

Duration: 30 Mins

Total Marks: 50

Q.ID: ITISKILL69120E

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

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

**Answer: A) Pitch**

2. Which thread has only one helical formation?

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

**Answer: A) Single start**

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

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

**Answer: C) Acme thread**

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

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

**Answer: A) Pitch/8**

5. 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**

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

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

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

7. Which type of thread have higher mechanical advantage?

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

**Answer: A) Square thread**

8. Which of the following used buttress thread?

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

**Answer: D) Carpentry vice**

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

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

**Answer: A) 1.25 mm**

10. What is the angle of BSW thread?

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

**Answer: D) 55 Degree**

11. 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 half the pitch  
D) Lead is twice the pitch

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

12. 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 - minor dia  
D) Major dia - Depth of thread

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

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

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

**Answer: B)  $0.5 \times \text{Pitch}$**

14. What is the angle of saw tooth thread?

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

**Answer: B) 30 Degree**

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

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

**Answer: B) 15 mm**

16. 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 40 driven 20  
 C) Driver 85 teeth driven 60 teeth      D) Driver 100 teeth driven 25 teeth

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

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

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

**Answer: C) Lead = No. start  $\times$  pitch**

**18.** 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 60 teeth Driven 35 teeth  
 C) Driver 50 teeth Driven 60 teeth      D) Driver 40 teeth Driven 20 teeth

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

**19.** Where multistart threads are used?

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

**Answer: A) For quick transmission**

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

- A) 2      B) 3  
 C) 5      D) 4

**Answer: B) 3**

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

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

**Answer: C) 2.25 mm**

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

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

**Answer: D) Lead**

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

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

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

**24.** 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 diameter decreases

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

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

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

**Answer: B) Driven**

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

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

**Answer: A)  $0.75 \times$  pitch**

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

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

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

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

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

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

**29.** What is the included angle of acme thread?

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

**Answer: A) 29 Degree**

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

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

**Answer: D) Driver**

**31.** 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

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

**32.** What is the formula for pitch diameter of thread?

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

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

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

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

**Answer: B) 4.5 mm**

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

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

**Answer: B) One**

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

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

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

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

**Answer: C) Square thread**

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

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

**Answer: B) 34 mm**

38. Which one is the angle of buttress thread?

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

**Answer: D) 45 Degree**

39. What does BIS stands for?

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

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

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

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

**Answer: C) 3 mm**

41. What is the purpose of Square thread?

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

**Answer: C) To transmit power**

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

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

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

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

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

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

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

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

**Answer: D) Chasing dial**

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

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

**Answer: C) 22.5 mm**

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

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

**Answer: B) 61 mm**

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

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

**Answer: B) Worm thread**

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

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

**Answer: C) Pitch**

49. 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**

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

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

**Answer: B) 10.5 mm**