

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

1. Which is the cheapest tool material?

- A) High speed steel      B) High carbon steel  
C) Carbide                  D) Diamonds

2. What is the advantage of jig?

- A) Cost is very low      B) Hold, locate and guide the tool  
C) It holds the job      D) Hold and locate the work

3. What is the effect, if the cutting speed is more than the recommended?

- A) Reduce the tool life      B) Normal tool life  
C) Better finish              D) Accurate dimension

4. What is the recommended cutting speed for aluminium using H.S.S tool?

- A) 25 m/min - 40 m/min      B) 50 m/min - 80 m/min  
C) 70 m/min - 100 m/min      D) 35 m/min - 50 m/min

5. Which type of tool is suitable to produce form surface in mass production activities?

- A) High speed steel cutting tool      B) High carbon steel tool  
C) Using single point cutting tool      D) Using carbide tipped form tool

6. Calculate the length of metal passing by cutting tool in one revolution if the diameter of work is 75mm and cutting speed is 120m/min.

- A) 295.7 mm                  B) 235.5 mm  
C) 485.7 mm                  D) 365.3 mm

7. Which cutting tools have highest cutting efficiency?

- A) High speed steel      B) High carbon steel  
C) Mild steel              D) Carbide

8. Which is a non-metallic tool material?

- A) High carbon steel      B) Carbide  
C) Diamonds                D) Stellite

9. What is the value of tool life index for a cemented carbide

tip to machine cast iron component?

- A) 0.2                          B) 0.1  
C) 0.128                      D) 0.125

10. Which gauge is to be selected for checking the corner radius of the job?

- A) Plug gauge                B) Fillet gauge  
C) Feeler gauge              D) Radius gauge

11. Which type of jig locates the piece part from its face?

- A) Table jig                  B) Plate jig  
C) Solid jig                  D) Post jig

12. What will happen to the tool life if the spindle is running higher speed?

- A) Medium                    B) Very less  
C) More                        D) Less

13. What is the term the distance moved by the tool along the work for each revolution?

- A) Feed                        B) Depth  
C) Speed                      D) Cutting speed

14. Where the follower is fixed to produce form turning?

- A) Cross slide                B) Tail stock  
C) Tool part                  D) Top slide

15. Which material is used to make radius gauge?

- A) Tool steel                  B) Cast steel  
C) Hardened steel              D) Stainless steel

16. What defect may occur during grinding a form tool cutting edge?

- A) Shape of the form gets altered      B) Thickness of the tool reduced  
C) Clearance angle changed      D) Form tool getting broken

17. What factor is important in free hand form turning?

- A) Sharp tool                B) High speed  
C) Skilled labour              D) Unskilled labour

18. Calculate the spindle speed to turn a 40mm dia M.S rod using a cemented carbide tool it cutting speed is 92mm/min?

- A) 950 rpm                      B) 508 rpm  
C) 685 rpm                      D) 731 rpm

19. What is the special benefit of using a fixture?

- A) Skilled worker required      B) Suitable for small batch production  
C) Slower rate of production    D) Faster rate of production

20. What is the recommended feed rate for turning cast iron (grey) using H.S.S tool?

- A) 0.2-1.00 mm/rev              B) 0.2-1.5 mm/rev  
C) 0.08-0.03 mm/rev          D) 0.15-0.7 mm/rev

21. Which one is example of ferrous tool material?

- A) High carbon steel              B) Carbide tool  
C) Stellite                          D) Diamonds

22. Which is the device that can hold, locate and guide the tool?

- A) Jig                                  B) Chuck  
C) Fixture                            D) Collet chuck

23. Which one is chief constituent of ferrous tool material?

- A) Iron                                B) Vanadium  
C) Tungsten                        D) Carbon

24. How many precision rollers required for measuring angle of tapered component?

- A) 2                                    B) 3  
C) 1                                    D) 4

25. What does the letter Y stands in the formula  $d = Y \sqrt{2(s+r)}$  in taper measurement?

- A) Diameter over rollers at small end      B) Distance from the centre of the roller to the end of the component  
C) Diameter over rollers at big end              D) Radius of the roller

26. How much percentage of cutting speed could be increased by using super HSS tools?

- A) 15% to 20%                    B) 5% to 10%  
C) 10% to 15%                    D) 20% to 25%

27. Which type of jig is used to hold thin and soft parts?

- A) Plat jig                            B) Trunnion jig  
C) Sandwich jig                    D) Channel jig

28. What is the tool life index of cemented carbide tool for turning high carbon high chromium die steel?

- A) 0.2                                B) 0.4  
C) 0.35                              D) 0.15

29. What is the name of gauge used to check the radius

- A) Feeler gauge                    B) Radius gauge  
C) Fillet gauge                     D) Plug gauge

30. Find out the R.P.M of spindle for a 50mm bar (D) and cutting speed is 25m/min.

- A) 100rpm                          B) 168rpm  
C) 250rpm                          D) 159rpm

31. Calculated the rpm of spindle if cutting speed  $V_c$  is 120m/min and the diameter  $D$  of the job is 50 mm?

- A) 975 rpm                         B) 856 rpm  
C) 764 rpm                         D) 500 rpm

32. Which type of jig is used for large awkward shaped piece part is to drilled in many directions?

- A) Plate jig                         B) Trunnion jig  
C) Post jig                         D) Table jig

33. What does the letter 's' stands in the equation  $d = Y \sqrt{2(s+r)}$  in taper measurement?

- A) Distance from the centre of the roller to the end of the component  
B) Radius of the rollers component  
C) Diameter over the rollers at small end  
D) Diameter over the roller at large end

34. Which gauge is used to position the cutter before cutting in milling fixture?

- A) Radius gauge                    B) Fillet gauge  
C) Screw pitch gauge              D) Feeler gauge

35. What are the possible surface that can be produced by form turning?

- A) To generating concave and convex profile      B) To generate conical surface  
C) To generate flat surface                              D) To generating cylindrical surface

36. Which gauge is used to check the radius formed at the steps of component?

- A) Radius gauge                    B) Fillet gauge  
C) Feeler gauge                    D) Plug gauge

37. What is the recommended cutting speed for turning mild steel using H.S.S tool?

A) 35-70 m/min

B) 25-40 m/min

C) 40-70 m/min

D) 35-50 m/min

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**38.** How the cutting speed is expressed?

A) Meter/min

B) Revoluation/min

C) Meter/sec

D) Foot/min

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