



**Sri Vidya College of Engineering and Technology**  
**Virudhunagar – 626 005**



**Department of Mechanical Engineering**  
**ME6302 Manufacturing Technology I**  
**Question Bank / Unit 2 - JOINING PROCESSES**

**PART-A (2 MARKS)**

1. What is the principle of resistance welding?
2. What is the role of fluxes in welding? Or function of flux in welding?
3. List out any four arc welding equipment.
4. What is the principle of Thermit welding?
5. What are the different types of gas flames? How are they formed?
6. Differentiate soldering and brazing .
7. What is the chemical reaction occurs in thermit welding?
8. What are the advantages of carbon arc welding?
9. Differentiate between oxy-acetylene and air-acetylene welding
10. What are the advantages of a.c. arc welding?
11. What is the principle cause of cracks in weld metals?
12. How do you specify an electrode?
13. What is the function of shielding gas in welding?
14. Why laser welding is used only for micro-welding applications?
15. Define resistance welding
16. What is flux? Why is it essential to use it in some welding situations?
17. What are the defects that are generally found in welding?
18. List any four applications of TIG Welding process.
19. Is flux necessary in Brazing process? If yes why?
20. How slag inclusions in welding be avoided?

## PART-B (16 MARKS)

1.
  - i. Distinguish between gas and arc welding
  - ii. What are the advantages of welding?
  - iii. Explain percussion welding
2.
  - i. Describe Electro slag welding
  - ii. Distinguish soldering and brazing
3.
  - i. Explain spot welding
  - ii. Explain submerged arc welding
4.
  - i. Explain the electron beam welding process with a neat sketch
  - ii. Write a brief note on “Welding defects”
5.
  - i. Sketch the three types of Oxy-acetylene flames and state their characteristics and applications.
  - ii. Describe the electro-slag welding process with a neat sketch.
6.
  - i. What is the principle of resistance welding and explain the seam welding?
  - ii. Describe plasma arc welding
7.
  - i. What are the different types of electrode? What are the functions of flux coating?
  - ii. What is the principle of friction welding?
8.
  - i. Describe metal inert Gas arc welding process with a neat sketch.
  - ii. Briefly explain on butt welding process
9.
  - i. Give a brief account of classification of welding processes?
  - ii. Explain TIG welding process variables and enumerate its advantages
10.
  - i. Describe shielded metal arc welding process with suitable diagram. What are its applications?
  - ii. What is the difference between welding, brazing and soldering process?