1. Describe the use of the following processes: LBD, LBW, and LBC.
2. How is laser light formed?
3. Other than the lasing material, what is the difference between solid state lasers and gas lasers?
4. What effect does a material’s surface have on the laser beam?
5. Using table 9-1 list the assisting cutting gas and the material each can cut. (list at least 3 each)

|  |  |
| --- | --- |
| air | 1. |
|  | 2. |
|  | 3. |
| oxygen | 1. |
|  | 2. |
|  | 3. |
| nitrogen | 1. |
|  | 2. |
|  | 3. |
| argon | 1. |

1. What are reactive laser assist gases called? How do they work?
2. What type of laser beam is used for drilling? Why?
3. What is CAC-A?
4. Using table 9-2, give the recommenced procedure for air carbon arc gouging of carbon steel, magnesium alloys, and low alloy copper.
5. Why are some carbon arc electrodes copper-coated?
6. What may occur if an SMA welding machine has below minimum arc voltage for air carbon arc gouging?
7. What is washing, and how can it be used?
8. How are oxygen lance cuts usually started?
9. What unusual material can be cut with an oxygen lance?
10. What are the advantages of abrasive powder to the water jet cutting stream?
11. What applications are arc cutting electrodes used for?