



Theoretical questions: mechanical engineering technician (part 2)

Right answer in bold.

1. Gear teeth can be machined by:
1-milling
2-drilling
3-turning
2. Shafts can be machined by:
1-milling
2-slotting
3-turning
3. Holes can not be machined by:
1-drilling
2-broaching
3-sawing
4. Multipoint tool operation is:
1-milling
2-multiple toolpath operation
3-two cutting cycles
5. Feed and cutting speed directions match in:
1-up-milling
2-down milling
3-face milling
6. Lathe is not used for:
1- machining planes
2-turning
3-drilling
4-facing
7. End milling means:
1-machining of shafts end
2-machining by end mill
3-end of machining stroke
8. Shaping tool moves:
1-up and down
2-from left to right
3-reciprocally
9. The broach tooth step determines:
1-chip width
2-chip thickness
3-chip speed
10. Metal forming machines do not perform:
1-upsetting
2-shaping
3-blanking

11. Presses are used for:
 - 1-clamping
 - 2-punching**
 - 3-reaming
12. Presses utilize:
 - 1-steam
 - 2-air**
 - 3-oil
 - 4-water
13. Single-point cutting tools do:
 - 1-planing**
 - 2-milling
 - 3-grinding
14. Cutting tool geometry does not include:
 - 1-rake angle
 - 2-side angle
 - 3-edge angle**
 - 4-back rake angle
15. Turret lathe has not:
 - 1-tailstock**
 - 2-carriage
 - 3-speed selector
16. Open-die forging:
 - 1-opens die
 - 2-closes die
 - 3-performs cogging**
17. Roll forging:
 - 1-makes rollers
 - 2-modify shape
 - 3-uses rollers**
18. Twist drills are used for:
 - 1- chip twist
 - 2 – drill twist
 - 3 – hole drilling**
19. Abrasive machining:
 - 1 – creates hard grains
 - 2 – uses hard grains
 - 3 – means grinding**
20. Most accurate abrasive machining of holes:
 - 1 – circular grinding
 - 2 - plunge grinding
 - 3 - honing**
21. Housings can not be machined by:
 - 1 – drilling
 - 2 – milling
 - 3 – turning**
22. Worm thread is machined by:
 - 1 – drilling
 - 2 – shaping**
 - 3- broaching

23. Fastest finishing of holes in levers is:
- 1 – grinding
 - 2 – broaching**
 - 3 – countersinking
24. Crankshafts are made of:
- 1 – manganese
 - 2 – carbon steel**
 - 3 – aluminium
25. Thread assembly can be secured by:
- 1- glueing
 - 2 – washing
 - 3- groove washer**
26. Bearing ring interference can be reduced by:
- 1- cutting
 - 2- heating**
 - 3 - pressing
27. Initial data for machining process planning include:
- 1 - drawings**
 - 2 - list of blanks
 - 3 – list of machine tools
28. Production type is:
- 1 – mass
 - 2 – massive
 - 3 – individual**
29. Blank for machining is:
- 1 – rolled bar**
 - 2 – roller
 - 3 – fixture
30. Most accurate blank is obtained by
- 1- die forging**
 - 2- blacksmithing
 - 3 – upset forging
31. Degree of freedom is
- 1 – motion along X axis
 - 2 - ability to move along X axis**
 - 3 – motion along Y axis
32. Positive restraint
- 1 - is opposite to negative
 - 2 - is created by abutment
 - 3 - is created by location peg**
33. Vee block is used for
- 1 – cutting tool rotation
 - 2 - work clamping**
 - 3 - cutting tool motion
34. Bush is used for
- 1 – drilling operations**
 - 2 – milling operations
 - 3 – turning operations
35. Most accurate hole machining method is
- 1 – countersinking

- 2 – reaming**
 3 - broaching
 36. Fastest hole finishing method is
 1 - countersinking
 2 - reaming
3 - broaching
 37. Most accurate plane machining method is
 1 – shaping
2 – grinding
 3 - milling
 38. Cutting speed does not depend on
 1 – feed rate
2 – tool shank material
 3 – depth of cut
 39. Depth of cut equals to tool radius
1 – in drilling
 2 – in counterboring
 3 – in countersinking
 40. Feed rate is measured in
1 - mm/revolution
 2 - kW/revolution
 3 – g/min
 4 – kg/revolution
 41. Hardest cutting tool material is
1 – hexagonal carbon
 2 - ceramics
 3 – tungsten carbide
 42. Grinding wheel grade is determined by
 1 - grit hardness
 2 – grit size
3 - bond type
 4 - arbour strength
 43. Allowance means
 1 – allowed speed
2 - removed material layer
 3 - chip breaking
 4 - length of cut
 44. Machine tools are not
 1 – lathes
 2 – grinders
3 – graders
 45. Machining time depend on
1 – feed rate
 2 – cutting liquid
 3 – cutting speed
 46. Machining route means:
1 – operation sequence
 2 – operation contents
 3 – transition contents
 47. Computer aided process planning uses

1 – machinability database

2 – machining speed limit

3 – machine tool base

48. PLM does not include:

1 - people

2 - geometry

3 – technology

4 - energy

49. Concurrent engineering includes

1 – automatic process update

2 - automatic cutting operations

3 – automatic setting of operation sequence

Disclaimer: Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.