Choose the correct answer.

1. In which of the following lathe, so many tools can work together?
   a) None of these  b) Speed lathe
   c) Turret lathe  d) Bench lathe

2. Which of the following lathe is appropriate for mass production?
   a) Turret lathe  b) Capstan lathe
   c) Both (a) & (b)  d) Bench lathe

3. Tumbler gear is used for the following work -
   a) To accelerate the carriage from lead screw
   b) To change the direction of the rotation of the lathe
   c) To change the direction of feed
   d) To change the velocity of spindle

4. Due to which reason, drill breaks during center drilling?
   a) By giving too much feed  b) By reducing speed and feed
   c) By trapping of chips  d) None of these

5. Which material is used to make the gauge of good quality?
   a) Vanadium steel  b) Cast iron
   c) Mild steel  d) None of these

Contd....2/-
6. Clearance between the mating parts is measured by which of the following gauge?
   a) By dial gauge  
   b) By plug gauge  
   c) By feeler gauge  
   d) By caliper gauge

7. Which of the following method is used for putting abrasive on lap?
   a) Lapping  
   b) Fixing  
   c) Charging  
   d) Rubbing

8. As compare to honing, ______ metal is removed in lapping.
   a) Less  
   b) More  
   c) Very less  
   d) None of these

9. The surface finish of a surface is measured in --
   a) Foot  
   b) Meter  
   c) Micron  
   d) Centimeter

10. In honing process, which of the following is used along with simple abrasive and bonding material for making hon?
    a) Sulphur  
    b) Resin  
    c) Wax  
    d) All of these

11. Nitride made the metals -
    a) Corrosion resistant  
    b) Wear resistant  
    c) Both (a) & (b)  
    d) None of these

12. Which of the following structure is formed by the rapid cooling of austenite structure of steel?
    a) Pearlite  
    b) Cementite  
    c) Martensite  
    d) None of these

13. TPI is the unit for measure the following -
    a) Thickness of wire  
    b) Diameter of nut  
    c) Pitch of threads of nut  
    d) Length of bolt

Contd....3/-
14. Split bearing is also known as –
   a) Pedestal bearing
   c) Pivot bearing
   b) Roller bearing
   d) Plain bearing

15. Jobs with asymmetric surface cannot hold in the centre by which of the following chuck?
   a) By four jaw chuck
   c) Both (a) & (b)
   b) By three jaw chuck
   d) None of these

16. After tightening and opening the jobs, chuck key should –
   a) Leave in the chuck
   c) Fasten along with the jobs
   b) Lock with the chuck
   d) Immediately withdraw from the chuck

17. The type of bearing is -
   a) Friction bearing
   c) Both (a) & (b)
   b) Anti-friction bearing
   d) None of these

18. Simple (Ordinary) nut and chuck nut have following difference -
   a) Both are same
   c) Simple nut have less thickness
   b) Chuck nut have less thickness
   d) None of these

19. Ball bearings are made up of metal tablets of -
   a) None of these
   c) Copper
   b) Alloy steel
   d) Cast iron

20. Honing allowance is kept –
   a) 0.01 to 0.02 mm
   c) 0.001 to 0.002 mm
   b) 0.05 to 0.10 mm
   d) None of these

21. Gauges wore out by rubbing on the surface, hence they are made by the following metal –
   a) Alloy steel
   c) Mild steel
   b) Cast steel
   d) Cast iron

Contd....4/-
22. The length of sine bar is given by the following –
   a) By the length of sine bar
   b) By the distance between the centers of rollers
   c) By the distance between the end point of both rollers
   d) None of the above

23. For supporting the pipe-shaped hollow job, following centroid is used –
   a) Revolving center
   b) Inverse center
   c) Half center
   d) Pipe center

24. The full name of SWG is –
   a) Standard Wire Gauge
   b) Straight Wire Gauge
   c) Standard Width Gauge
   d) Standard Wire Gear

25. Which of the following is the characteristic of bearing?
   a) Minimum friction
   b) Vibration free base
   c) The ability to keep the shaft on its place
   d) All of these

