Machine Tools

1. The larger diameter of shaft is 125 mm and smaller diameter of the shaft is 95 mm. Find the taper. Assume that length of the job and taper is same.
a) 30
b) 15
c) 60
d) none of the mentioned

2. Pitch of work piece threads=2, pitch of the lead screw threads=4.
Then, (driver gear/driven gear) =?
a) 2
b) 4
c) 0.5
d) none of the mentioned

3. Determine the rpm(n) of the shaft. diameter(d)=25 mm, cutting speed(cs)=50 m/min.
a) 636.9
b) 202.83
c) 10.615
d) none of the mentioned

4. Determine the diameter(d) of the shaft in mm. rpm(n)=25 mm/revolution, cutting speed(cs)=100 mm/min.
a) 21.23
b) 405.47
c) 1273.2
d) none of the mentioned

5. Determine the cutting speed(cs) of the shaft mm/min. diameter(d)=25 mm, rpm(n)=50 mm/revolution
a) 3.925
b) 1.25
c) 7.85
d) none of the mentioned

6. If the diameter of the work surface before machining(d1) is 100 mm and diameter of the machined surface(d2) is 50 mm. Then the depth of the cut is_____ mm.
a) 50
b) 25
c) 15
d) none of the mentioned

*7. Find the metal removal rate from the given data (in mm*mm*mm/minute). cutting speed(cs) =50 mm/minute, depth of cut(d)=10mm, feed(f)= 0.1 mm/revolution.*
a) 50
b) 500
c) 5000
d) none of the mentioned

*8. Find the cutting speed from the given data (in mm/minute). metal removal rate(mrr) =50 mm*mm*mm/minute, depth of cut(d)=1mm, feed(f)= 0.1 mm/revolution.*
a) 50
b) 500
c) 5000
d) none of the mentioned

9. Find the feed from the given data (in mm/revolution). cutting speed(cs) =50 mm/minute, depth of cut(d)=100mm, metal removal rate(mrr)= 10 mm/revolution.
a) 0.2
b) 0.02
c) 0.002
d) none of the mentioned

10. Number of revolution = 50, rpm = 100. Find out the machining time.
a) 0.5
b) 2
c) 4
d) none of the mentioned

11. In which operation, motion of job is rotary and motion of cutting tool is forward translating?
a) turning
b) planning
c) milling
d) all of the mentioned
View Answer

12. Which type of job motion is there in drilling operation?
a) rotary
b) translating
c) fixed
d) none of the mentioned
View Answer

13. In which type of operation, motion of cutting tool is translating?
a) drilling and milling
b) milling and turning
c) boring and drilling
d) turning and planning

14. In which type of operation, motion of cutting tool is rotary as well as translating?
a) planning
b) milling
c) drilling
d) turning

15. Which type of cutting tools have wide application on lathes?
a) single point
b) multi point
c) both single point and multi point
d) none of the mentioned