

Duration: 30 Mins

Total Marks: 337

Q.ID: ITISKILL9969YW

1. Which mode is used to move the turret in micron level?

- A) MDI mode                      B) Incremental jog mode  
C) Auto mode                      D) Jog mode

**Answer: B) Incremental jog mode**

2. What do you mean by MPG?

- A) Manually Procure the Digital Graphics      B) Manual Procedure to Calculate Geometrical Values  
C) Manually Pulse Generator      D) Manual Program Graphics

**Answer: C) Manually Pulse Generator**

3. Which material used for manufacturing crown wheel of a three jaw chuck?

- A) Chrome vanadium steel      B) Cast iron  
C) High carbon steel              D) Alloy steel

**Answer: D) Alloy steel**

4. Which type of jig is used to hold thin and soft parts?

- A) Sandwich jig                      B) Trunnion jig  
C) Channel jig                      D) Plat jig

**Answer: A) Sandwich jig**

5. Which material is used to make radius gauge?

- A) Tool steel                          B) Hardened steel  
C) Stainless steel                  D) Cast steel

**Answer: B) Hardened steel**

6. What is the hole basis system?

- A) Size of the hole is varied      B) Size of shaft is constant  
C) Size of hole is constant      D) Size of both hole and shaft are varied

**Answer: C) Size of hole is constant**7. What does the letter 's' stands in the equation  $d = Y - 2(s+r)$  in taper measurement?

- A) Diameter over the roller at large end      B) Radius of the rollers  
C) Distance from the centre of the roller to the end of the component      D) Diameter over the rollers at small end

**Answer: C) Distance from the centre of the roller to the end of the component**

8. What is the specific use of tool maker's button in lathe operation?

- A) For producing a tool to high degree accuracy  
C) For producing bore to a high degree of positional accuracy

- B) For producing tool to a high degree of positional accuracy  
D) For producing a button to a high degree of positional accuracy

**Answer: C) For producing bore to a high degree of positional accuracy**

9. What is the use of inside micrometer?

- A) Measuring the external surface  
C) Measuring keyways and small slots

- B) Determine the distance between internal parallel surface  
D) To measure the depth of hole

**Answer: B) Determine the distance between internal parallel surface**

10. What is the gear ratio if the lathe constant value is one?

- A) One                                  B) Six  
C) Three                                D) Two

**Answer: A) One**

11. What is the recommended cutting speed for aluminium using H.S.S tool?

- A) 35 m/min - 50 m/min      B) 25 m/min - 40 m/min  
C) 70 m/min - 100 m/min      D) 50 m/min - 80 m/min

**Answer: C) 70 m/min - 100 m/min**

12. What is the relationship between pitch and lead of a single start thread?

- A) Lead is 1/4 pitch                  B) Lead is twice the pitch  
C) Lead is equal to pitch            D) Lead is half the pitch

**Answer: C) Lead is equal to pitch**

13. What is the included angle of acme thread?

- A) 29 Degree                          B) 45 Degree  
C) 55 Degree                          D) 30 Degree

**Answer: A) 29 Degree**

14. What is the name of the centre accommodates in the main spindle sleeve?

- A) Live centre                        B) Pipe centre  
C) Dead centre                        D) Half centre

**Answer: A) Live centre**

15. Calculate the change gear to cut 8 mm pitch on a work having a lead screw of 4 mm pitch gear 20 to 120 teeth by 5 teeth range

- A) Driver 50 teeth Driven 60 teeth  
B) Driver 60 teeth Driven 35 teeth  
C) Driver 40 teeth Driven 20 teeth  
D) Driver 80 teeth Driven 25 teeth

**Answer: C) Driver 40 teeth Driven 20 teeth**

16. Which grade of file is used for heavy reduction of material?

- A) Bastard file  
B) Second cut file  
C) Smooth file  
D) Dead smooth file

**Answer: A) Bastard file**

17. How multi start threads are specified?

- A) By stating dia and angle of thread  
B) By stating core dia and pitch  
C) By stating dia and pitch  
D) By stating dia, pitch, and no. of start

**Answer: D) By stating dia, pitch, and no. of start**

18. Which is a non-metallic tool material?

- A) High carbon steel  
B) Stellite  
C) Diamonds  
D) Carbide

**Answer: C) Diamonds**

19. Which is the blank size M10 x1.5mm of external thread?

- A) 10.85mm  
B) 9.75mm  
C) 9.85mm  
D) 9.65mm

**Answer: C) 9.85mm**

20. Calculate pitch diameter of M16 x 2 mm square thread?

- A) 15.5 mm  
B) 15 mm  
C) 16 mm  
D) 14 mm

**Answer: B) 15 mm**

21. Which of the following property of metal is impart by annealing?

- A) Toughness  
B) Surface hardness  
C) Ductility  
D) Hardness

**Answer: C) Ductility**

22. Which lathe accessory is used to clamp the fixture?

- A) 4 jaw chuck  
B) Collet chuck  
C) 3 jaw chuck  
D) Face plate

**Answer: D) Face plate**

23. In Which case hardening process the ammonia gas is introduced?

- A) Induction hardening  
B) Cyaniding

- C) Carburizing  
D) Gas nitriding

**Answer: D) Gas nitriding**

24. What is the full form of MDI?

- A) Mounting of Diagonal Impact  
B) Manually Data Input  
C) Mechanical Data Implantation  
D) Moderated Data input

**Answer: B) Manually Data Input**

25. What does QA and QC stand for?

- A) Quality adjustment and quality complete  
B) Quality assurance and quality control  
C) Quality assurance and quenching control  
D) Quality assurance and quenching control

**Answer: B) Quality assurance and quality control**

26. How much angle is to be added for lead angle of a square thread as clearance to the helix angle?

- A) 1 Degree 50 Minutes  
B) 1 Degree 45 Minutes  
C) 1 Degree 55 Minutes  
D) 1 Degree 30 Minutes

**Answer: D) 1 Degree 30 Minutes**

27. What is the ratio between the pitch diameter and number of teeth of gear?

- A) Tooth thickness  
B) Module  
C) Dedendum  
D) Addendum

**Answer: B) Module**

28. Why heat treatment of metal is necessary?

- A) To make good appearance on the component  
B) To produce certain desired properties  
C) To increase strength of the metal  
D) To make the metal rust-proof

**Answer: B) To produce certain desired properties**

29. Which tool is used for cutting internal thread?

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

**Answer: B) Tap**

30. Which lathe part is used to mount the dial indicator for truing the bore?

- A) Tail stock  
B) Cross side  
C) Tool post  
D) Lathe bed

**Answer: C) Tool post**

31. Calculate the depth of buttress thread diameter 30 mm pitch 3 mm?

- A) 2.25 mm  
B) 1.25 mm  
C) 3.00 mm  
D) 1.5 mm

**Answer: A) 2.25 mm**

**32.** Which one of the following CNC control systems are used on CNC machines?

- A) MS office only
- B) Adobe reader and Microsoft
- C) Siemens and FANUC
- D) Excel and MS power point

**Answer: C) Siemens and FANUC**

**33.** What is the name of gauge used to check the radius

- A) Plug gauge
- B) Feeler gauge
- C) Radius gauge
- D) Fillet gauge

**Answer: C) Radius gauge**

**34.** What is the activity of code M06 based on FANUC CNC control system?

- A) End of the program with rewind
- B) The cutting tool has to be changed
- C) Switch of the coolant pump
- D) Spindle rotation in counter clockwise direction

**Answer: B) The cutting tool has to be changed**

**35.** Calculate the change gear to cut 6 mm pitch on a work having a lead screw of 5 mm pitch. Gears available from 20 to 120 teeth by 5 teeth range.

- A) Driver 60 driven 50
- B) Driver 85 teeth driven 60 teeth
- C) Driver 100 teeth driven 25 teeth
- D) Driver 40 driven 20

**Answer: A) Driver 60 driven 50**

**36.** Which victim has given CPR immediately?

- A) Difficulty in breathing
- B) Severe head injury
- C) Dehydration
- D) Severe blood loss

**Answer: A) Difficulty in breathing**

**37.** What is the body material of bench vice?

- A) Wrought iron
- B) Hardened steel
- C) Mild steel
- D) Cast iron

**Answer: D) Cast iron**

**38.** Which part of the universal surface gauge is used for fine adjustment?

- A) Guide pin
- B) Spindle
- C) Rocker arm
- D) Scriber

**Answer: C) Rocker arm**

**39.** What is the representation IT in limits and fits?

- A) Tolerance number
- B) Tolerance grade
- C) Tolerance
- D) Tolerance unit

**Answer: B) Tolerance grade**

**40.** Which one of the below is a work holding device?

- A) Face plate
- B) Catch plate
- C) Four jaw chuck
- D) Driving plate

**Answer: C) Four jaw chuck**

**41.** What is the minimum size of bore that can be checked with telescopic gauge?

- A) 31.7 mm
- B) 12.7 mm
- C) 19.00 mm
- D) 13.7 mm

**Answer: B) 12.7 mm**

**42.** Which mode the program will be executed continuously one block after another block?

- A) Jog mode
- B) Manual mode
- C) Auto mode
- D) Edit mode

**Answer: C) Auto mode**

**43.** Which mode is used to edit the program?

- A) Jog mode
- B) Edit mode
- C) MDI mode
- D) Auto mode

**Answer: B) Edit mode**

**44.** What is 'L' in tailstock offset method?

- A) Length of the job
- B) Length of the taper
- C) Amount taper
- D) Length of offset

**Answer: A) Length of the job**

**45.** Which method of multi-start thread cutting is depends upon the graduations marked on the dial and the number of teeth in worm wheel?