26. Which of the following washer is used where the loosening of bolts due to vibrations or shocks are more likely to be happen?
   a) Plain washer
   b) Spring washer
   c) Tap washer
   d) Fiber washer

27. Woodruff key have following type of shape –
   a) Rectangular
   b) Shape of the sector of circle
   c) Round and Taper
   d) Square

28. ________ is used for the picking of steel.
   a) Dilute sulfuric acid
   b) Spirit
   c) Troicloroethylene
   d) Carbon Tetra Chloride

29. In lapping process, aluminum oxide abrasive is used –
   a) For hard metals
   b) For non-ferrous metals
   c) For hard steel
   d) None of these

Contd....5/-
30. Among the following, reference surface while marking on any job is –
   a) Surface gauge  
   b) Workpiece  
   c) None of these  
   d) Surface of marking table

31. The taper of the work piece kept on the lathe machine can be checked by following –
   a) Taper plug gauge or taper ring gauge  
   b) Universal bevel protector  
   c) Steel rule and micrometer  
   d) Sine bar and slip gauge

32. Which taper is used in the spindle of tail stock?
   a) Morse taper  
   b) Browne and shape taper  
   c) Jarno taper  
   d) None of these

33. Face plate is made up of which of the following metal?
   a) Cast iron  
   b) Wrought iron  
   c) High carbon steel  
   d) None of these

34. For using taper turning attachment, the setting angle is calculated by the following formula –
   a) \( \tan \theta = \frac{D - d}{21} \)  
   b) \( \tan \theta = \frac{D - d}{I} \)  
   c) \( \tan \theta = \frac{2d}{D - d} \)  
   d) None of these

35. If the number size in wire gauge increases then the thickness of the wire will get –
   a) Less  
   b) More  
   c) Neither less nor more  
   d) None of these

36. Nut is a –
   a) Temporary fastner  
   b) Semi-permanent fastner  
   c) Permanent fastner  
   d) None of these

37. Which of the following instrument is used to check the hills & vallies for the surface of the job?
   a) By ammeter  
   b) By dial gauge  
   c) By barometer  
   d) By profile meter

38. The place where bearing are fit is known as –
   a) Friction  
   b) Housing  
   c) Shell bearing  
   d) Ball bearing

Contd....6/
39. Lead screw of lathe is used for –
   a) Step turning
   c) Taper turning
   b) Boring
   d) Thread cutting

40. Which of the following protects the long job from bending during turning?
   a) Mandrel
   c) Revolving center
   b) Steady rest
   d) Dog chuck

41. The method of cutting taper by tail stock is known as –
   a) Copying
   c) Long nose tool
   b) Offset
   d) Taper turning

42. Jobs are placed in ash or _________ for annealing.
   a) Limestone
   c) Pig iron
   b) Coke
   d) All of these

43. The included angle of acme thread is –
   a) 30°
   c) 47 ½°
   b) 29°
   d) 60°

44. Thread snap gauge is used to check –
   a) External diameter
   c) Internal diameter
   b) External thread
   d) Internal thread

45. For correctly fixing the threading tool, ___________ is used.
   a) Try square
   c) Center gauge
   b) Threaded gauge
   d) Tool attached with the face of the job

46. Which chuck has reversible jaws?
   a) Collet chuck
   c) Tail stock
   b) Four jaw chuck
   d) Head stock

Contd....7/-
47. ________ is done for removing more brittleness of chisel.
   a) Tempering  
   c) Carburizing  
   b) Hardening  
   d) Annealing

48. The percentage of carbon in grey cast iron is --
   a) More than 6.67 %  
   c) Less than 2.1 %  
   b) More than 2.1 %  
   d) None of these

49. The diameter of NOT GO end is kept slightly ________ than the actual size.
   a) Bigger  
   c) Equal  
   b) Smaller  
   d) None of these

50. What does 16 represents in M16 x 55?
   a) Length of shank  
   c) Both (a) & (b)  
   b) Diameter of threads  
   d) None of these