

Duration: 30 Mins

Total Marks: 166

Q.ID: ITISKILL8526JK

1. Find the gears required to cut 4.5mm pitch on a lathe having a lead screw of 4 TPI. Gears available from 20 to 120 teeth by 5 teeth with a special gear of 127T.

- A) 127T on driver and 90T on driven
B) 60T on driver and 127T on driven
C) 90T on driver and 127T on driven
D) 127T on driver and 60T on driven

Answer: C) 90T on driver and 127T on driven

2. Which part is pivoted to the disc of vernier bevel protractor?

- A) Disc
B) Stock
C) Dial
D) Blade

Answer: C) Dial

3. Calculate the change gears necessary to cut a thread of 7/16" lead on a lathe with a lead screw of 4TPI?

- A) Driven 30T, Driver 40T
B) Driver 70T, Driven 40T
C) Driven 70T, Driver 40T
D) Driver 30T, Driven 40T

Answer: B) Driver 70T, Driven 40T

4. Which type of centre is used in the end of the job if no counter sink hole is permitted?

- A) Insert type centre
B) Female centre
C) Ball centre
D) Revolving centre

Answer: B) Female centre

5. What is the reason for using ACME thread in lathe lead screw?

- A) Easily available
B) Manufacturing cost is less
C) Suitable for big diameter thread
D) Enable easy engagement

Answer: D) Enable easy engagement

6. Find the gear required to cut 3 mm pitch in a lathe having a lead screw of 6 TPI gear available from 20 to 120 teeth by 5 teeth with a special gear of 127 teeth?

- A) Driver 90 teeth Driven 127 teeth
B) Driver 20 teeth Driven 60 teeth
C) Driver 60 teeth Driven 20 teeth
D) Driver 127 teeth Driven 90 teeth

Answer: A) Driver 90 teeth Driven 127 teeth

7. What is the thread form cut by using chasers?

- A) External square thread
B) External and internal V - Thread
C) Trapezoidal thread
D) Internal square thread

Answer: B) External and internal V - Thread

8. Which device uses buttress thread?

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

Answer: A) Carpentry vice

9. What is the minor diameter of screw thread SQ 62 x 10.5 with depth clearance of 0.12 mm?

- A) 51.00 mm
B) 51.26 mm
C) 46.64 mm
D) 51.88 mm

Answer: B) 51.26 mm

10. What is the accuracy of the protractor head of a combination set?

- A) 5 Degree
B) 1 Degree
C) 1 Degree
D) 1 Degree

Answer: B) 1 Degree

11. What is the name of thread producing method by cold forging and by plastic deformation?

- A) Thread grinding
B) Thread rolling
C) Thread milling
D) Thread casting

Answer: B) Thread rolling

12. Which is the commonly used method to produce thread in nut?

- A) Thread casting
B) Thread grinding
C) Thread milling
D) Tapping

Answer: D) Tapping

13. What is the least count of vernier height gauge?

- A) 0.005 mm
B) 0.001 mm
C) 0.020 mm
D) 0.002 mm

Answer: C) 0.020 mm

14. What does BIS stand for?

- A) Bureau of Indian standard
B) Bureau of international society

- C) Bureau of Indian society D) Bureau of international standard

Answer: A) Bureau of Indian standard

15. Which is used to support hollows end jobs?

- A) Ball centre B) Female centre
C) Pipe centre D) Tipped centre

Answer: C) Pipe centre

16. How many carriers are available in a set?

- A) 10 numbers B) 6 numbers
C) 8 numbers D) 4 numbers

Answer: A) 10 numbers

17. What is the depth of buttress thread if the pitch is 1.8 mm of 45 Degree angle?

- A) 0.910 mm B) 1.35 mm
C) 0.42 mm D) 1.23 mm

Answer: B) 1.35 mm

18. What is protected by providing pieces between work and carrier while clamping?

- A) Dead centre B) Job surface
C) Carrier D) Live centre

Answer: B) Job surface

19. What is the depth of ACME thread of 1inch major diameter 6TPI?

- A) 0.09 B) 0.08
C) 0.082 D) 0.084

Answer: D) 0.084

20. Which formula is used to find depth of ACME thread?

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

Answer: D) $0.5 \times \text{pitch}$

21. Which method of thread forming produce threads on non-metals?

- A) Thread casting B) Thread milling
C) Thread grinding D) Thread rolling

Answer: A) Thread casting

22. How to measure the diameter of the small end of a external taper precisely?

- A) Vernier calipers B) Precision roller with slip gauge
C) Screw gauge D) Sine bar

