

026/2025

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. White symbol on blue background is used for which type of safety sign?
(A) Prohibition sign (B) Mandatory sign
(C) Warning sign (D) Information sign
2. The basic unit of length as per international system of unit is :
(A) Micrometre (B) Millimetre
(C) Centimetre (D) Metre
3. What is the least count of vernier sliding caliper?
(A) 0.01 mm (B) 0.02 mm
(C) 0.03 mm (D) 0.04 mm
4. What is the use of retaining pins in hacksaw frame?
(A) Locating holder (B) Locating blade
(C) Locating nut (D) Locating pins
5. What is C stands for ABC of First aid?
(A) Cardiac arrest (B) Confusion
(C) Circulation (D) Conclusion
6. Which is the material used for making steel rule?
(A) High speed steel (B) Spring steel
(C) Tool steel (D) Carbon steel
7. How many main scale divisions are taken for least count calculation in vernier caliper with 0.1 mm accuracy?
(A) 8 (B) 9
(C) 10 (D) 11
8. What is the pitch selected by cutting sheet metals by hacksaw blade?
(A) 0.6 (B) 0.8
(C) 1.0 (D) 1.2

9. Which term indicates the 'Discipline' or commitment of work place in 5 S concept?
- (A) Set (B) Sort
(C) Standardize (D) Sustain
10. What is the angle of punch which is used for correct seating of divider point?
- (A) 120 (B) 90
(C) 60 (D) 30
11. In Micrometre which part act as a nut?
- (A) Spindle (B) Barrel
(C) Thimble (D) Frame
12. Which file is used for filing at right angles to the finished surface?
- (A) Flat file (B) Hand file
(C) Smooth file (D) Second cut file
13. Which is the colour code bin used in industry for plastic waste?
- (A) Green (B) Black
(C) Yellow (D) Red
14. What is the other name of Jenny caliper?
- (A) Firm joint (B) Spring joint
(C) Odd leg (D) Inside caliper
15. The pitch of Micrometer is 0.5 mm but lead is _____ mm.
- (A) 0.5 (B) 1
(C) 1.5 (D) 2
16. While filing metal chips are clogged between teeth is known as :
- (A) Spinning (B) Pinning
(C) Filling (D) Thinning
17. Which preventive device is used against falling device in workshop?
- (A) Shoes (B) Helmet
(C) Gloves (D) Apron

18. Which hammer is used for spreading metal in one direction?
- (A) Ball pein (B) Cross pein
(C) Straight pein (D) Round pein
19. Measurement of 63.96 mm is taken from an outside Micrometre what is the minimum range?
- (A) 40 (B) 50
(C) 60 (D) 70
20. Which chisel is suitable for making grooves?
- (A) Flat chisel (B) Cross cut chisel
(C) Diamond point chisel (D) Web chisel
21. Which one of the following is a serious life threatening condition?
- (A) Heavy bleeding (B) Coma
(C) Severe burn (D) Falling
22. For protecting finished objects which material is used for making soft jaws?
- (A) Brass (B) Aluminum
(C) Copper (D) Zinc
23. In Dial test indicator which part helps to align zero?
- (A) Stem (B) Bezel
(C) Plunger (D) Pointer
24. Which tap is used for finishing cut?
- (A) First tap (B) Second tap
(C) Plug tap (D) Intermediate tap
25. Which one of the following indicates the aim of house keeping?
- (A) Clean dirt and sweep
(B) Keep better environment
(C) Clean object from gangway
(D) Tools put on rack

26. Which one of the following operation cannot be done by try square?
- (A) Check squareness (B) Check flatness
(C) Check finishness (D) Set at right angle
27. In vernier height gauge scriber is made of which material?
- (A) Stellite (B) Carbide
(C) Tungsten (D) Ceramics
28. Which die is used for resharping threads?
- (A) Split die (B) Half die
(C) Die nut (D) Plate die
29. What is the popular method of waste disposal and less expense?
- (A) Composting (B) Land fill
(C) Recycling (D) Incineration
30. What is the least Count of Vernier bevel protractor?
- (A) 5' (B) 6'
(C) 7' (D) 8'
31. What is the use of reamer?
- (A) Roughing (B) Finishing
(C) Sizing (D) Finishing and Sizing
32. Dry powder extinguishers are used to prevent _____ type of fire.
- (A) Class B (B) Class C
(C) Class D (D) All of these
33. Which one of the following part is not included in the combination set?
- (A) Square head (B) Protractor head
(C) Screw head (D) Centre head
34. Which instrument is used for checking chordal addendum and chordal thickness of a gear?
- (A) Vernier caliper (B) Gear Tooth caliper
(C) Vernier height gauge (D) Vernier depth gauge

