

Unit 4 Terminal Questions

1. Explain, with an example, the situation in which joining process becomes essential when compared to other manufacturing processes.
2. What is an oxidizing flame on a torch? Why it is used?
3. What is a reducing flame on a torch? When it is used?
4. Explain the following terminologies: (a) base metal (b) weld bead (c) weld pass (d) tack weld (e) puddle
5. State the advantages and limitations of: (a) arc welding (b) gas welding (c) resistance welding
6. Which method of welding will be best for welding high melting point metals? Justify your answer.
7. How do you define the term 'operating conditions' as applied to arc welding and gas welding processes?
8. What are the consequences of having (a) high current (b) high speed and (c) high voltage in arc welding processes?
9. Distinguish between gas welding, arc welding and resistance welding with respect to temperature generated, quality of welding obtained, application and cost.
10. Do you think oxy-acetylene flame can be used for cutting? Justify your answer.
11. Do you think in gas welding process, you can substitute methane in place of acetylene? What are the consequences of doing so?
12. What are the consequences of using air in place of oxygen in oxyacetylene welding?
13. What is meant by weld quality? Discuss the factors that influence it.
14. What is the basic principle of resistance welding?
15. Give any two examples of the applications of gas welding, resistance welding and arc welding processes other than given in the text.
16. Do you agree that in welding the core (filler material) should be consumed at slower rate than electrode coating? Justify your answer.