Answer: B) Precision roller with slip gauge

23. Which formula is used to find depth of buttress thread?

A) $0.6134 \times \text{pitch}$

B) $0.5 \times \text{pitch}$

C) $0.6403 \times \text{pitch}$

D) $0.75 \times \text{pitch}$

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

24. Which one is the disadvantage of taper turning by compound slide method?

- A) Only external taper can be turned B) Steep taper cannot be produced
C) Damages the centre drilled holes of the work D) Taper length is limited to the movement of the top slide

Answer: D) Taper length is limited to the movement of the top slide

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

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

Answer: A) 1.25 mm

26. Which is the chip less method of thread production?

- A) Thread grinding B) Thread milling
C) Die head D) Thread rolling

Answer: D) Thread rolling

27. Calculate the driven gear required to cut 4mm pitch thread is a lathe having lead screw of 4mm with driven gear of 60 teeth?

- A) 100 B) 50
C) 60 D) 120

Answer: C) 60

28. What is the formula for finding gear ratio for fractional pitch thread?

- A) $\text{DR/DN} = \text{Lead of work/No. Of threads per inch}$ B) $\text{DR/DN} = \text{Leads of screw to be cut X No. Of threads per inch of lead screw}$
C) $\text{DR/DN} = \text{Lead of head screw/ Lead of work}$ D) $\text{DR/DN} = \text{TPI on lead screw/ TPI to cut}$

Answer: B) $\text{DR/DN} = \text{Leads of screw to be cut X No. Of threads per inch of lead screw}$

29. How is the 'length of sine bars' specified?

- A) Length of datum surface B) Total length of the sine bar
C) Length of the rollers D) Distance between the centres of the rollers

Answer: D) Distance between the centres of the rollers

30. What is the shape of buttress thread flank?

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

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

31. How is the filler material distributed in the joint in braze welding?

- A) By capillary action
- B) By splashing
- C) By fission
- D) By fusion

Answer: A) By capillary action

32. What is the criteria for the selection of interchangeable anvil of a screw thread micrometer?

- A) Profile and pitch
- B) Minor diameter
- C) Major diameter
- D) Root diameter

Answer: A) Profile and pitch

33. Find the gears for simple gear train, if pitch of lead screw is 6 mm and pitch of thread to be cut is 2 mm?

- A) 40/120
- B) 30/120
- C) 40/150
- D) 50/120

Answer: A) 40/120

34. What is the purpose of using taper parallels in thread measurement?

- A) To measure the minor diameter of internal thread
- B) To measure the minor diameter of external thread
- C) To measure the major diameter of internal thread
- D) To measure the major diameter of external thread

Answer: A) To measure the minor diameter of internal thread

35. Which part of the combination set is used for measuring the angles?

- A) Centre head
- B) Protractor head
- C) Square head
- D) Rule

Answer: B) Protractor head

36. What should be the heights of gauge block to be built to check the work angle of 30 Degree using 150 mm sine bar?

- A) 38.62
- B) 291.26
- C) 75
- D) 145.63

Answer: C) 75

37. Which type of thread is produced by tap and die?

- A) Square thread
- B) Saw - tooth thread
- C) ACME thread
- D) V - thread

Answer: D) V - thread

38. How much times the spindle rotate the lead screw to cut 3 mm pitch thread in a 12 mm pitch lead screw?

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

Answer: C) 4 times

39. How the thread are formed in thread rolling?

- A) Grinding
- B) Plastic deformation
- C) Milling
- D) Casting

Answer: B) Plastic deformation

40. Which type of thread is used in screw jack spindle?

- A) BSW thread
- B) Worm thread
- C) Square thread
- D) BSF thread

Answer: C) Square thread

41. What is the depth of cut for 10TPI BSW thread?

- A) $0.6314 \times 1/10$ Inch
- B) $0.6134 \times 1/10$ Inch
- C) $0.6403 \times 1/10$ Inch
- D) $0.6304 \times 1/10$ Inch

