1. The efficiency of LBM system is about
   (a) 3 to 5%
   (b) 13 to 15%
   (c) 0.3 to 0.5%
   (d) 30 to 50%.
   Ans. (c)

2. While drilling deep hole by LBM process, it is (with reference to top surface)
   (a) Straight sided
   (b) converging
   (c) diverging
   (d) none of these.
   Ans. (b)

3. You can use LBM for machining glass
   (a) Yes
   (b) No.
   Ans. (b)

4. The phenomenon of the movement of an atom to the higher energy level is called
   (a) Absorption
   (b) Emission
   (c) Stimulated emission
   Ans. (a)

5. Properties of laser beam is
   (a) High monochromacity
   (b) High degree of coherence
   (c) Low monochromacity
   (d) Low degree of coherence
   Ans. (a), (b)

6. Solid state lasers can’t be used for heavy duty work due to
   (a) Low intensity
   (b) Low degree of coherence
   (c) Poor thermal properties
7. In LBM the thickness of HAZ increases
   (a) With the increase in feed rate
   (b) With the decrease in feed rate
   Ans. (b)

8. Large aspect ratio holes can be drilled with LBM
   (a) True
   (b) False
   Ans. (a)

9. The material removal mechanism for LBM is melting and vaporize
   (a) True
   (b) False
   Ans. (a)

10. Laser beam with low divergence should be recommended for
    (a) Shallow hole drilling
    (b) Larger sized holes drilling
    (c) Deep hole drilling
    Ans. (b)

11. The strength of the etchant in ChM process can be controlled by
    (a) Proper filtration
    (b) Addition of new chemicals
    (c) None of them
    (d) Both of them
    Ans. (d)

12. The extent of undercut in ChM is depends on depth of cut, type and strength of etchant, and the workpiece material
    (a) True
    (b) False
    Ans. (a)

13. The surface finish produced during ChM is about
    (a) 0.01-0.5 μm
14. In ChM, cut and peel method the thickness of the maskant coating is in the range of
   (a) 0.3-0.5 mm
   (b) 0.025-0.13 mm
   (c) 0.5-0.7 mm
   (d) 0.7-0.9 mm
   Ans. (b)

15. Type of maskant used in ChM for high volume production is
   (a) Cut and peel
   (b) Screen printing
   (c) Photoresist
   (d) None of them
   Ans. (b)

16. Etchant dissolves metal
   (a) By changing it into a metallic salt
   (b) By rupturing the atoms
   (c) By changing the metal into gaseous state
   Ans. (a)

17. ChM provides
   (a) Good surface finish
   (b) High material removal rate
   (c) Uniform material removal
   (d) None of them
   Ans. (c)

18. Chemical blanking is used for production of
   (a) Blind cavities
   (b) Through cavities
   (c) None of them
Ans. (b)
19. Etchant is heated and agitated to
(a) To increase MRR
(b) To improve surface roughness
(c) To decrease MRR
Ans. (a)
20. Material removal occur in ChM
(a) Downward
(b) Laterally
(c) None of them
(d) Both of them
Ans. (d)