Lesson 2 Frequently Asked Questions

1. Why the patterns are made split up into two or more parts?

How the pattern is made up depends on how simple or how complex the casting is. A simple casting with one or more flat surfaces can be moulded in one piece, providing that the pattern can be removed without disturbing the compacted sand. More complex patterns may be split up into two or more parts so they can be removed without disturbing the compacted sand, when using two part flasks.

2. Why patterns are made tapered?

The pattern must be tapered so that the pattern may be easily removed from the sand. This taper is known as the draft, and must be added if the part does not have a natural draft.

3. What determine the material that should be used for making of patterns?

The number of castings to be made from the mould and the specifications required of the finished casting are two of the criteria that determine which material is selected for the creation of the pattern.

4. What are the requirements for the material selected for making the pattern?

The material selected for making the pattern should fulfill the following requirements:

- (i) It should be easily shaped, worked, machined and joined.
- (ii) It should be resistant to wear and corrosion.
- (iii) It should be resistant to chemical action.
- (iv) It should be dimensionally stable and must remain unaffected by variations in temperature and humidity.
- (v) It should be easily available and economical.