

Railway Recruitment Cell

Post Name : 03A-Fitter

Exam Code : MASSXAIT

Exam Date : 21-06-2024

Exam Time : 11:15AM

Question No. 1

Which of the following is/are NOT part of a combination set?

- A) French curves
- B) Protractor head
- C) Square head
- D) Centre head

Answer Key: A

Question No. 2

Calculate the tap-drill size for an M6 x 1.0 thread.

- A) 7 mm
- B) 6 mm
- C) 5 mm
- D) 1 mm

Answer Key: C

Question No. 3

To measure which of the following is feeler gauge used?

- A) Gap width
- B) Thickness of workpiece
- C) Surface hardness
- D) Surface roughness

Answer Key: A

Question No. 4

Malleability is the property of metals, because of which they can be made into-

- A) Wires
- B) Sheets
- C) Hollow pipes
- D) Solid bars

Answer Key: B

Question No. 5

A _____ is an example of a permanent fastener.

- A) Key
- B) Rivet
- C) Cotter
- D) Screw

Answer Key: B

Question No. 6

The centre drill represents a combination of the-

- A) Drill and countersink
- B) Drill and counter bore
- C) Drill and mill
- D) Drill and ream

Answer Key: A

Question No. 7

The abrasive generally used for honing of non-ferrous metals is-

- A) Boron carbide
- B) Diamond
- C) Silicon carbide
- D) Aluminium oxide

Answer Key: C

Question No. 8

The portion of the shaft carried in the bearing is referred to as-

- A) Cage
- B) Thrust
- C) Journal
- D) Race

Answer Key: C

Question No. 9

The advancement of the nut on a bolt in one revolution is called-

- A) Lead
- B) Pitch
- C) Module
- D) Core distance

Answer Key: A

Question No. 10

Taps are re-sharpened by grinding-

- A) Flutes
- B) Threads
- C) Diameter
- D) Relief

Answer Key: A

Question No. 11

The pitch of a 3-start thread is the lead divided by-

- A) 1
- B) 2
- C) 3
- D) 4

Answer Key: C

Question No. 12

The tool post of a shaper is mounted on a-

- A) Base
- B) Cross-rail
- C) Clapper box
- D) Saddle

Answer Key: C

Question No. 13

The surface gauge is used for-

- A) Checking parallelism
- B) Checking acute angles
- C) Measuring the thickness
- D) Marking the diameter

Answer Key: A

Question No. 14

Tempering is the process of removing the property of-

- A) Brittleness
- B) Malleability
- C) Toughness
- D) Ductility

Answer Key: A

Question No. 15

The point angle of a prick punch is-

- A) 30°
- B) 70°
- C) 90°
- D) 100°

Answer Key: A

Question No. 16

In grinding wheel classification, the letter code 'E' means that the bond material used is-

- A) Vitrified
- B) Shellac
- C) Magnesia
- D) Silicate

Answer Key: B

Question No. 17

Which of the following tools is used for closing down the edges of plates and the heads of rivets to form a metal-to-metal joint?

- A) Drift
- B) Caulking tool
- C) Dolly
- D) Rivet snap

Answer Key: B

Question No. 18

Which of the following files is used for filing internal curved surfaces?

- A) Half-round file
- B) Knife-edge file
- C) Triangular file
- D) Square file

Answer Key: A

Question No. 19

What is the full form of BSF in the context of threads?

- A) Bureau of Standard Fine
- B) British Standard Fine
- C) British Screw Fine
- D) Bureau of Screw Fine

Answer Key: B

Question No. 20

Which of the following tools is used for scribing circles and arcs and for transferring and stepping off distances?

- A) Divider
- C) Try square

- B) Steel rule
- D) None of the options

Answer Key: A

Question No. 21

Parallel blocks are made in grades of-

- A) A and B
- C) X and Y
- B) 1 and 2
- D) I and II

Answer Key: A

Question No. 22

The least count of Vernier bevel protractor is-

- A) 1'
- C) 10'
- B) 5'
- D) 25'

Answer Key: B

Question No. 23

The least count of the Vernier caliper is equal to-

- A) Value of 1 M.S.D. - Value of 1 V.S.D.
- C) Value of 2 M.S.D. - Value of 1 V.S.D.
- B) Value of 1 V.S.D. - Value of 1 M.S.D.
- D) Value of 1 M.S.D. + Value of 1 V.S.D.

Answer Key: A

Question No. 24

Which of the following grades of slip gauges set is meant for reference purpose?

- A) Grade 2
- C) Grade 0
- B) Grade 1
- D) Grade 00

Answer Key: D

Question No. 25

As per Indian Standards, the grain size '46' comes under the group-

- A) Coarse
- C) Fine
- B) Medium
- D) Very fine

Answer Key: B

Question No. 26

Which of the following machine reamers is used to correct the misalignment between the reamer axis and the work axis?

