

Post Name : 03E-Turner

Exam Code : MASSXAUR

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Question No. 1

The jaws of a three-jaw lathe chuck are at _____ angle to each other.

- A) 60°
- B) 120°
- C) 180°
- D) 55°

Answer Key: B

Question No. 2

A _____ is used to quickly check to see if an item is within allowed tolerances.

- A) Surface gauge
- B) Go (and no-go) gauge
- C) Prototype
- D) Template

Answer Key: B

Question No. 3

Which of the following must be hardened for use in a lathe?

- A) Live center
- B) Ball bearing live center
- C) Dead center
- D) Revolving center

Answer Key: C

Question No. 4

Creating a conical hole to make the head of a screw to sit flush with the surface of the component is called-

- A) Spot-facing
- B) Drilling
- C) Counter-boring
- D) Counter-sinking

Answer Key: D

Question No. 5

Which among the following on a lathe is used to give depth of cut for plain turning operation?

- A) Tailstock
- B) Top slide
- C) Headstock
- D) Cross-slide

Answer Key: D

Question No. 6

The compound rest is mounted on the cross slide and has a circular base graduated in-

- A) Degrees
- B) Inches
- C) Millimetres
- D) Radians

Answer Key: A

Question No. 7

Taps are surfaces treated to-

- A) Improve the appearance
- B) Improve the wear resistance property
- C) Reduce the surface hardness
- D) Avoid lubrication

Answer Key: B

Question No. 8

Depth of cut is expressed in-

- A) Revolutions per minute
- B) Degrees
- C) Metres per minute
- D) Millimetres

Answer Key: D

Question No. 9

When the tool is set for threading, it is aligned with the work by using a-

- A) Try square
- B) Centre gauge
- C) Plug gauge
- D) Template

Answer Key: B

Question No. 10

The most important property of any lubricant is its-

- A) Viscosity
- B) Flash point
- C) Fire point
- D) Melting point

Answer Key: A

Question No. 11

For high-speed machining in cast iron, using _____ is a good choice of cutting fluid.

- A) Compressed air
- B) Kerosene
- C) Grease
- D) Soft water

Answer Key: A

Question No. 12

Tolerance is given to the part size to-

- A) Increase the production
- B) Decrease the production
- C) Finish the components approximately
- D) Produce the parts within the required permissible size error

Answer Key: D

Question No. 13

Brazing is a process, in which non-ferrous filler metal having a melting point-

- A) Above 427° C but lower than that of base metal is used
- B) Below 427° C but lower than that of base metal is used

C) Above 427° C but above that of base metal is used

D) Below 427° C but above that of base metal is used

Answer Key: A

Question No. 14

Why is flux used in brazing?

A) To join the base metal firmly

B) To speed up brazing process

C) To prevent oxidation and contamination of the base metal and filler metal

D) To make the final joint clean

Answer Key: C

Question No. 15

The brazing filler rod is made of-

A) Iron

B) Brass

C) Tin

D) Lead

Answer Key: B

Question No. 16

Which pair of the following operations often uses multipoint cutting tools?

A) Milling and drilling

B) Drilling and turning

C) Turning and milling

D) Milling and planing

Answer Key: A

Question No. 17

To reduce internal stresses of a hardened tool, the method of heat treatment generally applied is-

A) Stabilising

B) Annealing

C) Normalising

D) Tempering

Answer Key: D

Question No. 18

Which material is considered to be the best for a surface plate due to its surface hardness, low thermal expansion, no rust or corrosion, little warping, and long wear life attributes?

A) Granite

B) Wrought iron

C) Mild steel

D) Copper

Answer Key: A

Question No. 19

For Metric threads, the tapping drill size can be calculated by subtracting the-

A) Pitch from the tap size (thread diameter)

B) 0.5 of pitch from the tap size

C) Pitch from 0.5 times the tap size

D) Tap size from the pitch

Answer Key: A

Question No. 20

The process which uses loose abrasives for finishing of flat surfaces is known as-

- A) Milling
- B) Filing
- C) Lapping
- D) Tapping

Answer Key: C

Question No. 21

Which of the following is NOT a part of drilling machine?

- A) Tailstock
- B) Spindle
- C) Column
- D) Base

Answer Key: A

Question No. 22

Which of the following is the type of grinding wheel bond(s)?

- A) Vitriified bond
- B) Resinoid bond
- C) Shellac bond
- D) All of the options

Answer Key: D

Question No. 23

When sum of wedge angle and flank angle is greater than 90° , the rake angle is considered to be-

- A) Positive
- B) Neutral
- C) Negative
- D) None of the options

Answer Key: C

Question No. 24

Capstan and turret lathes are-

- A) Not lathes
- B) Semi automatic lathes
- C) Used only in the tool room for precision work
- D) Used for wood work only

Answer Key: B

Question No. 25

Pits occurring on the rake face of the tool at some distance from the cutting edge is called-

- A) Crater wear
- B) Flank wear
- C) Abrasive wear
- D) Adhesive (or attrition) wear

Answer Key: A

Question No. 26

The CNC code G72 in lathe is for-

- A) Tool nose radius compensation left
- B) Thread cutting
- C) Turning cycle
- D) Facing cycle

Answer Key: D

Question No. 27

What should NEVER be done immediately after a burn?

