

Duration: 30 Mins

Total Marks: 50

ID: ITISKILL69120E

Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

5. What is the angle of saw tooth thread?

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

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

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

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

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

8. Which type of thread have higher mechanical advantage?

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

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

- A) Pitch/2 B) Pitch/4

C) Pitch/8 D) Pitch/3

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

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

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

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

12. Which one is the angle of buttress thread?

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

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

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

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

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

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

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

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

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

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

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

18. Which of the following used buttress thread?

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

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

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

20. What is the shape of buttress thread flank?

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

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

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

22. Which thread has only one helical formation?

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

23. What does BIS stands for?

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

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

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

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

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

26. 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 40 driven 20
C) Driver 85 teeth driven 60 teeth
D) Driver 100 teeth driven 25 teeth

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

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

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

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

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

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

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

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

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

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

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

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

33. What is the included angle of acme thread?

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

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

- A) $\text{Lead} = \frac{1}{3} \times \text{pitch}$
B) $\text{Lead} = \text{Pitch}$
C) $\text{Lead} = \text{No. start} \times \text{pitch}$
D) $\text{Lead} = \frac{1}{2} \text{pitch}$

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

- A) $\text{Major diameters} - 2 \text{ depth}$
B) $\text{Major diameters} - \text{minor diameter}$
C) $\text{Major diameters} - \text{single depth}$
D) $\text{Major diameter} - \text{Pitch}$

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

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

37. Where multistart threads are used?

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

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

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

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

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

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

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

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

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

42. What is the purpose of Square thread?

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

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

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

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

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

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

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

46. What is the angle of BSW thread?

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

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

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

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

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

49. 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 80 teeth Driven 25 teeth
- B) Driver 50 teeth Driven 60 teeth
- C) Driver 40 teeth Driven 20 teeth
- D) Driver 60 teeth Driven 35 teeth

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

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