- A) Method using slotted face plate
- B) Method by moving the top slide
- C) Thread chasing dial method
- D) Dividing the first drive method

**Answer: C) Thread chasing dial method**

**46.** What is the name of last member in a simple gear train?

- A) Idler
- B) Reversing gear
- C) Driver
- D) Driven

**Answer: D) Driven**

**47.** Which formula is used to find crest width of a buttress thread?

- A)  $0.125 \times \text{pitch}$
- B)  $0.335 \times \text{pitch}$
- C)  $0.317 \times \text{pitch}$
- D)  $0.5 \times \text{pitch}$

**Answer: A)  $0.125 \times \text{pitch}$**

**48.** What is the swing over bed?

- A) Distance between centres
- B) Length of the bed

C) Perpendicular distance from lathe axis to top of bed  
D) Perpendicular distance from lathe and to the carriage

**Answer: C) Perpendicular distance from lathe axis to top of bed**

A) Reduce the life of machine  
B) Improves quantity and quality of product

C) Reduce the manpower for the maintenance  
D) Reduce the cost of maintenance

**Answer: B) Improves quantity and quality of product**

49. Which is four jaw chuck?

A) Collect chuck  
B) Self centring chuck  
C) Independent chuck  
D) Self aligning chuck

**Answer: C) Independent chuck**

57. What is the types of fit for the expression 20H7/g6?

A) Interference fit  
B) Force fit  
C) Clearance fit  
D) Transition fit

**Answer: C) Clearance fit**

50. What does the letter Y stands in the formula  $d = Y \cdot 2(s+r)$  in taper measurement?

A) Diameter over rollers at big end  
B) Distance from the centre of the roller to the end of the component  
C) Radius of the roller  
D) Diameter over rollers at small end

**Answer: D) Diameter over rollers at small end**

58. What is the purpose of MDI mode?

A) Editing of programmable Data  
B) Move the axes by manually  
C) For program execution  
D) Cross checking of the program graphically

**Answer: B) Move the axes by manually**

51. Which device is used as a reference surface for marking?

A) Anvil surface  
B) Lathe bed  
C) Plate angle  
D) Marking table

**Answer: D) Marking table**

59. What is the depth of 0.5 inch BSW 13TPI single start thread?

A) 0.049"  
B) 0.082"  
C) 0.025"  
D) 0.038"

**Answer: A) 0.049"**

52. Why in CNC machine tool, the part program entered in edit mode is stored into the computer memory?

A) Can be used again and again  
B) Cannot say  
C) Can be used again but it has to be modified every time  
D) Can be used only once time

**Answer: A) Can be used again and again**

60. What is lapping?

A) Grinding operation  
B) Chiseling operation  
C) Filing operation  
D) Precision finishing operation

**Answer: D) Precision finishing operation**

53. How the two halves of split bearing is joined?

A) On diameter line  
B) On offset of shaft  
C) On length vice  
D) On chord line

**Answer: A) On diameter line**

61. How many adjusting bearing pad in fixed steady rest?

A) Five  
B) Three  
C) Two  
D) Four

**Answer: B) Three**

54. How many ways CNC machine tool systems can be classified?

A) 4  
B) 5  
C) 2  
D) 3

**Answer: D) 3**

62. What is the heating temperature in gas nitriding process?

A) Up 300 Degree Celsius  
B) Up 400 Degree Celsius  
C) Up 500 Degree Celsius  
D) Up 200 Degree Celsius

**Answer: C) Up 500 Degree Celsius**

55. What is the name of the centre with a carbide tip is brazed into an ordinary steel shank?

A) Half centre  
B) Tipped centre  
C) Ball centre  
D) Insert type centre

**Answer: B) Tipped centre**

63. Which lapping material used for easy charging and rapid cutting?

A) Cast iron  
B) Close grained iron  
C) Copper and brass  
D) White cast iron

**Answer: C) Copper and brass**

56. What is the advantage of preventive maintenance system?

64. Which type of instrument is generally used to check eccentricity?

A) Dial test indicator  
B) Micrometer  
C) Vernier calipers  
D) Surface gauge

**Answer: A) Dial test indicator**

65. What is the maximum size of bore that can be checked with telescopic gauge?

- A) 152.4 mm
- B) 88.9 mm
- C) 31.7 mm
- D) 53.9 mm

**Answer: A) 152.4 mm**

66. What is the purpose of normalizing steel?

- A) Improve machinability
- B) Increase the toughness and reduce brittleness
- C) Soften the steel
- D) Remove induced stresses

**Answer: D) Remove induced stresses**

67. Where is the dead centre fixed on lathe?

- A) Head stock
- B) Tail stock
- C) Cross-Stock
- D) Carriage

**Answer: B) Tail stock**

68. How many gears are assembled in tumbler gear mechanism?

- A) 2 gears
- B) 5 gears
- C) 4 gears
- D) 3 gears

**Answer: D) 3 gears**

69. Which material is used to make back plate of a three jaw chuck?

- A) Wrought iron
- B) Alloy steel
- C) Cast steel
- D) Cast iron

**Answer: D) Cast iron**

70. What is the shape of buttress thread flank?

- A) One flank is 30 Degree and the other 45 Degree
- B) One flank is 90 Degree and the other 45 Degree
- C) One flank is 60 Degree and the other 45 Degree
- D) Two flanks are at 60 Degree

**Answer: B) One flank is 90 Degree and the other 45 Degree**

71. Which accessory is used in between centre work?

- A) Three chuck
- B) Catch plate
- C) Face plate
- D) Four jaw chuck

**Answer: B) Catch plate**

72. Which angle determines the rake angle at the cutting edge of twist drill?

- A) Helix angle
- B) Wedge angle
- C) Clearance angle
- D) Point angle

**Answer: A) Helix angle**

73. Which is the internal part of a bench vice?

- A) Movable jaw
- B) Fixed jaw
- C) Handle
- D) Box nut

**Answer: D) Box nut**

74. What is the roughness value of grade No N:12?

- A) 25 microns
- B) 0.1 microns
- C) 12.5 microns
- D) 50 microns

**Answer: D) 50 microns**

75. Which command activates in automatic mode?

- A) Work offset settings are taken
- B) Program simulation
- C) Program executed
- D) Tool changes automatically

**Answer: C) Program executed**

76. Which metal is to be case hardened?

- A) High carbon steel
- B) Cast iron (heavy parts)
- C) Alloy steel parts
- D) Low carbon steel parts

**Answer: D) Low carbon steel parts**

77. Which gauge is used to check the radius formed at the steps of component?

- A) Feeler gauge
- B) Plug gauge
- C) Radius gauge
- D) Fillet gauge

**Answer: D) Fillet gauge**

78. Which is 3 jaw chuck?

- A) Combination chuck
- B) Self centring chuck
- C) Magnetic chuck
- D) 4 Jaw chuck

**Answer: B) Self centring chuck**

79. What is the special benefit of using a fixture?

- A) Slower rate of production
- B) Suitable for small batch production
- C) Skilled worker required
- D) Faster rate of production

**Answer: D) Faster rate of production**

80. Which one of the following is possible in edit mode?

- A) Can read only the program
- B) Execute the program
- C) Simulation of the program
- D) Preparation of new programmable Data and correction / Alteration of an earlier program

**Answer: D) Preparation of new programmable Data and correction / Alteration of an earlier program**

81. How the complex cutting motion involving X,Y and Z moments is carried out by CNC machining?

- A) Based on electrical power supply of the machine
- B) Combinations of co ordinates obtained from drives along the axis
- C) Use of jigs, cams, templates and tracers
- D) Skill of machine operator

