

1. Explain the terms
  - a. Space
  - b. Time
  - c. Mass
  - d. Force
  - e. Particle
  - f. Rigid body.
2. Explain the difference between Scalars and Vectors.
3. Explain the terms
  - a. Fixed Vector b. Sliding Vector c. Free Vector.
4. Explain the terms (with sketches)
  - a. Collinear Forces
  - b. Coplanar parallel Forces
  - c. Coplanar Concurrent Forces
  - d. Coplanar Non-Concurrent Forces
  - e. Non-Coplanar parallel Forces
  - f. Non-Coplanar Concurrent Forces
  - g. Non-Coplanar Non-Concurrent Forces.
5. What are (Explain with sketches)
  - a. Rectangular Components of a force
  - b. Components of a force
  - c. Projections of a force?
6. Explain the Transmissibility of a force with a neat sketch.
7. Define Force and state its characteristics.
8. Explain the term Moment of a force with neat sketch.
9. State and prove the Varignon's theorem.
10. What is a Couple?
11. Define the term Couple and state its characteristics.
12. Explain the term Force-Couple System with the help of neat sketch.
13. State and prove the Principle of Moments.