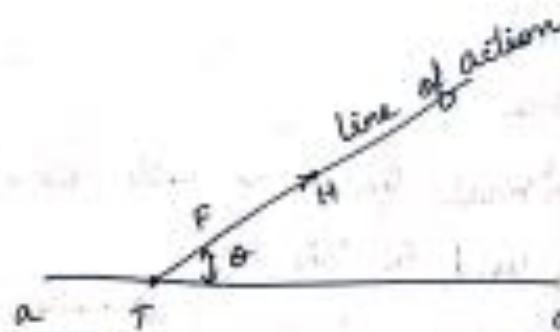




VECTOR:

A Physical quantity which has both magnitude and direction is called Vector. It must obey parallelogram law of addition.

Displacement, velocity, acceleration } - Vector
force, moment & momentum } Quantity



T - Tail of vector

H - Head of vector

CLASSIFICATION OF VECTORS.

- * Free Vector
- * Sliding Vector
- * Bound or Fixed Vector
- * Unit Vector
- * Negative Vector
- * Zero Vector / Null Vector

* FREE VECTOR

It may be moved anywhere in space, provided it maintains the same direction & magnitude. Eg: Couple.

* SLIDING VECTOR

It is the vector which may be applied at any point along its line of action.

* FIXED / BOUND VECTOR

It is the vector which remains at the same point of application. Eg: Moment.

* UNIT VECTOR

It is the vector of one unit in length.

* NEGATIVE VECTOR

It has the same magnitude & inclination but is of the opposite sense.

or ZERO VECTOR

It is obtained when a vector is subtracted from itself.

$$(ii) \vec{A} - \vec{A} = 0.$$