**Answer: B) Combinations of co ordinates obtained from drives along the axis**

82. Which one of the following heat treatment process produces a scale free surface on the components?

- A) Case hardening
- B) Flame hardening
- C) Induction hardening
- D) Nitriding

**Answer: C) Induction hardening**

83. Which of the following structures of steel is obtained due to the drastic cooling from the austenite structure?

- A) Cementite
- B) Ferrite
- C) Pearlite
- D) Martensite

**Answer: D) Martensite**

84. Which material used for manufacturing a marking table?

- A) Mild steel
- B) Tool steel
- C) Aluminium
- D) Cast iron

**Answer: D) Cast iron**

85. What is 7 with expression of fit 30H7/g6?

- A) Shaft and hole tolerance
- B) Hole tolerance grade
- C) Shaft tolerance grade
- D) Shaft and hole allowance

**Answer: B) Hole tolerance grade**

86. How many speed will obtained from a 3 stepped cone pulley headstock of lathe with back gear arrangement?

- A) 4
- B) 5
- C) 3
- D) 6

**Answer: D) 6**

87. Which one is the angle of buttress thread?

- A) 60 Degree
- B) 30 Degree
- C) 45 Degree
- D) 55 Degree

**Answer: C) 45 Degree**

88. Which one of the following M-code is suitable for coolant pump ON?

- A) M10
- B) M09
- C) M11
- D) M08

**Answer: D) M08**

89. What is the indication of 'x' axis in CNC lathe machine?

- A) Centre axis of the component
- B) The diameter of the component
- C) The length of the component
- D) The radius of the component

**Answer: B) The diameter of the component**

90. What is the least count of inside micrometer - metric?

- A) 0.02 mm
- B) 0.001 mm
- C) 0.01 mm
- D) 0.1 mm

**Answer: C) 0.01 mm**

91. Which jaw of 3 jaw chuck is used to hold hollow job?

- A) External jaw
- B) Fixed jaw
- C) Movable jaw
- D) Internal jaw

**Answer: D) Internal jaw**

92. Where the knuckle threads are used?

- A) Screw jack
- B) Carpentry vice
- C) Dead screw of lathe
- D) Railway carriage couplings

**Answer: D) Railway carriage couplings**

93. What is the purpose of square slot provided on the top of the pinion of a 3 jaw chuck is?

- A) To accommodate the chuck key
- B) To set chuck on machine
- C) To set the back plate on the machine
- D) To set the body of the chuck in spindle

**Answer: A) To accommodate the chuck key**

94. What is the tool life index of cemented carbide tool for turning high carbon high chromium die steel?

- A) 0.2
- B) 0.4
- C) 0.35
- D) 0.15

**Answer: D) 0.15**

95. Where will be using the angle plate and counter weight?

- A) Catch plate
- B) Face plate
- C) Driving plate
- D) Four jaw chuck

**Answer: B) Face plate**

96. What is the value of tool life index for a cemented carbide tip to machine cast iron component?

- A) 0.128
- B) 0.125
- C) 0.2
- D) 0.1

**Answer: D) 0.1**

97. Which one of the following code is suitable for spindle rotation in clock wise direction?

- A) M03
- B) G02
- C) G03
- D) M04

**Answer: A) M03**

98. Which one of the following command the G02 code indicates?

- A) Circular interpolation counter clockwise direction
- B) Cross sectional interpolation
- C) Linear interpolation
- D) Circular interpolation clockwise direction

**Answer: D) Circular interpolation clockwise direction**

99. In Which mode we can input the program command manually?

- A) Jog mode  
C) Auto mode
- B) MDI mode  
D) Edit mode

**Answer: B) MDI mode**

**100.** Which letter represents basic hole?

- A) H  
C) BH
- B) h  
D) Bh

**Answer: B) h**

**101.** What is the relation between pitch and lead in multistart thread?

- A) Lead = Pitch  
C) Lead = No. start x pitch
- B) Lead = 1/2 pitch  
D) Lead = 1/3 x pitch

**Answer: C) Lead = No. start x pitch**

**102.** What is the name of the pattern of work surface caused by the movement of cutting tool?

- A) Surface texture  
C) Roughness
- B) Roughness facing  
D) Waviness

**Answer: A) Surface texture**

**103.** Which code is suitable for multiple turning cycle in FANUC CNC control system?

- A) G92  
C) G71
- B) G96  
D) G94

**Answer: C) G71**

**104.** How the part programming mistakes can be avoided?

- A) Cannot be avoided in CNC machine  
C) Both NC and CNC machine
- B) CNC (Computer numerical control) machine only  
D) NC (Numerical control) machine only

**Answer: B) CNC (Computer numerical control) machine only**

**105.** Which method is suitable for measuring minor diameter of internal thread?

- A) By using three wire method  
C) By using screw thread micrometer
- B) By using precision rollers and vernier calliper  
D) By using slip gauge and precision roller

**Answer: D) By using slip gauge and precision roller**

**106.** What is the purpose of change gear train in centre lathe?

- A) Connecting quick change gear box to lead screw  
C) Connecting lead screw to changing dial
- B) Connecting fixed stud gear to quick change gear box  
D) Connecting spindle gear to fixed stud gear

**Answer: B) Connecting fixed stud gear to quick change gear box**

**107.** Where the milling attachment is mounted in centre

lathe?

- A) Rear tool post  
C) Cross - slide
- B) Compound rest  
D) Tailstock

**Answer: C) Cross - slide**

**108.** Which M code is used to activate coolant pump in CNC machine?

- A) M09  
C) M01
- B) M08  
D) M06

**Answer: B) M08**

**109.** Encoder is used in CNC machine tool to sense and control?

- A) Work position  
C) Spindle speed
- B) Spindle position  
D) Table position

**Answer: D) Table position**

**110.** Where the bend type lathe carrier is engaged?

- A) Catch plate  
C) Driving plate
- B) Angle plate  
D) Face plate

**Answer: A) Catch plate**

**111.** Which material is used to make the tool maker's button?

- A) Stainless steel  
C) Tool steel
- B) Hardened steel  
D) Cast steel

**Answer: B) Hardened steel**

**112.** What is the formula for metric thread depth?

- A)  $0.75 \times \text{pitch}$   
C)  $0.5 \times \text{pitch}$
- B)  $0.6134 \times \text{pitch}$   
D)  $0.6403 \times \text{pitch}$

**Answer: B)  $0.6134 \times \text{pitch}$**

**113.** What is the type of fit if minimum size of the shaft is larger than maximum size of hole?

- A) Running  
C) Clearance
- B) Transition  
D) Interference

**Answer: D) Interference**

**114.** What is the name of precision finishing operation carried out by using fine abrasive materials?

- A) Filing  
C) Lapping
- B) Grinding  
D) Polishing

**Answer: C) Lapping**

**115.** Which file is used for filing surfaces at right angle on already finished surface?

- A) Flat file  
C) Safe edge file
- B) Needle file  
D) Curved cut file

**Answer: C) Safe edge file**

**116.** Which part of the lathe helps to give angular movement

during taper turning?

- A) Saddle
- B) Cross slide
- C) Tool Post
- D) Compound slide

**Answer: D) Compound slide**

**117.** How does periodic inspection of the machines and equipments is carried out in preventive maintenance?

- A) As per the knowledge of manager
- B) As per the knowledge of instructor
- C) As per the knowledge of trainee
- D) As per checklist

**Answer: D) As per checklist**

**118.** Which part of carriage is only for possible manual operation?

- A) Top slide
- B) Apron
- C) Saddle
- D) Cross slide

**Answer: A) Top slide**

**119.** Where the driver pin is used?

- A) Driving plate
- B) Catch plate
- C) Angle plate
- D) Face plate

**Answer: A) Driving plate**

**120.** What is the cut of file used for deburring the job on lathe?

- A) Single cut file
- B) Double cut file
- C) Rasp cut file
- D) Curved cut file

**Answer: A) Single cut file**

**121.** Which mechanism is also called as reversing gear unit?

- A) Change gear unit
- B) Tumbler gear
- C) Quick change box
- D) Apron mechanism

