Choose the correct answer:

1. In a Lathe machine which of the following is fitted on the bed?
   a. Headstock
   b. Tailstock
   c. Both (a) & (b)
   d. None of these

2. Which of the following provides foundation for the whole lathe machine?
   a. Tailstock
   b. Bed
   c. Headstock
   d. Carriage

3. In lathe work, when the tool is fed parallel to the rotation of job work, it will produce
   a. Cylindrical surface
   b. Spherical surface
   c. Tapered surface
   d. All of these

4. The following part of Lathe serves as housing for the driving pulleys and back gears
   a. Head stock
   b. Tail stock
   c. Bed
   d. Carriage

5. In Lathe, the back gears are used for affecting _________ in spindle speeds, thereby
   facilitating wider range of speeds
   a. Increase
   b. Reduction
   c. Increase or reduction
   d. None of these

6. Identify the type of riveted joint
   a. Lap Joint
   b. Single strap butt joint
   c. Double strap butt joint
   d. Double riveted lap joint

7. Which one of the bushes used in a drill jig and permits cutting tools of different diameters?
   a. Press fit bushes
   b. Removable bushes
   c. Fixed removable bushes
   d. Liner bushes

Contd....2/-
8. In which tool post on lathe, quick replacement of the tool is ensured?
   a. Single way tool post
   b. Four bolt tool post
   c. Open slide tool post
   d. None of these

9. Three jaw chuck is also known as ______
   a. Universal chuck
   b. Self-centering chuck
   c. Universal or self-centering chuck
   d. None of these

10. Which of the following chuck is also known as dog chuck?
    a. Four jaw chuck
    b. Three jaw chuck
    c. Two jaw chuck
    d. None of these

11. A hole, which is not made through full depth of the component is known as
    a. Core hole
    b. Blind hole
    c. Pinhole
    d. Bore hole

12. It is the process of removing very small chips from metal surfaces by means of a sharpened tool. What is this tool called?
    a. Scraper
    b. Chisel
    c. Hacksaw
    d. Reamer

13. A cutting tool used to cut outside threads is called
    a. Drill
    b. Reamer
    c. Die
    d. Tap

14. Which one of the following is an artificial abrasive?
    a. Emery
    b. Diamond
    c. Corundum
    d. Silicon carbide

15. Which one of the following is used to rectify damaged or rusted threads?
    a. Die nut
    b. Circular split die
    c. Two-piece die
    d. Die plate

16. What is used for removing a broken tap?
    a. Tap disposer
    b. Tap wrench
    c. Tap extractor
    d. Tap nut

17. Which coolant is recommended for tapping copper or aluminium?
    a. Kerosene
    b. Lard oil
    c. Soda water
    d. Dry ice

18. A drilled hole goes out of centre due to
    a. Improper clamping of workpiece
    b. Workpiece having blowholes
    c. Centre punch mark not being large enough to give proper seat to the chisel edge of drill
    d. Any one of the above
19. A Ø 6H7 hole is to be reamed in a steel workpiece. What size of drill will be required?
   a. 5.5 mm  
   b. 5.8 mm  
   c. 6.0 mm  
   d. 6.2 mm

20. A screw thread is designated as 1" B.S.P. thread, what does 1" indicate?
   a. Major diameter of thread  
   b. Minor diameter of thread  
   c. Pitch diameter of thread  
   d. Hole diameter of pipe

21. The following method(s) is (are) used to measure the minor diameter of internal threads.
   a. Taper parallels methods  
   b. Calibrated rollers methods  
   c. Both (a) & (b)  
   d. None of these

22. Which one of the following thread forms is provided in the threaded parts where the pressure acts on one flank of the threads during transmission?
   a. V thread  
   b. Square thread  
   c. Knuckle thread  
   d. Buttress thread

23. The largest diameter of a screw thread is known as..............
   a. Minor diameter  
   b. Normal diameter  
   c. Major diameter  
   d. Pitch diameter

24. To check external diameter of hole, we use
   a. Plug gauge  
   b. Ring gauge  
   c. Slip gauge  
   d. Standard screw pitch gauge