Answer: C) $0.6403 \times 1/10$ Inch

42. What are the uses of B.S.P thread?

- A) General fastening
- B) Automobile industries
- C) Pipe and pipe fittings
- D) Load transmittion

Answer: C) Pipe and pipe fittings

43. Which is main criteria to increase the tool life?

- A) Cutting speed
- B) Material
- C) Depth of cut
- D) Feed

Answer: A) Cutting speed

44. What is the thread depth of square thread SQ60x9?

- A) 9.0 mm
- B) 42 mm
- C) 18 mm
- D) 4.5 mm

Answer: D) 4.5 mm

45. What is the isolating medium to prevent rapid cooling after brazing a tipped tool?

- A) Mica powder
- B) Oil
- C) Wet sand
- D) Water

Answer: A) Mica powder

46. What is the angle of metric ACME thread

- A) 47.5 Degree
- B) 30 Degree
- C) 29 Degree
- D) 45 Degree

Answer: B) 30 Degree

47. What is the depth of square thread 60 x 5 mm pitch?

- A) 4 mm
- B) 3 mm
- C) 2.5 mm
- D) 5 mm

Answer: C) 2.5 mm

48. Calculate the depth of buttress thread 60 mm diameter of 9 mm pitch?

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

Answer: C) 6.75 mm

49. Which mandrel is used for machining similar part where internal diameter vary slightly?

- A) Taper Shank mandrels B) Expansion stud mandrel
- C) Gang mandrels D) Stepped mandrels

Answer: B) Expansion stud mandrel

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

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

Answer: A) In between centres

51. What is the use of hand chaser?

- A) For making square thread B) Correcting and finishing a thread
- C) For production job D) To cut new thread

Answer: B) Correcting and finishing a thread

52. How many seconds is 1 Degree?

- A) 36000% B) 360000%
- C) 3600000% D) 6000%

Answer: B) 360000%

53. Which one of the following factor greatly causes to reduce tool life?

- A) Cutting speed B) Material
- C) Depth of cut D) Feed

Answer: A) Cutting speed

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

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

Answer: B) 2.25 mm

55. Which angle is ground on ACME threading tool?

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

Answer: B) 29 Degree

56. What is the thread depth of square thread SQ60x9?

- A) 9.0 mm B) 18 mm
- C) 42 mm D) 4.5 mm

Answer: D) 4.5 mm

57. Which method of threading is used in mass production?

- A) Use single point cutting tool B) Using taps and dies
- C) Thread grinding D) Thread rolling

Answer: D) Thread rolling

58. Which material is used for making the head of soldering iron?

- A) Forged steel B) Forged copper
- C) Forged aluminium D) Stainless steel

Answer: B) Forged copper

59. Calculate the driven gear to cut 1.5mm pitch thread on a job using a lathe having lead screw of 5mm pitch with driver gear of 30 teeth?

- A) 50 B) 60
- C) 100 D) 120

Answer: C) 100

60. Why the ball centre is preferred in tail stock offset method?

- A) For provide power feed B) To avoid damage to the centre drilled hole of the job
- C) For good surface finish D) For accurate setting

Answer: B) To avoid damage to the centre drilled hole of the job

61. Which is the advantage of taper turning by compound slide method?

- A) Most suitable for duplicate taper work B) Steep taper can be produced
- C) Thread on taper portion can be produced D) Long taper can be produced

Answer: B) Steep taper can be produced

62. What is the use of BSW thread?

- A) Fast movement B) General purpose fastening
- C) Used in electrical appliances D) Load fitting

Answer: B) General purpose fastening

63. How many teeth are in translating gear for cutting metric thread on British lathe?

- A) 122 B) 129
- C) 125 D) 127

Answer: D) 127

64. How can measure the minor diameter of a internal thread?

- A) Using slip gauge pack B) By vernier caliper
- C) By screw thread micrometer D) By three wire method