**Answer: B) Tumbler gear**

**122.** What is the included angle of center punch?

- A) 45 Degree
- B) 60 Degree
- C) 30 Degree
- D) 90 Degree

**Answer: D) 90 Degree**

**123.** Which one of the following is the solid carburizing material?

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

**Answer: A) Charcoal**

**124.** Which grade of angle plate are more accuracy and used for tool room work?

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

**Answer: D) Grade 1**

**125.** What is the type of fit in expression 75 H8/j7?

- A) Transition fit
- B) Force fit
- C) Clearance fit
- D) Interference fit

**Answer: A) Transition fit**

**126.** Which one is example of ferrous tool material?

- A) High carbon steel
- B) Stellite
- C) Diamonds
- D) Carbide tool

**Answer: A) High carbon steel**

**127.** Which mode, the cutting tool returns back to its home position?

- A) Reference mode
- B) Automatic mode
- C) Jog mode
- D) MDI mode

**Answer: A) Reference mode**

**128.** What type of taper provided on the shank of lathe center?

- A) Metric
- B) Jarno
- C) Brown & sharp
- D) Morse

**Answer: D) Morse**

**129.** How many precision rollers required for measuring angle of tapered component?

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

**Answer: A) 2**

**130.** Which of the following abrasive is preferred for lapping soft steels and non-ferrous metal?

- A) Aluminium oxide
- B) Natural corundum
- C) Boron carbide
- D) Silicon carbide

**Answer: A) Aluminium oxide**

**131.** Which angle plate is used to support jobs in different angles?

- A) Adjustable type
- B) Plain type
- C) Slotted type
- D) Box type

**Answer: A) Adjustable type**

**132.** What will happen if lap material used to make laps harder than work piece?

- A) Abrasives cut the lap instead of work piece
- B) Improve better geometrical accuracy
- C) Refines surface finish
- D) Improve dimensional accuracy

**Answer: A) Abrasives cut the lap instead of work piece**

**133.** What is the inclined angle of dead centre conical point?

- A) 60 Degree
- B) 50 Degree
- C) 90 Degree
- D) 30 Degree

**Answer: A) 60 Degree**

**134.** What is the meaning of M24 in M 24 x 3 single start thread?

- A) Depth of thread
- B) Major dia of thread
- C) Core dia of thread
- D) Effective dia of thread

**Answer: B) Major dia of thread**

**135.** What is the preheating temperature of steel?

- A) Upto 500 Degree Centigrade
- B) Upto 300 Degree Centigrade
- C) Upto 600 Degree Centigrade
- D) Upto 400 Degree Centigrade

**Answer: C) Upto 600 Degree Centigrade**

**136.** What does AQL stands for?

- A) Another quality limit
- B) Acceptance quality level
- C) Acceptance quality limit
- D) Aquired quality limit

**Answer: C) Acceptance quality limit**

**137.** How can the unexpected breakdowns of machines reduced?

- A) By break down maintenance
- B) By preventive maintenance
- C) By productive maintenance
- D) By quality maintenance

**Answer: B) By preventive maintenance**

**138.** How many number of teeth gear is used to as translating gear to cut metric thread on British lathe?

- A) 140
- B) 100
- C) 127
- D) 135

**Answer: C) 127**

**139.** What is the effect, if the cutting speed is more than the recommended?

- A) Reduce the tool life
- B) Better finish
- C) Accurate dimension
- D) Normal tool life

**Answer: A) Reduce the tool life**

**140.** What is the representation of zero line in limit and fits?

- A) Nominal size
- B) Basic size
- C) Actual size
- D) Tolerance size

**Answer: B) Basic size**

**141.** What is the main use of using tool maker's button for face boring?

- A) Easy to set square to the axis of rotation
- B) Easy to use
- C) Truing is not necessary
- D) Unskilled labour can do

**Answer: A) Easy to set square to the axis of rotation**

**142.** What is the advantage of maintenance records?

- A) Reduce the clerical work
- B) Monitor the frequent breakdown
- C) Increase the cost of production
- D) Zero breakdown maintenance

**Answer: B) Monitor the frequent breakdown**

**143.** Which deviation is zero in shft basis system?

- A) Upper deviation is zero
- B) Lower deviation is zero
- C) Both upper and lower deviation is zero
- D) Both upper and lower deviation is below basic size

**Answer: A) Upper deviation is zero**

**144.** Where the taper threads are used?

- A) Wood screw
- B) Stud
- C) Nut
- D) Bolt

**Answer: A) Wood screw**

**145.** Which part of the lathe is situated at right hand side of the lathe bed?

- A) Tool post
- B) Tailstock
- C) Head stock
- D) Carriage

**Answer: B) Tailstock**

**146.** Which G-code is suitable for data input in mm?

- A) G28
- B) G21
- C) G27
- D) G20

**Answer: B) G21**

**147.** Which type of jig is used for large awkward shaped piece part is to drilled in many directions?

- A) Trunnion jig
- B) Table jig
- C) Plate jig
- D) Post jig

**Answer: A) Trunnion jig**

**148.** Which one of the code is used to rewind the program?

- A) M39
- B) M40
- C) M30
- D) M38

**Answer: C) M30**

**149.** What is the roughnes value of grade No N1?

- A) 0.4 microns
- B) 12.5 microns
- C) 6.3 microns
- D) 0.025 microns

**Answer: D) 0.025 microns**

**150.** Which portion of a hammer head is not hardened or left soft?

- A) Cheek
- B) Face
- C) Cross pein
- D) Pein

**Answer: A) Cheek**

**151.** What will happen to the tool life if the spindle is running higher speed?

- A) More
- B) Less
- C) Medium
- D) Very less

**Answer: B) Less**

**152.** What is the material of files?

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

**Answer: D) High carbon steel**

**153.** What is the name of work holding device were the irregular work could hold in lathe?

- A) B-Jaw chuck
- B) Driving place
- C) Catch plate
- D) Face plate

**Answer: D) Face plate**

**154.** Calculate the spindle speed to turn a 40mm dia M.S rod using a cemented carbide tool it cutting speed is 92mm/min?

- A) 950 rpm
- B) 685 rpm
- C) 508 rpm
- D) 731 rpm

**Answer: D) 731 rpm**

**155.** What is the process of increasing carbon percentage on the surface of low carbon steel?

- A) Tempering
- B) Hardening
- C) Nitriding
- D) Carburizing

**Answer: D) Carburizing**

**156.** Why the ball centre is used in taper turning by offset method?

- A) Easy setting
- B) Minimum friction
- C) Minimum wear and strain
- D) Economical

**Answer: C) Minimum wear and strain**

**157.** Which one is the golden hours related to first aid?

- A) First 45 minutes
- B) First 20 minutes
- C) First 15 minutes
- D) First 30 minutes

**Answer: D) First 30 minutes**

**158.** Where the follower is fixed to produce form turning?

- A) Cross slide
- B) Tool part
- C) Top slide
- D) Tail stook

**Answer: A) Cross slide**

**159.** Calculate the pitch diameter of M 64 x 6 mm square thread?

- A) 60 mm
- B) 62 mm
- C) 61 mm
- D) 58 mm

**Answer: C) 61 mm**

**160.** What is the advantage of roller steady rest over fixed rest?

- A) It can fixed on saddle
- B) Easy to rotate the work
- C) It rotates and moves along the work
- D) It can fixed on tool post

**Answer: B) Easy to rotate the work**

**161.** What is the disadvantage of fixed steady rest over follower steady rest?

- A) Support at one fixed place only
- B) It rotate and moves along the work
- C) It rotate with the job
- D) Support continuous entire length

**Answer: A) Support at one fixed place only**

**162.** Which type of angle plate is used to hold work at an angle?

- A) Swivel
- B) Box
- C) Slotted
- D) Solid

**Answer: A) Swivel**

**163.** What is the recommended feed rate for turning cast iron (grey) using H.S.S tool?

- A) 0.2-1.00 mm/rev
- B) 0.08-0.03 mm/rev
- C) 0.2-1.5 mm/rev
- D) 0.15-0.7 mm/rev

**Answer: D) 0.15-0.7 mm/rev**

**164.** Which one is used for producing a bore to a high degree of positional accuracy?

- A) Reamer
- B) Drill
- C) Boring tool
- D) Tool maker's button

**Answer: D) Tool maker's button**

**165.** What is the advantage of using idler gear in simple gear train?

- A) Does not affect gear ratio
- B) Easy to engage
- C) Affect gear ratio
- D) Change the speed

**Answer: A) Does not affect gear ratio**

**166.** Why lapping tools are provided groove?

- A) For accommodate lapping compound
- B) Clearance
- C) Prevent damage to tool
- D) Expansion

**Answer: A) For accommodate lapping compound**

**167.** What will be the effect in helix angle if lead changes for a give diameter work?

- A) Lead decreases helix angle increases
- B) Helix angle have no change when lead decreases
- C) Lead decreases helix angle decreases
- D) Helix angle have no change when lead increases

**Answer: C) Lead decreases helix angle decreases**

168. What is the purpose of Square thread?

- A) For clamping                      B) To transmit power  
C) General fastening                D) To make adjustment

**Answer: B) To transmit power**

169. What is direction of finishing in surface texture?

- A) Lay                                      B) Flaw  
C) Waviness                              D) Roughness

