly

Q16. Setting of teeth in hacksaw blade is

- a. Not required
- b. Required to avoid friction between the blade and work piece
- c. Required for increasing the strength of blade
- d. Required for providing teeth on the blade

Q17. A die nut is nothing but

- a. A nut is nothing but
- b. A die in the shape of a nut
- c. A nut for tightening the die in the die stock
- d. A die which is used for cutting threads in nuts

Q18. Hacksaw blades with fine-pitched teeth are more effective on

- a. Thin section metal
- b. Soft metals
- c. Broad section metals
- d. Non-metals

Q19. The best position to hold the job in the vice when filing is

- a. Eye level
- b. Shoulder level
- c. Elbow level
- d. Arm level

Q20. What will happen if the job is loosely fitted between centers in cylindrical grinding?

- a. The job will be out of round
- b. The job will be oversized
- c. The job will be thrown out
- d. The job will not rotate

Q21. Grinding fluids are used to

- a. Reduce the friction between the wheel face and the job
- b. Wash away chips
- c. Prevent loading of wheel
- d. All of the above

Q22. The tapping hole should be

- a. Larger than the tap size

- b. Smaller than the tap size
- c. Equal to the tap size
- d. Equal to the core (minor) diameter of the tap

Q23. A rough file is used

- a. On irregular jobs
- b. To reduce the metal rapidly
- c. On wood
- d. If smooth file is not available

Q24. Tap water is NOT preferred as coolant while driller. What are the reasons for this?

- a. Insufficient cooling effect
- b. Danger of corrosion
- c. Decrease in cutting action of drill
- d. Quick evaporation of water

Q25. The teeth of hacksaw blade are set to

- a. Provide clearance for the blade
- b. Prevent jamming and breakage of blade
- c. Make the kerf wider than the blade
- d. All of the above

Q26. Which one the following drilling machines is used for drilling holes where electricity is not available?

- e. Bench drilling machine
- f. Pillar drilling machine
- g. Radial drilling machine
- h. Retched drilling machine