

Duration: 30 Mins

Total Marks: 50

ID: ITISKILL6912OE

Student Name: _____ Roll No: _____

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

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

- C) 0.125 x pitch D) 0.335 x pitch

2. Which thread has only one helical formation?

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

10. 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

3. What is the angle of saw tooth thread?

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

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

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

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

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

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

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

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

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

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

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

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

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

14. Where multistart threads are used?

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

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

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

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

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

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

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

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

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

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

- A) 0.317 x pitch B) 0.5 x pitch

17. 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 80 teeth Driven 25 teeth
C) Driver 40 teeth Driven 20 teeth
D) Driver 60 teeth Driven 35 teeth

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

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

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

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

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

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

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

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

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

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

23. What is the included angle of acme thread?

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

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

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

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

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

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

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

27. Which one is the angle of buttress thread?

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

28. What is the relationship between pitch and lead of a

single start thread?

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

29. 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 85 teeth driven 60 teeth
B) Driver 100 teeth driven 25 teeth
C) Driver 40 driven 20
D) Driver 60 driven 50

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

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

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

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

32. What is the purpose of Square thread?

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

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

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

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

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

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

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

36. 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

37. What is the angle of BSW thread?

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

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

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

39. What does BIS stands for?

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

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

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

41. Which of the following used buttress thread?

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

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

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

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

- A) equal to pitch
- B) $0.5 \times \text{Pitch}$
- C) $2 \times \text{Pitch}$
- D) $\text{Pitch} / 0.5$

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

- A) Easy to engage
- B) Change the speed

C) Does not affect gear ratio D) Affect gear ratio

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

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

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

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

47. Which type of thread have higher mechanical advantage?

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

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

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

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

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

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

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