



MCQ set#5 : Microfabrication and micromachining methods

1. Frequency of oscillation in Microultrasonic Machining is:
a) 20GHz
b) 20MHz
c) 20KHz <
d) None of the above
2. The silicon diaphragm is the basic structure used in:
a) Microengineered pressure sensor. <
b) Voltage sensor.
c) Actuators.
d) Relays.
3. One of the applications of Bulk micromachining is :
a) SAW sensor
b) Resonant sensor <
c) Temperature sensor
d) Pressure sensor
4. is the most used in silicon micromachining:
a) Laser micromachining.
b) Micro Electro-Discharge machining.
c) Bulk machining. <
d) Powder Blasting.
5. One of the most used kinds of lasers in microfabrication is:
a) Excimer <
b) Diamond milling
c) Bulk micromachining
d) None of the above
6. Which of these is a material removal method :
a) Laser Micromachining <
b) Laser Microelectronic
c) Laser Electro-Discharge
d) None of the above
7. Excimer stands for:
a) Excellent dimer
b) Excelled dimer
c) Excited dimer <
d) None of the above
8. Excimer laser is used for the micromachining of :
a) Metallic materials
b) Compound materials
c) Organic materials <
d) All of the above
9.process is also called spark erosion
a) Ultrasonic machining
b) Powder blasting
c) Soft lithography
d) Micro electro discharge machining <
10.method removes material through erosive action:
a) Diamond milling
b) Soft lithography
c) Micro-electro discharge machining <
d) Powder blasting
11. The Erosion rate of powder blasting is:
a) 1 mm/sec
b) 1 mm/min <
c) 1 mm/hour
d) 1mm/day
12. particle speed of powder blasting is in the range of:
a) 80—200 ms <
b) 80—400 ns
c) 80—200 ns
d) 80—200 s
13. The simplest plasma reactor consists of:
a) One plate electrodes
b) Two plate electrodes <
c) Four plate electrodes
d) Eight plate electrodes
14. Combination of..... is used to form sharp points:
a) Dry and isotropic wet etching <
b) Dry and anisotropic wet etching
c) a&b
d) None of the above
15. is a material removal method
a) Surface micromachining
b) Micro stereo Lithography
c) LIGA
d) None of the above <
16. the full wafer thickness range is:
a) 100 to 300 um
b) 600 to 800 um
c) 200 to 500 um <
d) 200 to 500 mm
17. focused ion beam milling is..... process
a) Anisotropic <
b) Wet isotropic
c) Electromechanical
d) X-ray lithography
18.is anisotropic milling method:
a) Diamond milling <
b) LCD milling
c) a&b
d) None of the above