Answer: B) By vernier caliper

65. Which method is non metallic threads are produced?

- A) Thread casting B) Thread milling
- C) Thread grinding D) Thread chasing

Answer: A) Thread casting

66. What is the disadvantage of chaser?

- A) To cut square thread only B) To cut V-thread only
C) To cut knuckle thread only D) To cut trapezoid thread only

Answer: B) To cut V-thread only

67. Calculate the change gear required to cut 4mm pitch thread in a lathe having lead screw of 4mm (lathe stud gear (driver has 50 teeth)

- A) 25 B) 100
C) 50 D) 150

Answer: C) 50

68. Which is the welding process, if base metal and filler is melted to form the joint?

- A) By arc welding B) By braze welding
C) By tig welding D) By gas welding

Answer: A) By arc welding

69. What type of thread can be produced by a die?

- A) External square thread B) Internal square thread
C) Internal V - thread D) External V - thread

Answer: D) External V - thread

70. What is the core dia of square thread 75 x 11 mm pitch?

- A) 64 mm B) 70 mm
C) 60 mm D) 65.8 mm

Answer: A) 64 mm

71. Which thread is recommended for pipe and pipe fittings?

- A) BSW thread B) BA thread
C) BSP thread D) BSF thread

Answer: C) BSP thread

72. What is the purpose of using v prism method in thread measurement?

- A) Measure the pitch of the thread B) Measure effective diameter
C) Measure minor diameter D) Measure major diameter

Answer: C) Measure minor diameter

73. What is the shape of interchangeable anvils used in screw thread micrometer?

- A) Radius shape B) Circular shape
C) V-shape D) Square shape

Answer: C) V-shape

74. What is the relationship between pitch and depth of a buttress thread?

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

Answer: A) depth = $0.75 \times \text{pitch}$

75. Which method is preferred for producing small length taper with least accuracy?

- A) Form tool method B) Taper turning attachment method
C) Tail stock offset method D) Compound slide method

Answer: A) Form tool method

76. Which formula is to find crest width of ACME thread?

- A) $0.5 \times \text{pitch}$ B) $0.75 \times \text{pitch}$
C) $0.335 \times \text{pitch}$ D) $0.317 \times \text{pitch}$

Answer: D) $0.317 \times \text{pitch}$

77. What is the angle of ACME thread

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

Answer: A) 29 Degree

78. What percentage of cutting speed is reduced for tool life doubling?

- A) 0.081 B) 0.083
C) 0.084 D) 0.082

Answer: B) 0.083

79. Which one is the disadvantage of using tail stock offset method?

- A) Only hand feed can be given B) Taper length is limited
C) Taper turning is possible when work held between centre only D) External threads on taper can't produce

Answer: C) Taper turning is possible when work held between centre only

80. Which is the cause of small particles of the material become embedded in the space between the grains of the grinding wheel?

- A) Glazing B) Grooving
C) Dressing D) Loading

Answer: D) Loading

81. A thread is represented as M12 x 1.5. What does represent the letter 12?

- A) Major diameter B) Root diameter
C) Minor diameter D) Pitch

Answer: A) Major diameter

82. Which method is used for turning steep taper?

- A) Offset tail stock B) Compound slide swivel
C) Form tool D) Taper turning attachment

Answer: B) Compound slide swivel

83. How metric chasing dial differ from British chasing dial?

- | | |
|--|--------------------------------------|
| A) More than one worm wheel and different dial | B) Same as British chasing dial |
| C) One worm wheel and one dial | D) One worm wheel and different dial |

Answer: A) More than one worm wheel and different dial

84. Which mandrels is NOT used in between lathe centres?

- | | |
|-------------------------|---------------------|
| A) Gang mandrels | B) Stepped mandrels |
| C) Taper Shank mandrels | D) Cone mandrels |

