

Student: Jeevan G N  
Score: 23/38 (60.53%)

Code: 8621

1. Which material is used to make radius gauge?

- A) Cast steel                      B) Tool steel  
C) **Hardened steel (Correct)**   D) Stainless steel

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

- A) **Radius gauge (Correct)**   B) Fillet gauge  
C) Plug gauge                      D) Feeler gauge

3. Which cutting tools have highest cutting efficiency?

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

4. Which is the cheapest tool material?

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

5. Which is a non-metallic tool material?

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

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

- A) **Iron**                      B) Tungsten (Incorrect)  
C) Vanadium                      D) Carbon

7. Which one is example of ferrous tool material?

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

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

- A) **0.1 (Correct)**                      B) 0.125  
C) 0.2                      D) 0.128

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

- A) **0.15 (Correct)**                      B) 0.2  
C) 0.4                      D) 0.35

10. 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) Diameter over rollers at big end  
C) Radius of the roller                      D) Distance from the centre of the roller to the end of the component (Incorrect)

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

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

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

- A) 1 (Incorrect)                      B) **2**  
C) 3                      D) 4

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

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

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

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

15. How the cutting speed is expressed?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

28. What is the advantage of jig?

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

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

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

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

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

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

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

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

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

33. 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 (Correct)  
C) 365.3 mm  
B) 295.7 mm  
D) 485.7 mm

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

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

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

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

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

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

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

**A) Less (Correct)**

B) More

C) Medium

D) Very less

38. What is the effect, if the cutting speed is more than the

recommended?

**A) Reduce the tool life**

B) Better finish

C) Accurate dimension

D) Normal tool life  
(Incorrect)