- A) Cool the burn with cool running water for 20 minutes
- B) Cover with sterile, non-adhesive bandage or clean cloth
- C) Apply butter
- D) Treat the pain from a burn with paracetamol or ibuprofen

Answer Key: C

Question No. 28

The side cutting edge angle is the angle between the-

- A) Tool face and line parallel to the base
- B) Side cutting edge and the line extending the shank
- C) Minor flank and a line normal to the base
- D) Face and minor flank

Answer Key: B

Question No. 29

Bilateral tolerance is fixed on-

- A) The upper side of the basic size
- B) The lower side of the basic size
- C) Any one side of the basic size
- D) Both directions of the basic size

Answer Key: D

Question No. 30

Which of the following is used to hold rectangular and other non-cylindrical shapes for turning?

- A) Three-jaw-chuck
- B) Four-jaw-chuck
- C) Collet chuck
- D) Magnetic chuck

Answer Key: B

Question No. 31

Which of the following is TRUE with respect to the dead center in a lathe?

- A) Typically fully hardened
- B) The axis of the dead centre will be generally coinciding with the axis of the spindle
- C) Does not rotate in operation
- D) All of the options

Answer Key: D

Question No. 32

Which among the following is NOT a general feature of the tailstock?

- A) Provides rotational power for lathe operations
- B) Drills can be mounted on it
- C) Dead-centre is mounted on it
- D) Can be used for taper turning by the offset method

Answer Key: A

Question No. 33

Tool maker's buttons are small drilled posts used for-

- A) Positioning the workpiece for boring
- B) Clamping a single-point cutting tool

C) Lubricating the guideways

D) Clamping the compound rest

Answer Key: A

Question No. 34

Which of the following is known as a universal chuck?

A) Four-jaw independent chuck

B) Three-jaw chuck

C) Magnetic chuck

D) Collet chuck

Answer Key: B

Question No. 35

What effective change will occur to the tool geometry if the cutting tool is set below the centre height of the workpiece in a lathe?

A) Front clearance angle increases

B) Front clearance angle decreases

C) Front clearance angle becomes zero

D) End relief angle becomes zero

Answer Key: A

Question No. 36

The most widely used drill bits are made from-

A) Cast iron

B) Mild steel

C) High-speed steel

D) Wrought iron

Answer Key: C

Question No. 37

Which of the following angles in a lathe tool helps in the easy flow of chips?

A) Rake angle

B) Front clearance angle

C) Side clearance angle

D) Back clearance angle

Answer Key: A

Question No. 38

Choose the correct formula to find the diameter of the job (d) in mm, if the cutting speed (v) in m/min and revolutions per minute (n) are given.

A) $d = (1000 \times v) / (\pi \times n)$

B) $d = (\pi \times n) / (1000 \times v)$

C) $d = (1000 \times \pi) / (v \times n)$

D) $d = (1000 \times n) / (\pi \times v)$

Answer Key: A

Question No. 39

While thread cutting on a lathe by using single-point-tool, the tool moves in a path called-

A) Epicycloid

B) Cycloid

C) Rake

D) Helix

Answer Key: D

Question No. 40

Graphite is a type of-

- A) Liquid lubricant
- B) Gaseous lubricant
- C) Solid lubricant
- D) Semi-solid lubricant

Answer Key: C

Question No. 41

In single-point cutting tool geometry, the horizontal top surface adjacent to the cutting edges is known as the-

- A) Shank
- B) Face
- C) Flank
- D) Base

Answer Key: B

Question No. 42

Fires caused by petrol and diesel belong to the category-

- A) Class A
- B) Class B
- C) Class C
- D) Class D

Answer Key: B

Question No. 43

Identify which of the following is a valid type of brazing?

- A) Torch brazing
- B) Resistance brazing
- C) Induction brazing
- D) All of the options

Answer Key: D

Question No. 44

Which of the following is the hardest cutting tool material?

- A) Diamond
- B) Ceramics
- C) Cermets
- D) Cemented carbide

Answer Key: A

Question No. 45

The two rake angles of a lathe cutting tool are-

- A) Front rake and back rake
- B) Top rake and bottom rake
- C) Back rake and side rake
- D) Left rake and right rake

Answer Key: C

Question No. 46

The main body (backward part) of the cutting tool which is held by the tool post, is known as the-

- A) Face
- B) Flank
- C) Heel
- D) Shank

Answer Key: D

Question No. 47

Which among the following locators is best suited for locating a round-shaped job?

- A) Pin-type locator
- B) Adjustable-stop locator
- C) Vee locator
- D) None of the options

Answer Key: C

Question No. 48

Case hardening is done to-

- A) Improve wear-resistance
- B) Reduce impact-resistance
- C) Reduce the durability
- D) Reduce the toughness

Answer Key: A

Question No. 49

Steels with a carbon content of more than 0.8% are known as-

- A) Hypoeutectoid steels
- B) Eutectoid steels
- C) Hypereutectoid steels
- D) Pure ferrite

Answer Key: C

Question No. 50

Which of the following is a solid carburizing material?