Answer: C) Taper Shank mandrels

85. How many number of teeth in translating gear used for cutting metric thread on British lathe?

- | | |
|--------|-------|
| A) 120 | B) 30 |
| C) 100 | D) 63 |

Answer: D) 63

86. Calculate the gear ratio to cut a 1/4 inch lead on a lathe with lead screw of 2TPI?

- | | |
|----------|----------|
| A) (3/4) | B) (1/4) |
| C) (2/3) | D) (1/2) |

Answer: D) (1/2)

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

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

Answer: C) 0.15

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

- | | |
|------------|------------|
| A) Pitch/8 | B) Pitch/4 |
| C) Pitch/2 | D) Pitch/6 |

Answer: A) Pitch/8

89. Convert 8 Degree 44 minutes into minutes?

- | | |
|--------|--------|
| A) 424 | B) 428 |
| C) 536 | D) 524 |

Answer: D) 524

90. What is the width of the tool to cut square thread of 30 x 3 mm pitch?

- | | |
|---------|-----------|
| A) 3 mm | B) 2 mm |
| C) 6 mm | D) 1.5 mm |

Answer: D) 1.5 mm

91. What is the angle of saw tooth thread?

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

Answer: A) 30 Degree

92. Which device is used as datum while marking with Vernier height gauge?

- | | |
|----------------|------------------|
| A) Face plate | B) Surface plate |
| C) Angle plate | D) Driving plate |

Answer: B) Surface plate

93. How much the compound rest should be tilted for cutting metric thread by compound rest?

- | | |
|--------------|--------------|
| A) 15 Degree | B) 30 Degree |
| C) 60 Degree | D) 45 Degree |

Answer: B) 30 Degree

94. What is the only thread form cut using diehead is turret lathe?

- | | |
|----------------|-------------|
| A) Square | B) V-Thread |
| C) Saw - Tooth | D) ACME |

Answer: B) V-Thread

95. How can measure the minor diameter of a internal thread accurately?

- | | |
|--|-------------------------|
| A) By using slip gauge and precision rollers | B) By plug gauge |
| C) By screw thread micrometer | D) By three wire method |

Answer: A) By using slip gauge and precision rollers

96. Which one is the example for transmission of motion using thread

- | | |
|--------------------|---------------------------|
| A) Bevel gearing | B) Worm and worm shaft |
| C) Rack and pinion | D) Crank and slotted link |

Answer: B) Worm and worm shaft

97. Calculate the change gear (driven gear) if driver is 50 teeth to cut 2.5mm pitch thread on a job by lathe having a lead screw of 5mm pitch?

- | | |
|--------|--------|
| A) 150 | B) 60 |
| C) 100 | D) 120 |

Answer: C) 100

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

- | | |
|------------------|------------------|
| A) 0.5 x pitch | B) 0.317 x pitch |
| C) 0.125 x pitch | D) 0.335 x pitch |

Answer: C) 0.125 x pitch

99. What is thread element that determine the direction of rotation on screw thread?

- | | |
|-------------------|--------------------|
| A) Lead of thread | B) Depth of thread |
| C) Hand of thread | D) Pitch of thread |

Answer: C) Hand of thread

100. Which part of the lathe is locked while the form tool

method is used for turning taper?

- A) Tail stock
- B) Carriage
- C) Compound rest
- D) Head stock

Answer: B) Carriage

101. Which carrier with V-groove provided and used to hold small diameter and square sections?

- A) Straight tail
- B) Clamp type
- C) Bent tail
- D) Safety clamp type

Answer: B) Clamp type

102. Which method of brazing is commonly used to braze of carbide tip on a shank?

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

Answer: D) Torch brazing

103. What is formula for finding depth of BSW external thread?

- A) $0.6403 \times \text{pitch}$
- B) $0.6134 \times \text{pitch}$
- C) $0.7 \times \text{pitch}$
- D) $0.5 \times \text{pitch}$

Answer: A) $0.6403 \times \text{pitch}$

104. Which terms are needed to calculate tool life index?

- A) Cutting speed time and index
- B) Cutting speed and feed
- C) Cutting speed and rpm of job
- D) Depth of cut and rpm