35. Which part is used for fine adjustment in a universal surface gauge?
(A) Snug (B) Clamping nut
(C) Rocker arm (D) Guide pin
36. While load lifting what is the cause of muscle strain?
(A) Rough edge of job (B) Sudden jerking
(C) Crushing foot (D) Age
37. Which marking media takes more time for drying?
(A) Marking blue (B) Prussian blue
(C) Copper sulphate (D) Cellulose lacquer
38. In Micrometre fine measurement can be taken with the help of _____ part.
(A) Lock nut (B) Ratchet stop
(C) Thimble (D) Anvil
39. The operation of countersinking is to make the surfaces :
(A) Bevelled edge (B) Conical edge
(C) Flat Edge (D) Square edge
40. The chip breaker is used while turning _____ materials.
(A) Hardened (B) Ductile
(C) Malleable (D) Tougher
41. In power feed mechanism of milling machine which part connect the feed gear box and knee?
(A) Feed shaft (B) Telescopic shaft
(C) Screw shaft (D) Vertical shaft
42. Where is the spot facing operation conducted?
(A) Around both ends of hole
(B) Around one end of hole
(C) Around one end of counter
(D) Around end of counter sinking bore

43. In power transmission which thread is used for power transmission?
(A) Knuckle thread (B) Worm thread
(C) Buttress thread (D) Acme thread
44. The specification of plain milling cutter is $30 \times 40 \times 27$ mm, in which 40 mm means?
(A) Diameter (B) Bore
(C) Length (D) Width
45. Which one of the following machine is driven by pneumatic power?
(A) Automatic drilling machine
(B) Gang drilling machine
(C) Portable drilling machine
(D) Sensitive drilling machine
46. While applying pressure on threaded part, which part of thread acts as bearing surface?
(A) Root (B) Crest
(C) Flank (D) Pitch
47. For pocket milling operation which one of the following cutter is used?
(A) Side milling cutter (B) End milling
(C) Half side milling (D) Plain milling cutter
48. Which one of the following is not used for holding twist drills?
(A) Chuck (B) Sleeve
(C) Adapter (D) Socket
49. In double start thread lead is equal to :
(A) Pitch (B) Double the pitch
(C) Half the pitch (D) Thrice the pitch
50. For producing convex surface on a work which cutter is used?
(A) Formed cutter (B) Concave cutter
(C) Convex cutter (D) Relief cutter

51. What is the RPM for 25 mm twist drill?
- (A) Same as 10 mm drill (B) More than 10 mm drill
(C) Less than 10 mm drill (D) Maximum available speed
52. For calibration purpose which grade of slip gauge is used?
- (A) Grade 1 (B) Grade 2
(C) Grade 0 (D) Grade 00
53. The relief angle grinded on milling cutter is :
- (A) 4° (B) 5°
(C) 6° (D) 7°
54. Which one of the following equation used for finding RPM in drilling machine?
- (A) $\pi d \div 1000$ (B) $1000 v \div d \pi$
(C) $1000 \pi \div d$ (D) $dv \div 1000 \pi$
55. The principle of Sine bar is based on _____ function.
- (A) Logarithmic (B) Trigonometric
(C) Geometric (D) Derivative
56. Which one of the following operation is known as convention milling?
- (A) Straddle milling (B) Gang milling
(C) Up milling (D) Down milling
57. Which property of a lubricant help to withstand high pressure or load on a bearing surface?
- (A) Fire point (B) Flash point
(C) Viscosity (D) Oiliness
58. In a gear train which one of the following is the linking gear?
- (A) Active gear (B) Idler gear
(C) Spur gear (D) Worm gear
59. Which jig is used to locate the work piece from its face?
- (A) Solid jig (B) Table jig
(C) Box jig (D) Channel jig

