

## CHAPTER 3

### HAND PROCESSES

#### **Questions**

1. List three cases the hand tools should be used.
2. Why a handle should always be fitted to a file before use.
3. What type of file that used in filing soft materials and how does it differ from the common hand file.
4. Show the factors classifying the files.
5. Sketch the different types of file teeth.
6. Show the correct procedures of filing process.
7. Should a file be lifted on the backstroke? Give a reason for your answer.
8. How should a hacksaw blade be fitted and tensioned hacksaw blade?
9. Give two effects of a badly tensioned hacksaw blade.
10. Show the factors classifying the blade of hacksaw.
11. What is the number of strokes per minute for sawing using HSS hacksaw?
12. Sketch three methods used for making the saw cut wider than the blade thickness.
13. What is the minimum number of teeth must be in contact with the workpiece.
14. What is meant by the "pitch" of the teeth in a hacksaw blade, and why is it important.
15. Sketch cold chisel illustrating the point angle and the correct inclination angle.
16. Show with the aid of sketch the effect of chisel inclination angle on the workpiece surface.
17. Give a reason for carrying out a scraping operation.
18. Examine simple method for flatness check.
19. List the various types of scrapers.
20. Show the different materials of engineering's hammers.
21. List the precautions should be observed when using hacksaws.
22. List the precautions should be observed when using cold chisel.
23. List the precautions should be observed when using hammers.
24. List the precautions should be observed when using screwdrivers.
25. List the precautions should be observed when using files.