Duration: 30 Mins   Total Marks: 50   **ID: ITISKILL6912OE**

Student Name: _____   Roll No: _____

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

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

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

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

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

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

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

A) 0.6134 x pitch
B) 0.6403 x pitch
C) 0.5 x pitch
D) 0.75 x pitch

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

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

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

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

7. What is the purpose of Square thread?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

15. What does BIS stands for?

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

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

A) Driver
B) Driven
C) Reverible gear
D) Idler

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

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

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

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

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

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

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

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

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

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

22. What is the shape of buttress thread flank?

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

23. Which type of thread have higher mechanical advantage?

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

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

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

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

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

26. Where multistart threads are used?

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

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

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

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

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

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

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

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

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

31. What is the included angle of acme thread?

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

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

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

33. What is the angle of saw tooth thread?

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

34. 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 60 teeth Driven 35 teeth
D) Driver 40 teeth Driven 20 teeth

35. What is the angle of BSW thread?

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

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

A) Buttress 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) Worm thread 60 mm dia x 9 mm pitch

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

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

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

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

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

    A) 5   B) 3

    C) 4   D) 2

40. Which thread has only one helical formation?

    A) Quadrapple   B) Triple start

    C) Single start   D) Double start

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

    A) 1 Degree 55 Minutes   B) 1 Degree 50 Minutes

    C) 1 Degree 45 Minutes   D) 1 Degree 30 Minutes

42. Which one is the angle of buttress thread?

    A) 45 Degree   B) 60 Degree

    C) 30 Degree   D) 55 Degree

43. 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 40 driven 20

    C) Driver 60 driven 50   D) Driver 100 teeth driven 25 teeth

44. Which of the following used buttress thread?

    A) Screw jack   B) General purpose nut and bolt

    C) Carpentry vice   D) Lead screw of lathe

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

    A) Major diameters - single depth   B) Major diameters - minor diameter

    C) Major diameters - 2 depth   D) Major diameter - Pitch

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

    A) Connecting quick change gear box to lead screw   B) Connecting spindle gear to fixed stud gear

    C) Connecting fixed stud gear to quick change gear box   D) Connecting lead screw to changing dial

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

    A) Angle of thread   B) Root dia of work

    C) Pitch   D) Major dia of work

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

    A) Two   B) One

    C) Six   D) Three

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

    A) Pitch/4   B) Pitch/8

    C) Pitch/2   D) Pitch/3

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

    A) Increase spindle speed   B) Transmit power between driver and driven gears

    C) Reduce gear ratio   D) Reduce spindle speed