60. The periodic maintenance helpful to avoid _____ of machine.
- (A) Weekly shutdown (B) Long shutdown
(C) Short shutdown (D) Intermittent shutdown
61. For turning a cored job which one of the following device used?
- (A) 3 jaw chuck (B) 4 jaw chuck
(C) Mandrel (D) Face plate
62. Which attachment used for cutting gears in milling machine?
- (A) Slotting attachment (B) Indexing attachment
(C) Spiral attachment (D) High speed attachment
63. Which one of the centre used for heavy job turning with high speeds?
- (A) Tipped centre (B) Inserted type centre
(C) Revolving centre (D) Ball centre
64. Write the equation for finding linear pitch in rack teeth?
- (A) πm (B) $2\pi m$
(C) πm^2 (D) $2\pi m^2$
65. While turning which device used to give torque to the work?
- (A) Catch plate (B) Dogs
(C) Face plate (D) Angle plate
66. For right angle power transmission which gear used?
- (A) Spur gear (B) Helical gear
(C) Bevel gear (D) Worm gear
67. For turning long taper which method used?
- (A) Compound rest swiveling method (B) Taper turning attachment
(C) Offset tail stock (D) Compound feed method
68. In a simple indexing head where is the worm gear fitted?
- (A) Index crank (B) Worm shaft
(C) Spindle (D) Index plate

69. In which part of lathe contains the controlling mechanism of carriage?
- (A) Head stock (B) Apron
(C) Saddle (D) Bed
70. Which cam element cause reciprocating movement to the follower?
- (A) Rise (B) Lobe
(C) Lead (D) Axis
71. Which statement is/are true with the safety precautions regarding CNC lathe?
- (i) Make sure the CNC machine isn't operating when you load a tool magazine.
(ii) Double check that you have set the right tool data for the program.
(iii) Shift the levers to change the speeds and feeds only when the rotating parts are fully stationary.
- (A) (i) only (B) Only (i) and (ii)
(C) (iii) only (D) Only (i) and (iii)
72. Which statement is/are true with the advantage of CNC machine over NC machine?
- (i) The part programming is done with punched cards.
(ii) Reprogramming or editing the part program is very easy.
(iii) Greater flexibility of controlling and programming.
- (A) (ii) only (B) (i) only
(C) (ii) and (iii) only (D) (iii) only
73. Which statement is/are correct with the CNC control system?
- (i) Sinumeric and fanuc controls systems are CNC control systems.
(ii) Magnus and divine control systems are CNC control systems.
(iii) Heidenhain and mitsubishi systems are CNC control systems.
- (A) (i) and (iii) only (B) (i) and (ii) only
(C) (i) only (D) (ii) and (iii) only

78. Which statement is/are true with CNC machining sequence?

- (i) N20 G54 M03 S500 – this block indicates spindles speed 500 in CW
 - (ii) N30 G92 S1500 – this block indicates the minimum speed for 1500 rpm
 - (iii) N35 G00 X050 Z20 – this block means rapid traverse to the position with co-ordinates X50 Z20
- (A) (i) and (iii) only
- (B) (i) and (ii) only
- (C) (ii) and (iii) only
- (D) All of the above (i), (ii) and (iii)

79. The specification of CNC boring bar is S32 U S S which of the statement is/are true about this holder?

- (i) U indicates tool length
 - (ii) U indicates shape of holder
 - (iii) 32 indicates diameter of boring bar
- (A) (i) only
- (B) (ii) only
- (C) (i) and (ii) only
- (D) (i) and (iii) only

80. Which of the statement is/are true with the operational modes in CNC turning?

- (i) In auto mode the program can be edited manually
 - (ii) In MDI mode, we can input the program command manually and execute the program.
 - (iii) In jog mode, the turret can be moved in X and Z direction.
- (A) (i) only
- (B) (ii) and (iii) only
- (C) (i) and (iii) only
- (D) (i) and (ii) only

SPACE FOR ROUGH WORK

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