

**Duration: 30 Mins**

**Total Marks: 50**

**ID: ITISKILL9597P9**

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

**1. What does BIS stands for?**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**5. 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) Pitch      D) Angle of thread

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

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

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

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

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

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

**7. What is the angle of saw tooth thread?**

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

**15. 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

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

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

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

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

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

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

- A) 1.5 mm
- C) 2.25 mm

- B) 3.00 mm
- D) 1.25 mm

- A) 10.5 mm
- C) 3.5 mm

- B) 12.8 mm
- D) 8.5 mm

18. Which one is the angle of buttress thread?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

27. Which type of thread have higher mechanical advantage?

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

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

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

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

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

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

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

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

32. 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

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

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

34. What is the purpose of Square thread?

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

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

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

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

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

37. 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
  - C) Driver 60 driven 50
- B) Driver 100 teeth driven 25 teeth
  - D) Driver 85 teeth driven 60 teeth

38. What is the angle of BSW thread?

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

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

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

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

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

41. 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

42. Which of the following used buttress thread?

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

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

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

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 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

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

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

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

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

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

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

48. Which thread has only one helical formation?

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

49. What is the shape of buttress thread flank?

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

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

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