Answer: A) Cutting speed time and index

105. Which diameter is maintained in a job for making threads by rolling?

- A) Major diameter
- B) Root diameter
- C) Pitch diameter
- D) Minor diameter

Answer: C) Pitch diameter

106. Which is the term used to express grinding wheels to hold the abrasive particle together?

- A) Grit
- B) Bond
- C) Structure
- D) Grain

Answer: B) Bond

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

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

Answer: B) 4.5 mm

108. How many un-numbered divisions on the British chasing dial?

- A) 3
- B) 12

C) 18

D) 4

Answer: D) 4

109. What is removing dull grain in order to make grinding wheel sharp?

- A) Trueing
- B) Loading
- C) Glazing
- D) Dressing

Answer: D) Dressing

110. What is the purpose of the beveled edges of the rule in a vernier bevel protractor?

- A) Checking 45 Degree and 60 Degree
- B) Checking parallelism
- C) Checking flatness
- D) Checking squareness

Answer: A) Checking 45 Degree and 60 Degree

111. Which form of thread is widely used for fastening purpose?

- A) Saw tooth thread
- B) Square thread
- C) Knuckle thread
- D) V - thread

Answer: D) V - thread

112. What is the use of a sine bar?

- A) To measure the gap
- B) To determine the angle of tapered job
- C) To measure the length of a taper job
- D) To measure the diameter of the job

Answer: B) To determine the angle of tapered job

113. Calculate the driven gear to cut 1.5mm pitch thread on a job using a lathe having lead screw of 4mm pitch with driver gear 30 teeth?

- A) 100
- B) 80
- C) 60
- D) 50

Answer: B) 80

114. What is the core dia of square thread 62 x 10 mm pitch?

- A) 57.4 mm
- B) 56.45 mm
- C) 52 mm
- D) 52.7 mm

Answer: C) 52 mm

115. Which thread is used for general purpose fastening?

- A) Unified
- B) BA
- C) BSF
- D) BSW

Answer: D) BSW

116. Find the change gear (driven gear) to cut 2.5mm pitch thread using a lathe having lead screw of pitch 5mm with driver gear 60 teeth?

- A) 60
- B) 100
- C) 150
- D) 120

Answer: D) 120

117. How is the vernier height gauge generally specified?

- A) Size of base
- B) Thickness of beam
- C) Width of beam
- D) Height of beam

Answer: D) Height of beam

118. Which wheel is used for grinding tough materials?

- A) Silicon carbide
- B) Aluminium oxide
- C) Cemented carbide
- D) Ceramic

Answer: B) Aluminium oxide

119. Calculate the change gears to cut a worm of 0.35" lead on a lathe with a lead screw of 4TPI?

- A) Driver 70T, Driven 50
- B) Driver 50T, Driven 30
- C) Driver 40T, Driven 50
- D) Driver 30T, Driven 40

Answer: A) Driver 70T, Driven 50

120. Calculate the least count of V.B.P if 23 div on main scale is divided into 12 equal parts

- A) 1 Degree - 50 Degree
- B) 28 Degree
- C) 100 Degree
- D) 5 Degree

Answer: D) 5 Degree

121. Which is the angle of inclination in the thread to the imaginary perpendicular line?

- A) Right angle
- B) Acute angle
- C) Helix angle
- D) Obtuse angle

Answer: C) Helix angle

122. What will happen if threading tool is set below centre height?

- A) Major diameter will changed
- B) Difficult for catching
- C) Pitch will changed
- D) Thread will be damaged

Answer: D) Thread will be damaged

123. Which method of thread forming does not produce chips and used in mass production?

- A) Thread milling
- B) Taps and dies
- C) Thread grinding
- D) Thread rolling

Answer: D) Thread rolling

124. Which parameter of a thread is measured by three wire method?

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

Answer: B) Effective diameter

125. Calculate the driven gear to cut 2mm pitch on a job using a lathe having lead screw of 4mm pitch with driven gear 50 teeth?