- A) Floating blade reamer
- C) Machine jig reamer
- B) Shell reamer
- D) Chucking reamer

Answer Key: A

Question No. 27

The shape of the frame of a thread-snap gauge is-

- A) Round
- B) Square
- C) 'Y' type
- D) 'C' type

Answer Key: D

Question No. 28

The front view, top view and side view of a 3D object in two dimensions can be seen in-

- A) Perspective projection
- B) Trigonometric projection
- C) Orthographic projection
- D) Both perspective and trigonometric projections

Answer Key: C

Question No. 29

Discontinuous chips are formed during the machining of-

- A) Brittle metals
- B) Ductile metals
- C) Malleable metals
- D) Soft metals

Answer Key: A

Question No. 30

The objective of caulking in a riveted joint is to make the joint-

- A) Leak proof
- B) Stronger in tension
- C) Free from stress concentration
- D) Free from corrosion

Answer Key: A

Question No. 31

The feed for the tool in a lathe is expressed in-

- A) m/min
- B) mm/min
- C) mm/rev
- D) cm/rev

Answer Key: C

Question No. 32

The size of a gear is usually specified by the-

- A) Pressure angle
- B) Circular pitch
- C) Pitch circle diameter
- D) Both pressure angle and circular pitch

Answer Key: C

Question No. 33

Screw pitch gauge blades are made from-

- A) Cast iron
- B) Aluminium
- C) Brass
- D) High-carbon steel

Answer Key: D

Question No. 34

While drilling in the lathe, the drill is held in the-

- A) Headstock
- B) Tailstock
- C) Compound rest
- D) Bed

Answer Key: B

Question No. 35

The composition of soft solder is lead and _____.

- A) Tin
- B) Silver
- C) Copper
- D) Aluminium

Answer Key: A

Question No. 36

A thread M12 X 1.25 to be cut on a mild steel rod has a pitch of-

- A) 1.25 cm
- B) 1.25 mm
- C) 12 mm
- D) 12 cm

Answer Key: B

Question No. 37

The cutting angle of a flat chisel for chipping brass is-

- A) 30°
- B) 50°
- C) 75°
- D) 90°

Answer Key: B

Question No. 38

Which of the following is used for making internal threads?

- A) Drill
- B) Reamer
- C) Taps
- D) Chisel

Answer Key: C

Question No. 39

In a hermaphrodite caliper-

- A) One leg is bent inward and another straight leg ends in a sharp point
- B) Both legs are bent inward
- C) Both legs end in a sharp point
- D) One leg is bent inward and the other leg is bent outward

Answer Key: A

Question No. 40

A swage block is a-

A) Heavy block of cast iron

B) Light block of aluminium

C) Heavy block of plastic

D) Light block of zinc

Answer Key: A

Question No. 41

A _____ is a semi-circular disc that fits into a circular recess in the shaft.

A) Parallel key

B) Gib-head key

C) Feather key

D) Woodruff key

Answer Key: D

Question No. 42

A hammer that has two heads one being round and the other being flat is known as a-

A) Claw hammer

B) Ball-peen hammer

C) Club hammer

D) Mallet

Answer Key: B

Question No. 43

An anvil beak is used for-

A) Drawing down and cutting off metals

B) Bending and rounding operations

C) Punching holes in the workpiece

D) Inserting hardie holes and stakes

Answer Key: B

Question No. 44

Bent snips are used for _____.

A) Making holes on a sheet

B) Bending a sheet

C) Removing burrs from the corner

D) Cutting a sheet along curved lines

Answer Key: D

Question No. 45

Which of the following files has 8 teeth per centimeter?

A) Rough file

B) Bastard file

C) Second-cut file

D) Dead-smooth file

Answer Key: A

Question No. 46

Which of the following stakes has two horns, one of which is tapered and the other being a rectangular shaped anvil?

A) Half-moon stake

B) Bick-iron stake

C) Pipe stake

D) Hatchet stake

Answer Key: B

Question No. 47

What is the full form of BSW with respect to the thread standard?

- A) British Standard Whitworth
- B) Bureau of Standard Wide
- C) British Standard Wire
- D) British Standard Wide

Answer Key: A

Question No. 48

British Association (BA) thread has an included angle of-

- A) 55°
- B) 47.5°
- C) 60°
- D) 85°

Answer Key: B

Question No. 49

One decameter is equivalent to-

- A) 10 decimetre
- B) 10 centimetre
- C) 10 metre
- D) 10 millimetre

Answer Key: C

Question No. 50

The ACME thread has an included angle of-

- A) 29°
- B) 35°
- C) 50°
- D) 79°

Answer Key: A

Question No. 51

_____ is the depth of the tooth below the pitch circle.

- A) Addendum
- B) Backlash
- C) Dedendum
- D) Clearance

Answer Key: C

Question No. 52

Which of the following parts of carriage assembly in a lathe is a flat H-shaped casting that fits on the outer ways on the bed?