- A) Charcoal
- B) Petrol
- C) Ammonia
- D) Kerosene

Answer Key: A

Question No. 51

Identify the FALSE statement about aluminium.

- A) It is ductile
- B) It is not malleable
- C) It reacts with alkalis
- D) It conducts electricity

Answer Key: B

Question No. 52

Gun metal is an alloy of-

- A) Tin and lead
- B) Iron, carbon and zinc
- C) Copper, tin and zinc
- D) Lead and phosphorus

Answer Key: C

Question No. 53

Metals can be hammered or 'rolled' into thin sheets by a property known as-

- A) Elasticity
- B) Malleability
- C) Toughness
- D) Tensile strength

Answer Key: B

Question No. 54

Identify the 5S principle that best denotes the line: "Clean the work area by conducting a cleanup campaign."

- A) Seiri
- B) Seiketsu
- C) Shitsuke
- D) Seiso

Answer Key: D

Question No. 55

If the zero marking on the circular scale is above the main scale reference line of a micrometer, and the faces of the spindle and the anvil touch each other, it is known as-

- A) Negative-zero error
- B) Positive-zero error
- C) No-zero error
- D) Scale error

Answer Key: A

Question No. 56

It is necessary to wear _____ to protect eyes from flying objects.

- A) Goggles
- B) Apron
- C) Gloves
- D) Boots

Answer Key: A

Question No. 57

_____ are sharp tools by means of which lines are drawn while marking on a job.

- A) Scribes
- B) Stencils
- C) French curves
- D) Surface plates

Answer Key: A

Question No. 58

A lathe with a hexagonal rotatable head, directly mounted on the saddle, capable of performing multiple operations is known as a/an-

- A) Turret lathe
- B) Speed lathe
- C) Bench lathe
- D) Engine lathe

Answer Key: A

Question No. 59

The angle between the side flank and the line passing through the tip perpendicular to the base (the angle being measured in a plane perpendicular to the tool axis) is known as the-

- A) End-cutting edge angle
- B) Side-relief angle
- C) End-relief angle
- D) Side-cutting edge angle

Answer Key: B

Question No. 60

The size of the hole is kept constant and shaft sizes varied to obtain various types of fits in the-

- A) Hole-basis system
- B) Shaft-basis system
- C) Clearance fit
- D) Transition fit

Answer Key: A

Question No. 61

The smallest diameter of a screw thread is the-

- A) Major diameter
- B) External thread
- C) Minor diameter
- D) Internal thread

Answer Key: C

Question No. 62

An accurate rectangular bar, having two rollers at the ends, used to measure angles is known as the-

- A) Sine bar
- B) Bevel protractor
- C) Centre head
- D) Try square

Answer Key: A

Question No. 63

When heat is created by a rapidly alternating current induced into the workpiece by an adjacent coil, it is known as-

- A) Torch brazing
- B) Induction brazing
- C) Furnace brazing
- D) Dip brazing

Answer Key: B

Question No. 64

The distance from a point on a screw thread to the corresponding point on the next thread, measured parallel to the axis is called-

- A) Pitch
- B) Crest
- C) Thread angles
- D) Effective diameter

Answer Key: A

Question No. 65

Soft grade grinding wheels are indicated with the alphabetic letters-

- A) A, B, C
- B) T, U, V
- C) Q, R, S
- D) X, Y, Z

Answer Key: A

Question No. 66

'Medium-size' grit or the grain size number (in ANSI) of grinding wheels is-

- A) 16
- B) 40
- C) 120
- D) 200

Answer Key: B

Question No. 67

The G code used for rapid traverse in a CNC lathe is-

- A) G71
- B) G72
- C) G01
- D) G00

Answer Key: D

Question No. 68

The G code for 'Tool nose radius compensation left' in CNC is-

- A) G41
- B) G81
- C) G40
- D) G80

Answer Key: A

Question No. 69

A tapering steel plate used to remove the drill bit, etc. from the spindle is known as the-

- A) Drill chuck
- B) Drill sleeve
- C) Socket
- D) Drill drift

Answer Key: D

Question No. 70

The minimum measurement that can be made by a measuring device is known as the-

- A) Positive zero error
- B) Least count
- C) Negative zero error
- D) Precision

Answer Key: B

Question No. 71

The protractor head of a combination set is used to-

- A) Drill a workpiece
- B) Locate centers of round work pieces
- C) Measure angles
- D) Directly find the frequency

Answer Key: C

Question No. 72

In a capstan lathe, the turret is mounted on the-

- A) Compound slide
- B) Spindle
- C) Ram which is mounted on the saddle
- D) Headstock

Answer Key: C

Question No. 73

Which of the following is TRUE with respect to cutting tools?

- A) Application of correct cutting fluid increases tool life
- B) Tool life will be very low when machining soft materials