**Answer: A) Lay**

170. Which formula is used to find root width of a buttress thread?

- A)  $0.317 \times \text{pitch}$                       B)  $0.335 \times \text{pitch}$   
C)  $0.5 \times \text{pitch}$                               D)  $0.125 \times \text{pitch}$

**Answer: D)  $0.125 \times \text{pitch}$**

171. What is the width of the tool to cut a square thread of 60 x 9 mm pitch?

- A) 9 mm                                      B) 8.5 mm  
C) 4.5 mm                                      D) 9.5 mm

**Answer: C) 4.5 mm**

172. Which code suitable for circular interpolation counter clockwise direction?

- A) G01                                      B) G04  
C) G03                                      D) G02

**Answer: C) G03**

173. Which mode is used for moving the turret in X and Z direction?

- A) Edit mode                              B) MDI mode  
C) Jog mode                                D) Auto mode

**Answer: C) Jog mode**

174. Calculate change gears to cut a three start thread having a pitch of 1.5 mm; the lead screw has a pitch of 6 mm.

- A) Driver 50 teeth, Driven 100 teeth      B) Driver 45 teeth, Driven 60 teeth  
C) Driver 30 teeth, Driven 70 teeth      D) Driver 60 teeth, Driven 50 teeth

**Answer: B) Driver 45 teeth, Driven 60 teeth**

175. Which type of tap wrench is used to minimise the damage of taps?

- A) Bar type tap wrench                B) Double ended tap wrench  
C) T handle type tap wrench      D) Solid type tap wrench

**Answer: D) Solid type tap wrench**

176. What is the angle of BSW thread?

- A) 29 Degree                              B) 60 Degree  
C) 55 Degree                              D) 45 Degree

**Answer: C) 55 Degree**

177. Where the fixed steady rest clamped on a lathe?

- A) On a saddle                              B) On the lathe bed  
C) On a carriage                              D) On tool post

**Answer: B) On the lathe bed**

178. Which part of centre lathe make angular movement?

- A) Compound slide                      B) Cross slide  
C) Saddle                                      D) Top slide

**Answer: A) Compound slide**

179. Which formula to be used to find depth of buttress thread?

- A)  $0.6134 \times \text{pitch}$                       B)  $0.6403 \times \text{pitch}$   
C)  $0.5 \times \text{pitch}$                               D)  $0.75 \times \text{pitch}$

**Answer: D)  $0.75 \times \text{pitch}$**

180. What is the angle between the adjustable jaws of a three jaw chuck?

- A) 90 Degree                                B) 120 Degree  
C) 119 Degree                              D) 118 Degree

**Answer: B) 120 Degree**

181. Which method of holding is used for lengthy work to avoid over hanging?

- A) In face plate                              B) In between centres  
C) Angle plate                                D) In four jaw chuck

**Answer: B) In between centres**

182. What heat treatment process the nitriding comes under?

- A) Hardening                                B) Tempering  
C) Normalizing                              D) Case hardening

**Answer: D) Case hardening**

183. What does Sq 60 x 9 IS 4694-1968 means?

- A) Worm thread 60 mm dia x 9 mm pitch      B) Acme thread 60 mm dia x 9 mm pitch  
C) Square Thread 60 mm dia, 9 mm pitch      D) Buttress thread 60 mm dia x 9 mm pitch

**Answer: C) Square Thread 60 mm dia, 9 mm pitch**

184. Which one of the following is disadvantages of taper turning by attachments?

- A) Both external and internal tapers can be produced      B) Length taper can be produced  
C) Power feed can be produced                      D) Only limited taper angle can be turned

**Answer: D) Only limited taper angle can be turned**

185. What is the purpose of G28 code based on FANUC CNC control system?

- A) Circular interpolation clockwise  
B) Tool has to return from reference point  
C) Circular interpolation counter clockwise  
D) Tool has return to reference point

**Answer: D) Tool has return to reference point**

**186.** How much percentage of cutting speed could be increased by using super HSS tools?

- A) 10% to 15%  
B) 15% to 20%  
C) 5% to 10%  
D) 20% to 25%

**Answer: B) 15% to 20%**

**187.** Which one of the program block may suitable to move the cutting tool 'x' axis 42.0 'z' axis 0.0 with the feed of 0.1 mm?

- A) G02 x 42.0 z 0.0 F 0.1;  
B) G01 x 42.0 z 0.0 F 0.1;  
C) G00 x 42.0 z 0.0 F 0.1;  
D) G03 x 42.0 z 0.0 F 0.1;

**Answer: B) G01 x 42.0 z 0.0 F 0.1;**

**188.** Find the lead of a 2 start thread having pitch 1.5 mm?

- A) 1.50 mm  
B) 6.00 mm  
C) 4.50 mm  
D) 3.00 mm

**Answer: D) 3.00 mm**

**189.** Which type taper is provided at the hollow end of the tailstock barrel/spindle?

- A) Jarno taper  
B) Morse taper  
C) Metric taper  
D) Brown & sharpe taper

**Answer: B) Morse taper**

**190.** What is the use of CNC code of M05 to develop the command?

- A) Tool returns from reference point to work place  
B) The cutting tool has to be changed  
C) Rewind the program once again  
D) The spindle rotation has to stop

**Answer: D) The spindle rotation has to stop**

**191.** Which one of the below accessory has provided U slot?

- A) Driving plate  
B) Angle plate  
C) Face plate  
D) Catch plate

**Answer: D) Catch plate**

**192.** Calculate the pitch diameter of M 36 x 4 mm square thread?

- A) 34 mm  
B) 32 mm  
C) 35 mm  
D) 33 mm

**Answer: A) 34 mm**

**193.** How many types of split bearing?

- A) 5  
B) 4

- C) 2  
D) 3

**Answer: C) 2**

**194.** What is the use of maintenance records?

- A) To analyse the cause fault and rectification  
B) To analyse the periodic inspection  
C) To analyse the function maintenance department  
D) To analyse the purchase

**Answer: A) To analyse the cause fault and rectification**

**195.** Which type of vice has a trigger for opening the movable jaw?

- A) Bench vice  
B) Pin vice  
C) Pipe vice  
D) Quick releasing vice

**Answer: D) Quick releasing vice**

**196.** How many standard wires are used to check effective diameter very accurately?

- A) One wire  
B) Two wire  
C) Four wire  
D) Three wire

**Answer: D) Three wire**

**197.** Which material is to used to make body of three jaw chuck?

- A) Hardened steel  
B) Cast iron  
C) Alloy steel  
D) Cast steel

**Answer: D) Cast steel**

**198.** What is the term the distance moved by the tool along the work for each revolution?

- A) Speed  
B) Feed  
C) Cutting speed  
D) Depth

**Answer: B) Feed**

**199.** What is the normal lip clearance angle for standard drill?

- A) 8 Degree - 12 Degree  
B) 13 Degree - 16 Degree  
C) 5 Degree - 7 Degree  
D) 2 Degree- 4 Degree

**Answer: A) 8 Degree - 12 Degree**

**200.** What is the purpose of preventive maintenance?

- A) Reduce the vibration of machine  
B) Increase the cost of inspection  
C) Maintain machine in good working order  
D) To keep the maintenance records

**Answer: C) Maintain machine in good working order**

**201.** Which is the device that can hold, locate and guide the tool?

- A) Fixture  
B) Jig  
C) Collet chuck  
D) Chuck

**Answer: B) Jig**

202. What is angle between the two faces of angle plate?

- A) 45 Degree
- B) 60 Degree
- C) 90 Degree
- D) 30 Degree

**Answer: C) 90 Degree**

203. Which lathe accessory is used to hold the previously bored job?

- A) Mandrel
- B) Face plate
- C) Drive plate
- D) Catch plate

**Answer: A) Mandrel**

204. Which one of the following code used to switch off the coolant pump?

- A) M08
- B) M07
- C) M30
- D) M09

**Answer: D) M09**

205. Which part of a lathe is used to catch thread quickly?

- A) Tool post
- B) Top slide
- C) Cross - slide
- D) Chasing dial

**Answer: D) Chasing dial**

206. What is the purpose of lapping vehicles?

- A) Improves dimensional accuracy
- B) Improves cutting ability
- C) Regulate cutting action and lubricate surface
- D) Smooth effective operation

**Answer: C) Regulate cutting action and lubricate surface**

207. How the roughness value is expressed?

- A) Centimetre
- B) Metre
- C) Millimetre
- D) Micrometer

**Answer: D) Micrometer**

208. What is the point angle of cold chisel to cut aluminium?

- A) 45 Degree
- B) 30 Degree
- C) 60 Degree
- D) 55 Degree

**Answer: B) 30 Degree**

209. How many fundamental deviations are recommended by BIS?

- A) 25
- B) 20
- C) 24
- D) 30

**Answer: A) 25**

210. What is the use of gap bed lathe?

- A) To turn larger diameter work
- B) To turn lengthy work
- C) To turn small diameter work
- D) To turn irregular shaped work

**Answer: A) To turn larger diameter work**

211. A CNC machine tool has a continuous part control both linear and circular along x,y,z and control of table rotation about x axis and z axis, so the machine should be called?