- A) 120
- B) 50
- C) 60
- D) 100

Answer: D) 100

126. Which material is used for making nozzle for gas welding?

- A) High carbon steel
- B) Copper
- C) Bronze
- D) Mild steel

Answer: B) Copper

127. What is the name of device used to drive the work during turning between centres?

- A) Face plate
- B) Driving plate
- C) Catch plate
- D) Lathe carrier

Answer: D) Lathe carrier

128. Calculate the least count of V.B.P if 23 div on main scale is divided into 12 scale divisions

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

Answer: D) 4 minutes

129. What is the formula for finding the depth of a BIS metric thread?

- A) $0.6134 \times \text{pitch}$
- B) $0.6403 \times \text{pitch}$
- C) $0.6431 \times \text{pitch}$
- D) $0.6043 \times \text{pitch}$

Answer: A) $0.6134 \times \text{pitch}$

130. Which mandrel is manufactured in order to reduce the number of mandrel?

- A) Threaded mandrel
- B) Solid mandrel
- C) Stepped mandrel
- D) Gang mandrel

Answer: C) Stepped mandrel

131. What is the relationship between pitch and depth of a square thread?

- A) Depth is $\frac{3}{4}$ pitch
- B) Depth is $\frac{1}{4}$ pitch
- C) Depth is $\frac{1}{2}$ pitch
- D) Depth is equal to pitch

Answer: C) Depth is $\frac{1}{2}$ pitch

132. Which material is suitable for button die chaser?

- A) H.C.S
- B) H.S.S
- C) High strength material
- D) Low strength material

Answer: D) Low strength material

133. Calculate the amount of off-set if total length of job = 80 mm and $\tan = 5$ Degree 45 minutes?

- A) 10 mm
- B) 12 mm
- C) 7 mm
- D) 8 mm

Answer: D) 8 mm

134. Which is the form of Trapezoidal thread?

- A) Metric
- B) ACME
- C) BSF
- D) BSW

Answer: B) ACME

135. What is the core diameter of BSW thread of 1 inch outer dia and 8 TPI

- A) 0.84 Inch
- B) 0.80 Inch
- C) 0.83 Inch
- D) 0.81 Inch

Answer: A) 0.84 Inch

136. What is 1.25 stands for a metric thread designated as M12 x 1.25?

- A) Pitch of the thread
- B) Depth of thread
- C) Major dia of thread
- D) Minor dia of thread

Answer: A) Pitch of the thread

137. Which type thread is used in lathe lead screw?

- A) Metric
- B) Square
- C) ACME
- D) Buttress

Answer: C) ACME

138. Which welding method is more suitable for joining dissimilar metals readily?

- A) Arc welding
- B) Braze welding
- C) Gas welding
- D) Tig welding

Answer: B) Braze welding

139. Which chuck is mainly used for getting a very effective grip over the job?

- A) Magnetic chuck
- B) Push - out chucks
- C) Collect chuck
- D) Hydraulic chuck

Answer: D) Hydraulic chuck

140. What term indicate actual size of the abrasive grain?

- A) Structure
- B) Grade of bond
- C) Abrasive type
- D) Grit size

Answer: D) Grit size

141. Why the thread chaser is used to form threads?

- A) To time saving
- B) To reduce labour
- C) For easy thread cutting
- D) To get proper, crest, flat, root radius and profile

Answer: D) To get proper, crest, flat, root radius and profile

142. What is the reason for providing buttress thread in carpentry vice?

- A) For easy use
- B) For easy manufacturing
- C) Pressure acts at one flank
- D) For better appearance

Answer: C) Pressure acts at one flank

143. Select a suitable instrument for measuring angles?

- A) Calipers
- B) Vernier height gauge
- C) Vernier caliper
- D) Vernier bevel protractor

Answer: D) Vernier bevel protractor

144. Calculate the width of flat of buttress thread 6 mm pitch?

- A) 2 mm
- B) 1.5 mm
- C) 0.75 mm
- D) 1 mm

Answer: C) 0.75 mm

145. Calculate the change gear (driver gear) if driven gear has 120 teeth to cut 3mm pitch on a job using lathe having 6 mm pitch lead screw?