- A) Saddle
- B) Cross-slide
- C) Tool post
- D) Apron

Answer Key: A

Question No. 53

The process of reducing the diameter of workpiece over a very narrow surface is-

- A) Grooving
- B) Tapping
- C) Facing
- D) Spinning

Answer Key: A

Question No. 54

A fly cutter, which is a single-point cutting tool, is used in-

- A) Drilling machines
- B) Metal spinning lathes
- C) Milling machines
- D) Boring machines

Answer Key: C

Question No. 55

The main function of the clapper box in a shaper is to-

- A) Provide clearance for the tool in the return stroke
- B) Ensure cutting action
- C) Provide lubrication
- D) All of the options

Answer Key: A

Question No. 56

The letter 'P' in the acronym PASS related to the operation of a fire extinguisher is-

- A) Pull
- B) Push
- C) Power
- D) Put

Answer Key: A

Question No. 57

In metric micrometers, the pitch of the spindle thread is-

- A) 0.5 mm
- B) 0.05 mm
- C) 1 mm
- D) 2 mm

Answer Key: A

Question No. 58

What is the full form of SWG with respect to wire measurement?

- A) Supportive Wire Gauge
- B) Standard Wire Gauge
- C) Standard Wide Gauge
- D) Steel Wire Gauge

Answer Key: B

Question No. 59

What is the class of fire caused by fire wood, paper, cloth?

- A) Class 'A' fire
- B) Class 'B' fire
- C) Class 'C' fire
- D) Class 'D' fire

Answer Key: A

Question No. 60

The drill specified by letter Z has the diameter of-

- A) 10.490 mm
- B) 9.804 mm

C) 7.671 mm

D) 5.944 mm

Answer Key: A

Question No. 61

Which of the following files is also known as a fish-back file?

A) Crossing file

B) Rotary file

C) Barrette file

D) Mill-saw file

Answer Key: A

Question No. 62

Slight convexity is provided to the face of a hammer to-

A) Avoid digging of the edge

B) Provide grip to the hand

C) Provide mechanical balance

D) Absorb shock

Answer Key: A

Question No. 63

A rivet is specified by the _____ of the rivet.

A) Shank diameter

B) Head diameter

C) Shank length

D) Head length

Answer Key: A

Question No. 64

When soft materials such as aluminium, copper, and lead are ground, the metal particles get clogged in the pores of the wheel. This condition is called-

A) Loading

B) Glazing

C) Dressing

D) Truing

Answer Key: A

Question No. 65

Fire is a combination of-

A) Fuel, light and oxygen

B) Fuel, heat and oxygen

C) Fuel, heat and carbon dioxide

D) Fuel, light and nitrogen

Answer Key: B

Question No. 66

The micrometer works on the principle of-

A) Rivet and hammer

B) Piston and cylinder

C) Rack and pinion

D) Nut and bolt

Answer Key: D

Question No. 67

A cutting tool used to cut outside threads is called the-

- A) Drill
- B) Reamer
- C) Die
- D) Tap

Answer Key: C

Question No. 68

The point angle of a twist drill for general purposes is-

- A) 135°
- B) 118°
- C) 90°
- D) 60°

Answer Key: B

Question No. 69

The pitch diameter of a screw thread is the-

- A) Nominal diameter of the rod
- B) Imaginary diameter in between the major and minor diameters of the thread
- C) Minimum diameter of the thread
- D) Maximum diameter of the thread

Answer Key: B

Question No. 70

A nut having a raised height and slots on the raised portion is called a-

- A) Sawn nut
- B) Slotted nut
- C) Castle nut
- D) Pin-hole nut

Answer Key: C

Question No. 71

Calculate the height of the slip-gauge pack required to raise a 100 mm sine bar to an angle of 3°35'. (Take $\sin 3^\circ 35' = 0.0624$)

- A) 2.34 mm
- B) 4.73 mm
- C) 6.24 mm
- D) 8.47 mm

Answer Key: C

Question No. 72

Cold chisels are made of-

- A) Aluminium
- B) High-carbon steel
- C) Cast iron
- D) Mild steel

Answer Key: B

Question No. 73

A _____ is part of a file and fits inside a handle.

- A) Tang
- B) Heel
- C) Point
- D) Belly

Answer Key: A

Question No. 74

Which of the following is an alloy?

- A) Steel
- B) Brass
- C) Bronze
- D) All of the options

Answer Key: D

Question No. 75

_____ is a forging process that increases the diameter of the metal by compressing its length.

- A) Upset forging
- B) Roll forging
- C) Isothermal forging
- D) Drop forging

Answer Key: A