TIME: 3 Hrs.  
Note:- Attempt all the questions.  
All questions carry equal marks.  
This paper carries negative marking 25% marks will be deducted for each wrong answer.

Choose the correct answer:

1. Twist drill are made of
   a) High speed steel
   b) Low carbon steel
   c) Stainless steel
   d) Wood

2. Which type of apron is used while during welding
   a) Cotton
   b) Plastic
   c) Silk
   d) Leather and worn

3. Which one of the following is not reason for accident
   a) unawareness of danger
   b) Negligence
   c) Improper use of tools
   d) Using gloves

4. In Lap Joint, plates are kept
   a) At straight angle
   b) In butt positions
   c) Overlap position
   d) At a angle

5. Killed steel is opposite of ............... steel.
   a) Carbon
   b) Alloy
   c) Rimmed
   d) None of these

6. Welding flux is used for
   a) Radiation
   b) Oxidation
   c) Reduction
   d) To stop oxidation

7. The least count of a Vernier bevel protectors
   a) 1"  
   b) 5"
   c) 1°
   d) 5°

8. What should be done immediately if a cylinder leaks due to defective valves or safety plug
   a) Try to repair it yourself
   b) Ask other to repair it
   c) Inform other to the suppliers
   d) Move it to a safe area
9. Pressure welding process, generally used in sheet metal fabrication is called
   a) Arc welding    b) Gas welding
   c) Spot welding    d) Thermit welding

10. The clearance angle of a drill is between .......... 
    a) 3° to 5°    b) 8° to 12° 
    c) 12° to 20°    d) 15° to 20°

11. The tap used to cut threads in a blind hole is .......... 
    a) Taper Tap    b) Second tap
    c) Bottoming Tap    d) Any one of these

12. Electrode is consumed in the following welding process .. 
    a) Gas    b) Resistance
    c) Arc    d) Thermit

13. The Material used for coating of electrode is called 
    a) Protective layer    b) Blinder
    c) Flux    d) Slag

14. A Drift is used for ............ 
    a) Drawing drill location    b) Fixing chuck on the machine spindle
    c) Removing a broken drill from the work    d) Removing the drill from the machine spindle

15. The charge is fed into the blast furnace through the 
    a) Throat    b) Stack
    c) Bosh    d) Tuyers

16. Adjustable screw plate die is used for .............. 
    a) Chasing or reconditioning    b) Easy to assemble inside the color
    c) Increasing or decreasing depth of cut    d) To supply the cutting oil while threading

17. ............ Is used for galvanizing iron sheets so that they do not rust. 
    a) Lead    b) Tin
    c) Zinc    d) Silver

18. The process of beveling the end of a hole is called 
    a) Counter boring    b) Counter sinking
    c) Spot facing    d) Reaming
19. Straight shank drills are held in: -
   a) Sleeve
   c) Arbor
   b) Socket
   d) Drill chuck

20. Property of wrought iron is decide by-
   a) Carbon and magnesium
   c) Aluminum and carbon
   b) Carbon and manganese
   d) Magnesium and manganese

21. The drilled hole is more than drill size due to
   a) Incorrect clearance
   c) Inappropriate cutting angle
   b) Unequal lip lengths
   d) Large Helix angle

22. Jenny caliper is used to
   a) For finding the external of round bar
   c) For finding the center of round bar
   b) For finding the internal round bar
   d) For finding the angles

23. While drilling the drill gets overheated this is due to ......
   a) More lip clearance angle
   c) Material being drilled is ductile
   b) Less cutting angle
   d) Excessive cutting pressure

24. Angle of BSW ‘V’ form thread is ...........
   a) 60°
   c) 47.5°
   b) 55°
   d) 45°

25. To find/check the clearance between two mating parts, ........ Gauge is used
   a) Radius
   c) Feeler
   b) Fillet
   d) Plug

26. Vernier height gauge works on the principle similar to
   a) Vernier micrometer
   c) Vernier bevel protector
   b) Vernier caliper
   d) None of the above

