

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) Buttruss thread B) Square thread
C) Knuckle thread D) Acme thread

2. Which formula is used to find root width of a buttruss thread?

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

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

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

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

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

5. Which of the following used buttruss thread?

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

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

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

7. Which thread has only one helical formation?

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

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

- A) Major dia - $2 \times \text{depth}$ B) Major dia - Pitch dia
C) Major dia - Depth of thread D) Major dia - minor dia

9. Calculate the depth of buttruss thread 60 mm diameter and 9 mm pitch?

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

10. 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

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

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

12. 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 50 teeth, Driven 100 teeth B) Driver 30 teeth, Driven 70 teeth
C) Driver 60 teeth, Driven 50 teeth D) Driver 45 teeth, Driven 60 teeth

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

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

14. 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 85 teeth driven 60 teeth
C) Driver 40 driven 20 D) Driver 100 teeth driven 25 teeth

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

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

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

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

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

- A) Minor diameter
- C) Effective diameter

- B) Depth
- D) Pitch

- C) 45 Degree

- D) 55 Degree

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

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

19. What does BIS stands for?

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

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

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

21. Where multistart threads are used?

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

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

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

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

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

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

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

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

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

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

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

27. What is the included angle of acme thread?

- A) 29 Degree
- B) 30 Degree

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

41. Which one is the angle of buttress thread?

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

42. Which type of thread have higher mechanical advantage?

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

43. 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 spindle gear to fixed stud gear
- D) Connecting fixed stud gear to quick change gear box

44. 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 40 teeth Driven 20 teeth
- C) Driver 80 teeth Driven 25 teeth
- D) Driver 60 teeth Driven 35 teeth

45. What is the shape of buttress thread flank?

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

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

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

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

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

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

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

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

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

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

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