- A) 150
- B) 60
- C) 50
- D) 100

Answer: B) 60

146. What is the effect of reversing the machine with out disengaging the half nut in thread cutting?

- A) For the use of chasing dial
- B) Reduce the wear and tear of half nut
- C) For improve the productivity
- D) For avoid catching the thread in each cut

Answer: D) For avoid catching the thread in each cut

147. What is the value of tool life index for cutting cast iron by cemented carbide tool?

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

Answer: D) 0.1

148. What is the schedule of lubrication for lathe bed?

- A) Weekly
- B) Frequently
- C) Daily
- D) Monthly

Answer: C) Daily

149. What is the name of chuck that hardend steel sleeve having slits cut partly?

- A) Magnetic chuck
- B) Combination chuck
- C) Collect chuck
- D) Hydrolic chuck

Answer: C) Collect chuck

150. What is the purpose of using thread micrometer?

- A) Measure effective diameter
- B) Measure minor diameter
- C) Measure pitch of the thread
- D) Measure major diameter

Answer: A) Measure effective diameter

151. What is the minor diameter of Trapezoidal square thread Tr 40 x 7 depth clearance of 0.01 mm?

- A) 36.49 mm B) 36.50 mm
C) 32.98 mm D) 33.00 mm

Answer: C) 32.98 mm

152. What is the main disadvantage of a braze welded joints?

- A) It take more time for repairing B) Dissimilar metals can be joined
C) The joint not suitable for thicker sections D) Heavy distortion due to heat

Answer: C) The joint not suitable for thicker sections

153. What is the reason for using dial indicator instead of scriber point in Vernier height gauge?

- A) For accurate marking B) To check eccentricity
C) For accurate measuring D) For good appearance

Answer: B) To check eccentricity

154. Which instrument can measure angle upto an accuracy of 5 minutes?

- A) Vernier bevel protractor B) Bevel gauge
C) Angle gauge D) Combination set

Answer: A) Vernier bevel protractor

155. What is the purpose of tail on the lathe carrier?

- A) Protect the work B) Give good finish
C) Locate and drive the work D) Protect the operator

Answer: C) Locate and drive the work

156. Which is the smallest unit of angular measurement?

- A) Radian B) Minutes
C) Seconds D) Degree

Answer: C) Seconds

157. Which bonding material is not affected by water, acid or normal temperature?

- A) Resinoid B) Backlite
C) Vetrified D) Rubber

Answer: C) Vetrified

158. What is the formula to find out core diameter of external thread by using prisms and micrometer?

- A) Core dia = Measurement over prisms + Height of prisms ? Single depth B) Core dia = Measurement over prisms ? Height of prisms + Two depth
C) Core dia = Measurement over prisms ? Height of prisms + Single depth D) Core dia = Measurement over prisms ? Height of prisms ? Single depth of thread

Answer: D) Core dia = Measurement over prisms ? Height of

prisms ? Single depth of thread

159. Which is the angle of buttress thread?

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

Answer: B) 45 Degree

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

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

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

161. Which is the method to produce accurate internal thread?

- A) Thread chasers B) Using dies
C) Thread milling D) Thread rolling

Answer: C) Thread milling

162. Which angle is provided on the metric screw thread micrometer anvil?

- A) 60 Degree B) 47.5 Degree
C) 55 Degree D) 30 Degree

Answer: A) 60 Degree

163. Which mechanism is used for converting linear motion into rotary motion in plunger dial gauge?

- A) Scroll and pinion mechanism B) Rack and scroll mechanism
C) Rack and pinion mechanism D) Lever and scroll mechanism

Answer: C) Rack and pinion mechanism

164. What is the angle of a BIS metric thread?

- A) 45 Degree B) 60 Degree
C) 27.5 Degree D) 55 Degree

Answer: B) 60 Degree

165. What is calculated by formula $0.75 \times \text{pitch}$?

- A) depth of square thread B) depth of metric thread
C) depth of acme thread D) depth of buttress thread

Answer: D) depth of buttress thread

166. Calculate the change gear ratio to cut a thread of 7/16" lead on a lathe with lead screw of 4 TPI?

- A) 03-Jul B) 04-Jul
C) 03-Apr D) 07-Apr

Answer: D) 07-Apr