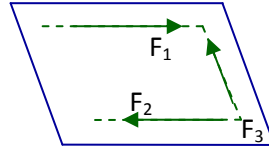


SYSTEM OF FORCES

A group or set of forces is called system of forces.

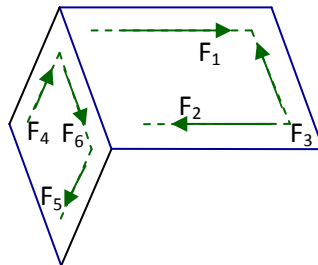
Types:

1. Coplanar force system:



If the lines of action of forces forming the system lie in the same plane, then the system is said to be coplanar.

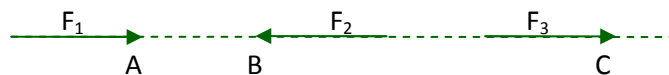
2. Non-coplanar forces:



If the lines of action of forces forming the system do not lie in the same plane then the system is said to be non-coplanar.

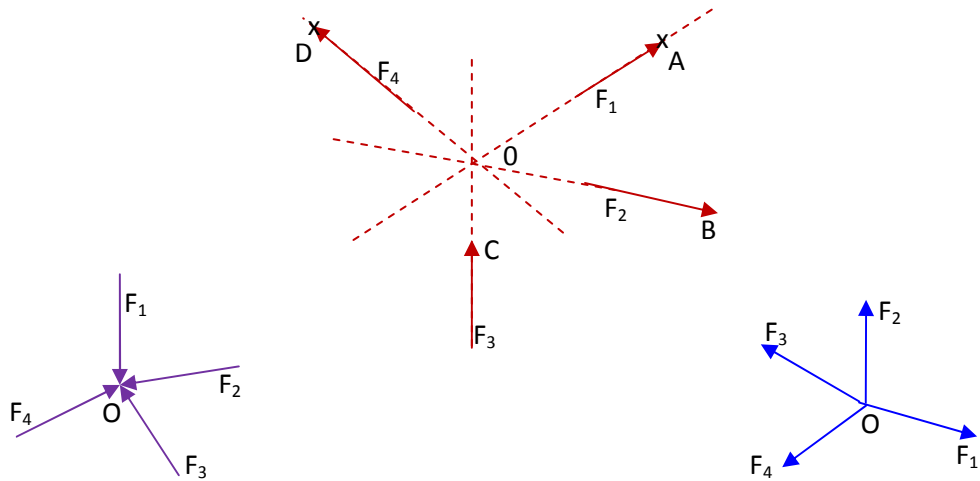
Note: Our study is restricted to coplanar forces.

3. Collinear force system:



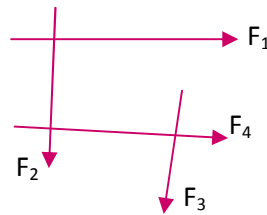
If the forces forming the system have common line of action then the system is said to be collinear.

4. Concurrent force system:



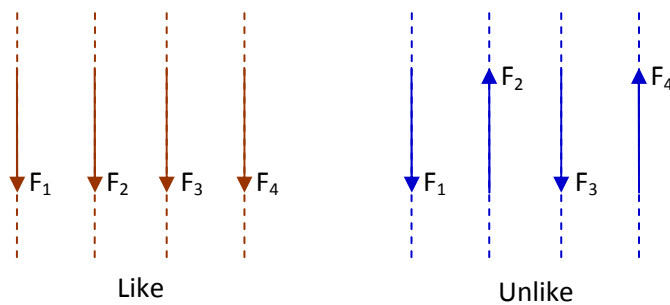
If the line of action of forces forming the system pass through a common point (point of concurrence) then the system is said to be concurrent.

5. Non-concurrent force system:



If the lines of action of forces forming the system do not pass through a common point, then the system is said to be non-concurrent.

6. Parallel force system:



It is a particular case of non-concurrent force system in which the line of action of forces forming the system are parallel.