

**Duration: 30 Mins**

**Total Marks: 50**

**Q.ID: ITISKILL9597P9**

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

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

**Answer: B) 61 mm**

2. Which thread has only one helical formation?

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

**Answer: A) Single start**

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

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

**Answer: B) 2.25 mm**

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

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

**Answer: C)  $0.125 \times \text{pitch}$**

5. What is the purpose of Square thread?

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

**Answer: D) To transmit power**

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

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

**Answer: A) Chasing dial**

7. Which one is the angle of buttress thread?

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

**Answer: A) 45 Degree**

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

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

**Answer: D) Major dia -  $2 \times \text{depth}$**

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

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

**Answer: B)  $0.75 \times \text{pitch}$**

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

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

**Answer: D) 3.00 mm**

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

- A)  $\text{Pitch}/8$                       B)  $\text{Pitch}/4$   
C)  $\text{Pitch}/2$                       D)  $\text{Pitch}/3$

**Answer: A)  $\text{Pitch}/8$**

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

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

**Answer: A) Lead is equal to pitch**

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

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

**Answer: A) Driven**

14. 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 diameter decreases  
C) Diameters decreases helix angle increases                      D) No change in helix angle if diameter increases

**Answer: C) Diameters decreases helix angle increases**

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

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

**Answer: C) Lead**

16. Which formula is used to find root width of a buttress

thread?

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

**Answer: D) 0.125 x pitch**

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

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

**Answer: C) 34 mm**

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

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

**Answer: C) Square Thread 60 mm dia, 9 mm pitch**

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

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

**Answer: D) Does not affect gear ratio**

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 55 Minutes                  D) 1 Degree 45 Minutes

**Answer: B) 1 Degree 30 Minutes**

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

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

**Answer: B) 10.5 mm**

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

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

**Answer: A) 22.5 mm**

23. What is the included angle of acme thread?

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

**Answer: A) 29 Degree**

24. 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

**Answer: D) Transmit power between driver and driven gears**

25. What is the shape of buttress thread flank?

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

**Answer: A) One flank is 90 Degree and the other 45 Degree**

26. What is the angle of saw tooth thread?

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

**Answer: A) 30 Degree**

27. What does BIS stands for?

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

**Answer: D) Bureau of Indian Standard**

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

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

**Answer: A) Square thread**

29. 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 40 teeth Driven 20                  B) Driver 80 teeth Driven 25  
teeth    teeth  
C) Driver 60 teeth Driven 35                  D) Driver 50 teeth Driven 60  
teeth    teeth

**Answer: A) Driver 40 teeth Driven 20 teeth**

30. Which of the following used buttress thread?

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

**Answer: C) Carpentry vice**

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

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

**Answer: A) Worm thread**

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

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

**Answer: C) Driver**

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

- A) 9.5 mm    B) 8.5 mm

C) 9 mm D) 4.5 mm

**Answer: D) 4.5 mm**

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

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

**Answer: B) 15 mm**

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

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

**Answer: D) One**

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

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

**Answer: B) Pitch**

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

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

**Answer: C) Major diameters - single depth**

38. Which type of thread have higher mechanical advantage?

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

**Answer: B) Square thread**

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

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

**Answer: B) Connecting fixed stud gear to quick change gear box**

40. What is the angle of BSW thread?

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

**Answer: D) 55 Degree**

41. 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

**Answer: C) 0.5 x Pitch**

42. What is the relation between pitch and lead in multistart

thread?

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

**Answer: B) Lead = No. start x pitch**

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

**Answer: C) Driver 60 driven 50**

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

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

**Answer: D) Module**

45. Where multistart threads are used?

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

**Answer: B) For quick transmission**

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

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

**Answer: A) 3 mm**

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

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

**Answer: D) 1.25 mm**

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

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

**Answer: A) Acme thread**

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

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

**Answer: B) 3**

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

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

**Answer: C) Pitch**