- A) 2C, L
- B) 3L,2C
- C) 2L, 2C
- D) 5C

**Answer: B) 3L,2C**

212. Which axis the tool moves in taper turning attachment?

- A) Parallel to lathe axis
- B) Angular to lathe axis
- C) Perpendicular to lathe axis
- D) Vertical to lathe axis

**Answer: B) Angular to lathe axis**

213. Where multistart threads are used?

- A) For quick transmission
- B) For general fastening
- C) For easy alignment
- D) For easy engagement

**Answer: A) For quick transmission**

214. How the cutting speed is expressed?

- A) Revolution/min
- B) Meter/sec
- C) Meter/min
- D) Foot/min

**Answer: C) Meter/min**

215. What is the formula for pitch diameter of thread?

- A) Major diameters - 2 depth
- B) Major diameters - minor diameter
- C) Major diameters - single depth
- D) Major diameter - Pitch

**Answer: C) Major diameters - single depth**

216. Which thread is more suitable to hold the tool maker button in position?

- A) 4BA thread
- B) 7BA thread
- C) 5BA thread
- D) 6BA thread

**Answer: A) 4BA thread**

217. Which part is assembled in compound rest other than compound slide?

- A) Swivel base
- B) Saddle
- C) Cross slide
- D) Apron

**Answer: A) Swivel base**

218. What is the formula used to find flat width of a buttress thread?

- A) Pitch/8
- B) Pitch/2
- C) Pitch/4
- D) Pitch/3

**Answer: A) Pitch/8**

219. Which punch is used for locating center of the hole?

- A) Prick punch
- B) Center punch
- C) Hollow Punch
- D) Dot punch

**Answer: B) Center punch**

**220.** Calculate the depth of buttress thread 60 mm diameter and 9 mm pitch?

- A) 7.75 mm
- B) 4.75 mm
- C) 6.75 mm
- D) 5.75 mm

**Answer: C) 6.75 mm**

**221.** Which material is used for making lathe bed?

- A) Pig iron
- B) Grey cast iron
- C) Nodular cast iron
- D) Mild steel

**Answer: B) Grey cast iron**

**222.** Calculated the rpm of spindle if cutting speed  $V_c$  is 120m/min and the diameter  $D$  of the job is 50 mm?

- A) 975 rpm
- B) 856 rpm
- C) 764 rpm
- D) 500 rpm

**Answer: C) 764 rpm**

**223.** Which one of the following code is suitable for rapid traverse?

- A) G03
- B) G00
- C) G02
- D) G04

**Answer: B) G00**

**224.** Which one of the following M-code is suitable for spindle rotation stop?

- A) M03
- B) M05
- C) M04
- D) M06

**Answer: B) M05**

**225.** What is the nose cutter width of the square threads tool?

- A) equal to pitch
- B) 2 x Pitch
- C) 0.5 x Pitch
- D) Pitch / 0.5

**Answer: C) 0.5 x Pitch**

**226.** Which of the following is not advantage of CNC machine?

- A) Reduced scrap rate
- B) Higher flexibility
- C) Improved strength of the components
- D) Improved quality

**Answer: C) Improved strength of the components**

**227.** What is the drill point angle for drilling brass?

- A) 120 Degree
- B) 130 Degree
- C) 140 Degree
- D) 118 Degree

**Answer: D) 118 Degree**

**228.** The CNC keyboards have with following keys?

- A) Alphabetic control keys
- B) Alphanumerical control keys electronic

C) CNC codes

D) Numerical Data based keys only

**Answer: B) Alphanumerical control keys electronic**

**229.** What is the use of drive pin in drive plate?

- A) To turn the job
- B) To locate the job
- C) To rotate the job
- D) Hold the job

**Answer: C) To rotate the job**

**230.** How many numbers of gears having in a simple gear train?

- A) 3
- B) 4
- C) 2
- D) 5

**Answer: A) 3**

**231.** Which type of thread cut on the screw shaft of an independent chuck?

- A) Left hand square
- B) Left hand V thread
- C) Right hand V thread
- D) Left hand acme thread

**Answer: A) Left hand square**

**232.** Which part of the lathe gives perpendicular movement to the tool?

- A) Cross slide
- B) Tailstock
- C) Carriages
- D) Apron

**Answer: A) Cross slide**

**233.** Which gauge is generally used to check internal threads?

- A) Thread ring gauge
- B) Thread calliper gauge
- C) Thread snap gauge
- D) Thread plug gauge

**Answer: D) Thread plug gauge**

**234.** Which gas is used in Halon extinguisher?

- A) Carbon tetrachloride
- B) Carbon dioxide
- C) Carbon monoxide
- D) Hydrogen

**Answer: A) Carbon tetrachloride**

**235.** Which heat process is increase the toughness and decrease the brittleness?

- A) Annealing
- B) Normalizing
- C) Case hardening
- D) Tempering

**Answer: D) Tempering**

**236.** What are the standard diameters of tool maker's button?

- A) 14mm, 16mm, 18mm
- B) 8mm, 10mm, 12mm
- C) 20mm, 22mm, 24mm
- D) 2mm, 4mm, 6mm

**Answer: B) 8mm, 10mm, 12mm**

**237.** Which is the operation in point to point system used?

- A) Facing  
C) Parting
- B) Grooving  
D) Drilling

**Answer: D) Drilling**

**238.** Which is used to mark the center of a round rod?

- A) Outside caliper  
C) Inside caliper
- B) Jenny caliper  
D) Divider

**Answer: B) Jenny caliper**

**239.** What is the purpose of back gear unit in cone pulley headstock of a lathe?

- A) To get reduced spindle speed  
C) To get increased spindle speed
- B) For helping step turning  
D) To double the spindle speed

**Answer: A) To get reduced spindle speed**

**240.** Calculate the flat width of 10 mm pitch buttress thread?

- A) 3.25 mm  
C) 1.25 mm
- B) 2.25 mm  
D) 4.25 mm

**Answer: C) 1.25 mm**

**241.** What is the recommended cutting speed for turning mild steel using H.S.S tool?

- A) 25-40 m/min  
C) 35-70 m/min
- B) 40-70 m/min  
D) 35-50 m/min

**Answer: D) 35-50 m/min**

**242.** What is the form of NO GO anvil of calliper gauge with roller type?

- A) Full thread form  
C) Truncated shaped form
- B) Correct shaped form  
D) Half thread form

**Answer: C) Truncated shaped form**

**243.** What is the material of jaws of 3 jaw chuck?

- A) Medium carbon steel  
C) Cast iron
- B) Alloy steel  
D) High carbon steel

**Answer: D) High carbon steel**

**244.** What is the shape of telescopic gauge?

- A) S - shaped  
C) C - shaped
- B) T - shaped  
D) U - shaped

**Answer: B) T - shaped**

**245.** Which surface is finished by honing?

- A) Internal cylindrical surface  
C) Flat surface
- B) Both external and internal surface  
D) External cylindrical surface

**Answer: A) Internal cylindrical surface**

**246.** Which type of chisel is used for squaring materials at the

corners and joints?

