CHAPTER 11

Casting Processes

QUESTIONS

1. Explain briefly the main constituents of molding sand.
2. How do the grain size and shape affect the performance of molding sand?
3. How are binders classified?
4. Describe the process of molding sand preparation and conditioning.
5. Name and describe the different properties of good molding sand.
6. What are the common tests performed on molding sands?
7. What are the major functions of additives in molding sands?
8. What is meant by green strength and dry strength as applied to a molding sand?
9. Using the neat sketches, describe procedural steps to be followed in making dry sand mold.
10. Differentiate between the process of green sand molding and dry sand molding.
11. Sketch a complete mold and indicate on it the various terms related to it and their functions.
12. Discuss briefly the various types of molds.
13. Explain the procedure of making a mold using a split pattern.
14. Why do you prefer fabricating of metal parts by casting?
15. Define casting. What four basic steps are generally involved in making a casting?
16. Describe the permanent mold casting process and discuss how it differs from the other casting processes.
17. What are the common materials used for making the permanent molds?

18. Describe step by step procedure for casting using a permanent mold. What are the advantages, disadvantages and applications of permanent mold casting?
19. What different metals and alloys are commonly cast in permanent molds?
20. What is the difference between gravity die casting and pressure die casting?
21. What are the general advantages, disadvantages applications of die casting?
22. Explain the various steps involved in the investment casting of metals.
23. What is investment casting? What are the main materials used for making the investment pattern?
24. Describe the complete step by step procedure of investment casting.
25. What are the main advantages and disadvantages of investment casting?