

Duration: 30 Mins

Total Marks: 50

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Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- A) Acme thread 60 mm dia x 9 mm pitch B) Worm 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

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

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

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

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

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

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

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

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

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

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

8. 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

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

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

9. Where multistart threads are used?

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

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

18. 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) $0.335 \times \text{pitch}$ D) $0.5 \times \text{pitch}$

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

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

20. 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 30 Minutes
C) 1 Degree 45 Minutes D) 1 Degree 55 Minutes

21. 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 100 teeth driven 25 teeth B) Driver 40 driven 20
C) Driver 85 teeth driven 60 teeth D) Driver 60 driven 50

22. 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 45 teeth, Driven 60 teeth B) Driver 30 teeth, Driven 70 teeth
C) Driver 60 teeth, Driven 50 teeth D) Driver 50 teeth, Driven 100 teeth

23. What does BIS stands for?

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

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

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

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

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

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

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

27. Which type of thread have higher mechanical advantage?

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

28. Which one is the angle of buttress thread?

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

29. Which thread has only one helical formation?

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

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

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

31. What is the included angle of acme thread?

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

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

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

33. 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

34. Which of the following used buttress thread?

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

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

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

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

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

37. 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

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

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

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

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

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

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

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

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

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

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

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

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

44. How many numbers of gears having in a simple gear

train?

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

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

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

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

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

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

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

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

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

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

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

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