

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

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

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

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

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

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

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

4. What does the letter 's' stand in the equation  $d = Y - 2(s+r)$  in taper measurement?

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

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

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

6. 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

7. What is the value of tool life index for a cemented carbide tip to machine cast iron component?

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

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

- A) Collet chuck                          B) Fixture

C) Jig

D) Chuck

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

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

10. Which is the cheapest tool material?

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

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

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

12. 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) 235.5 mm                              B) 365.3 mm  
C) 295.7 mm                              D) 485.7 mm

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

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

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

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

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

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

16. 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

17. Which one is example of ferrous tool material?

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

18. Which cutting tools have highest cutting efficiency?

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

19. What does the letter Y stands in the formula  $d = Y \cdot 2 \cdot (s+r)$  in taper measurement?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- A) 4    B) 2  
C) 1    D) 3

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

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

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

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

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

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

31. Which material is used to make radius gauge?

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

32. What is the advantage of jig?

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

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

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

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

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

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

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

36. How the cutting speed is expressed?

- A) Meter/sec                                B) Meter/min  
C) Revolution/min                         D) Foot/min

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

- A) Plat jig
- C) Trunnion jig

- B) Sandwich jig
- D) Channel jig

**38.** Which is a non-metallic tool material?

- A) Diamonds
- C) Carbide

- B) High carbon steel
  - D) Stellite
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