- A) Cross cut chisel  
C) Flat chisel
- B) Diamond point chisel  
D) Web chisel

**Answer: B) Diamond point chisel**

**247.** Which mode is used while loading / unloading the work piece in CNC machine?

- A) Edit mode  
C) Simulation mode
- B) Automatic mode  
D) Jog mode

**Answer: D) Jog mode**

**248.** Which material is used to make the stylus of mechanical surface indicator?

- A) Diamond  
C) Mild steel
- B) High carbon steel  
D) High speed steel

**Answer: A) Diamond**

**249.** Which type of thread have higher mechanical advantage?

- A) Square thread  
C) Buttress thread
- B) V- thread  
D) Acme thread

**Answer: A) Square thread**

**250.** Which type of thread is used in lathe head screw?

- A) Knuckle thread  
C) Acme thread
- B) Buttress thread  
D) Square thread

**Answer: C) Acme thread**

**251.** How we can protect the surface of marking table to maintain accuracy?

- A) Providing plastic coating  
C) By applying thin layers of oil
- B) Provide a stand  
D) By providing a guard

**Answer: C) By applying thin layers of oil**

**252.** Which one is chief constituent of ferrous tool material?

- A) Carbon  
C) Iron
- B) Tungsten  
D) Vanadium

**Answer: C) Iron**

**253.** Which type of chisel is used to cut key ways?

- A) Half round nose chisel  
C) Cross cut chisel
- B) Flat chisel  
D) Diamond point chisel

**Answer: C) Cross cut chisel**

**254.** Which mode execute the program continuously one block after another block?

- A) Auto mode  
C) Edit mode
- B) Jog mode  
D) MPG mode

**Answer: A) Auto mode**

255. What is the type of fit if minimum size of hole is larger than maximum size of shaft?

- A) Clearance
- B) Force
- C) Transition
- D) Interference

**Answer: A) Clearance**

256. How the turning tool is moving in tail stock offset method?

- A) Vertical to lathe axis
- B) Perpendicular to lathe axis
- C) Parallel to lathe axis
- D) Angular to lathe axis

**Answer: C) Parallel to lathe axis**

257. Which mode is used for fine positioning (Micron level) of the axis movement?

- A) Edit mode
- B) MDI mode
- C) Auto mode
- D) Incremental Jog mode

**Answer: D) Incremental Jog mode**

258. Which type of vice is used for marking of small jobs on the surface plate?

- A) Pipe vice
- B) Tool Makers vice
- C) Bench vice
- D) Quick releasing vice

**Answer: B) Tool Makers vice**

259. Which point in any CNC machine the position measuring systems has a starting point to each axis?

- A) Work zero
- B) Machine zero
- C) Tool geometrical value
- D) Reference mode

**Answer: B) Machine zero**

260. Which one belongs to team work?

- A) Knowledge
- B) Technical skill
- C) Hard skill
- D) Soft skill

**Answer: D) Soft skill**

261. What is the lead of M 10 x 1.5 double start thread?

- A) 3.5 mm
- B) 2 mm
- C) 4 mm
- D) 3 mm

**Answer: D) 3 mm**

262. Which formula to be used to find core diameter?

- A) Core diameter = Major diameter - depth
- B) Core diameter = Major diameter - 2 depth
- C) Core diameter = Major diameter - minor diameter
- D) Core diameter = Major diameter - pitch

**Answer: B) Core diameter = Major diameter - 2 depth**

263. What are the possible surface that can be produced by form turning?

- A) To generating cylindrical surface
- B) To generating concave and convex profile

- C) To generate flat surface
- D) To generate conical surface

**Answer: B) To generating concave and convex profile**

264. Which gear drives the fixed stud gear in lathe?

- A) Tumbler gear
- B) Apron mechanism
- C) Feed shaft
- D) Norton gear box

**Answer: A) Tumbler gear**

265. What type of thread is used in screw jack machine?

- A) Acme thread
- B) Square thread
- C) V-thread
- D) Buttress thread

**Answer: B) Square thread**

266. Which lap material inexpensive and can be expanded if worn out?

- A) Lead
- B) Bronze
- C) Brass
- D) Cast Iron

**Answer: A) Lead**

267. What is the advantage of jig?

- A) It holds the job
- B) Cost is very low
- C) Hold and locate the work
- D) Hold, locate and guide the tool

**Answer: D) Hold, locate and guide the tool**

268. What factor is important in free hand form turning?

- A) Skilled labour
- B) High speed
- C) Sharp tool
- D) Unskilled labour

**Answer: A) Skilled labour**

269. Which cutting tools have highest cutting efficiency?

- A) High carbon steel
- B) Carbide
- C) Mild steel
- D) High speed steel

**Answer: B) Carbide**

270. Which work holding device is used to hold irregular shaped work?

- A) Face Plate
- B) 3 Jaw chuck
- C) 4 Jaw chuck
- D) Catch plate

**Answer: A) Face Plate**

271. Which is the cheapest tool material?

- A) High carbon steel
- B) Carbide
- C) High speed steel
- D) Diamonds

**Answer: A) High carbon steel**

272. What is the accuracy of measurement by a try square?

- A) 2 mm / 1 mm length
- B) 0.002 mm / 10mm length
- C) 0.02 mm / 100mm length
- D) 0.2 mm / 1000 mm length

**Answer: B) 0.002 mm / 10mm length**

**273.** Which axis is parallel to Z - axis?

- A) Tool axis
- B) Spindle axis
- C) X - axis
- D) Y-axis

**Answer: B) Spindle axis**

**274.** Which one of the advantage of mass production?

- A) Special purpose machinery are necessary
- B) Gauges are to be used
- C) Time for manufacturing of components is reduced
- D) Jigs and fixture are needed

**Answer: C) Time for manufacturing of components is reduced**

**275.** Which type of trapezoidal thread is used in places there motion is to be transmitted between shafts at right angle?

- A) Acme thread
- B) Worm thread
- C) Saw-tooth thread
- D) Buttress thread

**Answer: B) Worm thread**

**276.** What is the most accepted method of representing roughness?

- A) Symbol
- B) Weight
- C) Grade number
- D) Units

**Answer: C) Grade number**

**277.** What is the purpose of slots milled on two planes of angle plate?

- A) Good appearance
- B) Clamp the job
- C) Maintain accuracy
- D) Reduce the weight

**Answer: B) Clamp the job**

**278.** What is the angle of saw tooth thread?

- A) 45 Degree
- B) 90 Degree
- C) 30 Degree
- D) 29 Degree

**Answer: C) 30 Degree**

**279.** Which part of screw rod of 4 jaw chuck permits the screws to rotate but not to advance?

- A) Finger pin
- B) Locating pin
- C) Taper pin
- D) Pinion

**Answer: A) Finger pin**

**280.** Which material is used to make angle plate?

- A) Wrought iron
- B) Mild steel
- C) Cast iron
- D) Tool steel

**Answer: C) Cast iron**

**281.** Find out the R.P.M of spindle for a 50mm bar (D) and cutting speed is 25m/min.

- A) 100rpm
- B) 159rpm

C) 168rpm

D) 250rpm

**Answer: B) 159rpm**

**282.** What is the purpose of idler gear in simple gear train?

- A) Reduce gear ratio
- B) Reduce spindle speed
- C) Increase spindle speed
- D) Transmit power between driver and driven gears

**Answer: D) Transmit power between driver and driven gears**

**283.** Which one of the following is disadvantage of tailstock offset method?

- A) Only external taper can be turned
- B) Good surface finish can be obtained
- C) Power feed can be given
- D) External taper thread can be produce

**Answer: A) Only external taper can be turned**

**284.** What is the indication of 'z' axis in CNC lathe machine?

- A) The diameter of the component
- B) The radius of the component
- C) The length of the component
- D) The centre axis of the component

**Answer: C) The length of the component**

**285.** What is the lead of M 24 x 3.5 triple start thread?

- A) 10.5 mm
- B) 3.5 mm
- C) 8.5 mm
- D) 12.8 mm

**Answer: A) 10.5 mm**

**286.** Which is used to prevent concentration of abrasives on lapping surface?

- A) Holder
- B) Retainer
- C) Vehicle
- D) Absorber

**Answer: C) Vehicle**

**287.** What will be the effect in helix angle if diameter changes for a given lead?

- A) No change in helix angle if diameter decreases
- B) No change in helix angle if diameter increases
- C) Diameters decreases helix angle increases
- D) Diameters decreases helix angle decreases

**Answer: C) Diameters decreases helix angle increases**

**288.** What is the type of fit for the expression Fit 25H7/p6?

- A) Interference fit
- B) Clearance fit
- C) Transition fit
- D) Running fit

**Answer: A) Interference fit**

**289.** Which of the following used buttress thread?

- A) Carpentry vice
- B) Screw jack
- C) General purpose nut and bolt
- D) Lead screw of lathe

**Answer: A) Carpentry vice**

**290.** Which parameter will decide the driver and driven gear ratio to cut thread on lathe?

- A) Major dia of work
- B) Root dia of work
- C) Angle of thread
- D) Pitch

**Answer: D) Pitch**

**291.** What is the term of thread the advancement of mating part in one complete rotation?

- A) Lead
- B) Depth
- C) Helix angle
- D) Pitch

**Answer: A) Lead**

**292.** What is the name of first member in a simple gear train?

- A) Reversible gear
- B) Idler
- C) Driven
- D) Driver

**Answer: D) Driver**

**293.** Which gauge is used to position the cutter before cutting in milling fixture?

- A) Fillet gauge
- B) Radius gauge
- C) Feeler gauge
- D) Screw pitch gauge

**Answer: C) Feeler gauge**

**294.** Calculate pitch diameter of f 24 x 3 mm square thread?

- A) 21.5 mm
- B) 21 mm
- C) 24 mm
- D) 22.5 mm

**Answer: D) 22.5 mm**

**295.** Which safety practice refers, Do not wear the ring?

- A) Machine safety
- B) General safety
- C) Road safety
- D) Personal safety

**Answer: D) Personal safety**

**296.** Which gauge is to be selected for checking the corner radius of the job?

- A) Fillet gauge
- B) Plug gauge
- C) Feeler gauge
- D) Radius gauge

**Answer: D) Radius gauge**

**297.** Which deviation is zero in hole basis system?

- A) Both upper and lower deviation is zero
- B) Lower deviation is zero
- C) Both upper and lower deviation is below basic size
- D) Upper deviation is zero