25. ‘GO’ and ‘NO GO’ gauge is a type of
   a. Plug gauge  
   b. Slip gauge  
   c. Ring gauge  
   d. Limit gauge

26. A positive allowance will always result in a _____ fit.
   a. Clearance  
   b. Interference  
   c. Both (a) & (b)  
   d. Any of these

27. Induction hardening process involves
   a. Heating surface by induction in field of invariable current  
   b. Case depth minimum of 2mm are produced  
   c. Heating surface by induction in field of alternating current  
   d. None of these

28. Error of measurement =
   a. True value – Measured value  
   b. Precision – True value  
   c. Measured value – Precision  
   d. None of these

29. Which method gives accurate results when effective diameter is measured without considering the thread angle?
   a. Two wire method  
   b. Three wire method  
   c. Best wire size  
   d. All of these

Contd...4/-
30. Which of the following is a surface finishing operation?
   a. Drilling  
   b. Lapping  
   c. Milling  
   d. Turning

31. Largest amount of material is used in
   a. Buffing  
   b. Lapping  
   c. Honing  
   d. Super finishing

32. Which of the following process has lowest cutting speed?
   a. Drilling  
   b. Honing  
   c. Milling  
   d. Turning

33. Which of the following process has lowest metal removal rate?
   a. Drilling  
   b. Reaming  
   c. Milling  
   d. Lapping

34. During a honing process, reciprocating speed of honing tool was 9m/min with a rotary speed of 25m/min. Cross hatch angle is equal to
   a. 40°  
   b. 35°  
   c. 30°  
   d. 25°

35. The following operation is performed after polishing.
   a. Buffing  
   b. Super finishing  
   c. Tumbling  
   d. Burnishing

36. In which of the following processes, highly polished steel balls are used instead of abrasive
   a. Honing  
   b. Lapping  
   c. Polishing  
   d. Burnishing

37. Scale and sharp edges are removed in
   a. Honing  
   b. Lapping  
   c. Tumbling  
   d. Burnishing

38. Which of the following are functions of bearings?
   a. Ensure free rotation of shaft with minimum friction  
   b. Holding shaft in a correct position  
   c. Transmit the force of the shaft to the frame  
   d. All of these

39. The fire triangle in fire hazards is identified as
   a. Fuel, oxygen & heat  
   b. Fuel, liquid and vapour  
   c. Fuel, burning and solid  
   d. Fuel, oil and waste

40. The following is (are) the example(s) of Plain bearing(s).
   a. Thrust bearing  
   b. Linear bearing  
   c. Journal bearing  
   d. All of these

Contd...5/-
41. A _______ bearing supports the load acting along the axis of the shaft.
   a. Thrust
   b. Radial
   c. Longitudinal
   d. Transversal

42. In angular contact bearings, _______ bearings are required to take thrust load in both directions.
   a. 1
   b. 4
   c. 2
   d. 3

43. Taper roller bearing supports
   a. Axial loads
   b. Thrust loads
   c. Both (a) & (b)
   d. None of these

44. Which of the following cannot take radial load?
   a. Cylindrical Roller bearing
   b. Taper roller bearing
   c. Thrust ball bearing
   d. None of these

45. Which of the following cannot tolerate misalignment?
   a. Angular contact bearing
   b. Cylinder roller bearing
   c. Thrust ball bearings
   d. All of these

46. What will be the result if the clearance angle in drill is increased?
   a. Poor wedging action
   b. Weak cutting edge
   c. Rough hole surface
   d. Increased point angle

47. The pattern on the work surface caused by the movement of the cutting tool is called?
   a. Waviness
   b. Roughness
   c. Surface texture
   d. Lay

48. Which of the following property is affected by heat treatment?
   a. Hardness
   b. Strength
   c. Ductility
   d. All of these

49. Annealing involves heating the component to a temperature
   a. Slightly above the critical temperature
   b. Equal to critical temperature
   c. Slightly less than critical temperature
   d. None of these

50. Tempering involves
   a. Reheating the quenched component to a temperature greater than critical temperature
   b. Increasing the brittleness
   c. Reheating the quenched component to a temperature equal to critical temperature
   d. None of these

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