

Duration: 60 Mins

Total Marks: 38

Q.ID: ITISKILL7650TU

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

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

Answer: A) Iron

2. 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

Answer: A) To generating concave and convex profile

3. What does the letter Y stands in the formula $d = Y ? 2 (s+r)$ 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

Answer: C) Diameter over rollers at small end

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

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

Answer: D) Reduce the tool life

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

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

Answer: A) Radius gauge

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

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

Answer: B) Jig

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

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

Answer: B) Shape of the form gets altered

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

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

Answer: B) Feed

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

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

Answer: A) Trunnion jig

10. Which cutting tools have highest cutting efficiency?

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

Answer: B) Carbide

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

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

Answer: A) Faster rate of production

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

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

Answer: D) 35-50 m/min

13. Which is the cheapest tool material?

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

Answer: D) High carbon steel

14. What is the advantage of jig?

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

Answer: D) Hold, locate and guide the tool

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

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

Answer: B) 159rpm

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

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

Answer: D) Less

17. Which one is example of ferrous tool material?

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

Answer: A) High carbon steel

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

Answer: C) 731 rpm

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

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

Answer: D) 0.1

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

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

Answer: A) 70 m/min - 100 m/min

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

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

Answer: A) 0.15-0.7 mm/rev

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

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

Answer: B) 15% to 20%

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

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

Answer: C) Using carbide tipped form tool

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

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

Answer: C) Fillet gauge

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

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

Answer: C) Cross slide

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

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

Answer: B) Feeler gauge

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

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

Answer: A) Skilled labour

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

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

Answer: B) Distance from the centre of the roller to the end of the component

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

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

Answer: D) 764 rpm

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

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

Answer: C) Table jig

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

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

Answer: D) Radius gauge

32. 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) 295.7 mm
- C) 485.7 mm
- D) 365.3 mm

Answer: A) 235.5 mm

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

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

Answer: B) 2

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

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

Answer: C) 0.15

35. How the cutting speed is expressed?

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

Answer: B) Meter/min

36. Which is a non-metallic tool material?

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

Answer: B) Diamonds

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

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

Answer: B) Sandwich jig

38. Which material is used to make radius gauge?

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

Answer: B) Hardened steel