**Answer: B) Lower deviation is zero**

**298.** Which work holding method is to be used if, high degree of concentricity is needed?

- A) Three jaw chuck
- B) Face plate

- C) Four jaw chuck
- D) In between centres

**Answer: D) In between centres**

**299.** Which type of jig locates the piece part from its face?

- A) Table jig
- B) Plate jig
- C) Solid jig
- D) Post jig

**Answer: A) Table jig**

**300.** What is the use of Goo activates the command?

- A) Rapid traverse
- B) Tool returns from reference point
- C) Linear interpolation
- D) Return to reference point

**Answer: A) Rapid traverse**

**301.** Which code is suitable for tool nose radius compensation at right side?

- A) G41
- B) G50
- C) G40
- D) G42

**Answer: D) G42**

**302.** Which gas is used in nitriding process?

- A) Hydrogen
- B) Ammonia
- C) Carbon dioxide
- D) Helium

**Answer: B) Ammonia**

**303.** What is the specification for shape of file?

- A) Grades
- B) Cut
- C) Cross section
- D) Length

**Answer: C) Cross section**

**304.** Which thread has only one helical formation?

- A) Double start
- B) Quadruple
- C) Single start
- D) Triple start

**Answer: C) Single start**

**305.** Which type of tool is suitable to produce form surface in mass production activities?

- A) Using single point cutting tool
- B) Using carbide tipped form tool
- C) High carbon steel tool
- D) High speed steel cutting tool

**Answer: B) Using carbide tipped form tool**

**306.** What is the use of roller steady rest?

- A) To support long thin and thick rod
- B) To support long slender work
- C) To support the job and travel along job
- D) To support irregular job

**Answer: A) To support long thin and thick rod**

**307.** Which part of lathe slides over the bedways between headstock and the tailstock?

- A) Spindle  
C) Carriage
- B) Feed rod  
D) Lead screw

**Answer: C) Carriage**

**308.** Which one is the cause for hazard in personal safety?

- A) Sleeve tightly rolled  
C) Buttons fastened
- B) Safety boots  
D) Long hair

**Answer: D) Long hair**

**309.** Where the grinding attachment is mounted in centre lathe?

- A) Rear tool post  
C) Compound rest
- B) Tailstock  
D) Lathe bed

**Answer: C) Compound rest**

**310.** What is the unit of deviation in limits and fits?

- A) Mill micron  
C) Millimeter
- B) Micron  
D) Centimeter

**Answer: B) Micron**

**311.** Which work holding device of lathe is require to balance for irregular job?

- A) Face plate  
C) Catch plate
- B) Four Jaw chuck  
D) 3 Jaw chuck

**Answer: A) Face plate**

**312.** How may roughness grade number are used?

- A) N1 to N12  
C) N1 to N30
- B) N1 to N25  
D) N1 to N20

**Answer: A) N1 to N12**

**313.** What is the formula to calculate the core dia of the square thread?

- A) Major dia - minor dia  
C) Major dia - Depth of thread
- B) Major dia - 2 x depth  
D) Major dia - Pitch dia

**Answer: B) Major dia - 2 x depth**

**314.** What is the correct sequence of the operation of a simple fire extinguisher?

- A) Sweep Aim pull and squeeze  
C) Pull, Aim squeeze & sweep
- B) Squeeze aim pull and sweep  
D) Aim pull sweep and squeeze

**Answer: C) Pull, Aim squeeze & sweep**

**315.** What defect may occur during grinding a form tool cutting edge?

- A) Clearance angle changed  
C) Form tool getting broken
- B) Thickness of the tool reduced  
D) Shape of the form gets altered

**Answer: D) Shape of the form gets altered**

**316.** Which one of the following code is used for tool nose compensation at left side?

- A) G42  
C) G32
- B) G40  
D) G41

**Answer: D) G41**

**317.** What is the standard colour code used for identifying the bin for the metal waste material?

- A) Violet  
C) Blue
- B) Red  
D) Green

**Answer: B) Red**

**318.** Which G-code is suitable for thread cutting?

- A) G30  
C) G01
- B) G32  
D) G34

**Answer: B) G32**

**319.** Which work holding device is more suitable for accurate boring using tool maker's button?

- A) Face plate  
C) Collect
- B) Magnetic chuck  
D) 3-Jaw chuck

**Answer: A) Face plate**

**320.** Calculate the minor diameter of M 20 x 2.5 pitch thread?

- A) 17.933  
C) 18.933
- B) 15.933  
D) 16.933

**Answer: D) 16.933**

**321.** What does BIS stands for?

- A) Bereau of Indian Society  
C) Bureau of International Society
- B) Bureau of International Standard  
D) Bureau of Indian Standard

**Answer: D) Bureau of Indian Standard**

**322.** What is the expanded form of ABC in first aid?

- A) Aspiration, blood and circulation  
C) Airway, blood and circulation
- B) Airway, breathing and circulation  
D) Aspiration, breathing and circulation

**Answer: B) Airway, breathing and circulation**

**323.** What is an accuracy of an independent four chuck in metric system?

- A) 0.002mm  
C) 0.02mm
- B) 0.001mm  
D) 0.01mm

**Answer: C) 0.02mm**

**324.** Which of the following feed back devices can sense both speed and position?

- A) Tachometer  
C) Resolver  
B) Motor  
D) Encoder

**Answer: D) Encoder**

**325.** What is the length a spacing collar used in inside micrometer?

- A) 13 mm  
C) 25 mm  
B) 12 mm  
D) 38 mm

**Answer: B) 12 mm**

**326.** Which one of the following M-code is suitable for chuck close?

- A) M11  
C) M10  
B) M09  
D) M13

**Answer: A) M11**

**327.** Which angle is preventing the cutting edge from rubbing action?

- A) Clearance angle  
C) Web angle  
B) Rake angle  
D) Point angle

**Answer: A) Clearance angle**

**328.** How is the minor diameter of external thread checked generally?

- A) Using pitch gauge  
C) Using screw thread gauge  
B) Using knife edge of vernier caliper  
D) Using thread ring gauge

**Answer: B) Using knife edge of vernier caliper**

**329.** Which part of the lathe is H shaped cast iron on the bed ways?

- A) Top slide  
C) Cross slide  
B) Tail stock  
D) Saddle

**Answer: D) Saddle**

**330.** What is the advantage of follower steady rest over fixed steady rest?

- A) Support at fixed place of work  
C) Support continuous entire length of work  
B) It rotate with the work  
D) It rotate and moves along the work

**Answer: C) Support continuous entire length of work**

**331.** Which heat treatment process is used to reduce internal stresses of a hardened tool?

- A) Stabilizing  
C) Normalizing  
B) Annealing  
D) Tempering

**Answer: D) Tempering**

**332.** What does M20 stands for?

- A) Metric thread 20 mm length  
C) Metric thread 20 mm pitch  
B) Metric thread 20 mm lead  
D) Metric thread 20 mm diameter

**Answer: D) Metric thread 20 mm diameter**

**333.** Which is the advantage of CNC machine over conventional machines?

- A) Mass production  
C) High cutting speed  
B) High feed  
D) Feed back control

**Answer: A) Mass production**

**334.** What is the included angle of prick punch used for marking light punch marks needed to position dividers?

- A) 60 Degree  
C) 30 Degree  
B) 90 Degree  
D) 45 Degree

**Answer: C) 30 Degree**

**335.** What do you mean by simulation?

- A) Editing of related part program  
C) Finding out of tool geometrical values  
B) Finding out of work offset values  
D) Cross checking of programmable DATA

**Answer: D) Cross checking of programmable DATA**

**336.** Calculate the length of metal passing by cutting tool in one revolution if the diameter of work is 75mm and cutting speed is 120m/min.

- A) 235.5 mm  
C) 485.7 mm  
B) 295.7 mm  
D) 365.3 mm

**Answer: A) 235.5 mm**

**337.** What is the term the distance from a point on thread to the corresponding point on next thread?

- A) Effective diameter  
C) Minor diameter  
B) Depth  
D) Pitch

**Answer: D) Pitch**