

Student Name: _____ Roll No: _____

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

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

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

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

3. Which one is example of ferrous tool material?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

13. Where the follower is fixed to produce from turning?

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

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

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

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

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

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

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

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

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

18. Which is a non-metallic tool material?

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

19. How the cutting speed is expressed?

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

20. Which material is used to make radius gauge?

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

21. 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) 0.15
- D) 0.35

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

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

23. Which cutting tools have highest cutting efficiency?

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

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

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

25. What is the advantage of jig?

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

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

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

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

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

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

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

29. 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) 485.7 mm
- C) 235.5 mm
- D) 365.3 mm

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

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

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

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

32. Which is the cheapest tool material?

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

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

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

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

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

35. 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

36. 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
- B) 731 rpm
- C) 950 rpm
- D) 685 rpm

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

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

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

A) Distance from the centre of the roller to the end of the component
B) Diameter over rollers at big end

C) Radius of the roller

D) Diameter over rollers at small end