27. Which of the following thread is used for transmitting motion?
   a) Round thread
   c) ISO Metric thread
   b) Trapezoidal thread
   d) BSW thread

28. The coating of electrodes for welding mild and low alloy steels ...... is used to provide
    gaseous shield with reducing agent.
   a) Metal Carbonates
   c) Ferromanganese and Ferro silicon
   b) Titanium Oxide
   d) Cellulose

29. Shaping of grinding wheel to make it run concentric with the axis is called:
    a) Dressing
    c) Balancing
    b) Truing
    d) Glazing
| 30. | Bronze is an alloy of copper and ...........  
  | a) Zinc  
  | c) Lead  
  | b) Tin  
  | d) Silver  
| 31. | The difference between the maximum limit of sizes is equal to  
  | a) Upper deviation  
  | c) Tolerance  
  | b) Lower deviation  
  | d) Actual size  
| 32. | Name the instrument to measure the diameter of round rod.  
  | a) Depth Micrometer  
  | c) Outside micrometer  
  | b) Inside micrometer  
  | d) Tube micrometer  
| 33. | Which one of the following elements cannot be checked with the screw pitch gauge  
  | a) Pitch  
  | c) Profile  
  | b. Lead  
  | d. Depth  
| 34. | Operation for making a seat for bolt head, washer or nut is called  
  | a) Spot facing  
  | c) Counter sinking  
  | b. Counter boring  
  | d. Grooving  
| 35. | The number of divisions on Vernier scale of a Vernier micrometer (metric) are:  
  | a) 5  
  | c) 50  
  | b) 10  
  | d) 100  
| 36. | The surface of a grinding wheel develops a smooth and shining appearance is called –  
  | a) Glazing  
  | c) Dressing  
  | b) Loading  
  | d) Truing  
| 37. | Files are made of ...........  
  | a) Forged wrought iron  
  | c) High carbon steel  
  | b) Mild Steel  
  | d) Aluminum  
| 38. | What is the functional part “pilot” provided in reamers-  
  | a) Finish Concentric Hole  
  | c) Hold in tap wrench  
  | b) Removing chips  
  | d) Hold in machine spindle.  
| 39. | Pudding furnace is used to produce ...........  
  | a) Pig Iron  
  | c) Wrought Iron  
  | b) Cast Iron  
  | d) Steel  
| 40. | In Oxy acetylene welding, color of oxygen cylinder is  
  | a) Red  
  | c) Black  
  | b) Maroon  
  | d) Brown  

**Note:** All text is from the visible content in the image. No additional information is provided.
41. Which flame is suitable for cutting operations -
   a) Oxidizing flame
   b) Carburizing flame
   c) Neutral Flame
   d) None of these

42. Which flame is suitable for welding of non ferrous metals (brasses and bronzes) -
   a) Oxidizing flame
   b) Carburizing flame
   c) Neutral Flame
   d) None of these

43. A left hand screw advances in:
   a) Clockwise
   b) Anticlockwise
   c) Any direction
   d) None of these

44. Acme thread is a modified form of:
   a) Vee thread
   b) Square thread
   c) Saw tooth thread
   d) Worm thread

45. Mechanical seals are used to:
   a) Prevent vibration
   b) Prevent leakage
   c) Reduce Function
   d) Balance the equipment

46. Interchangeability of parts is best suited for:
   a) Batch production
   b) Mass production
   c) Job production
   d) None of the above

47. Hook Scrapers are used for scraping ......
   a) Curved surface
   b) Hollow Surface
   c) Centre portion of a flat surface
   d) Bend surface

48. In Marking of grinding wheels, .......... compulsory symbols are used?
   a) 7
   b) 8
   c) 6
   d) 5
49. While over tighten the bench vice which part will get damage?
   a) Handle
   b) Spindle
   c) Square nut
   d) Fixed Jaw

50. Zero line represents:
   a) Upper deviation
   b) Lower deviations
   c) Zero deviations
   d) None of the above

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