1. The forces and their effect, while acting upon the body is at rest is known as
(a) Statics (b) Kinematics
(c) Dynamics (d) Kinetics

2. Unit of force

(a) Newton (b) joule (c) watt (d) Kelvin

3. The value of tan 45°

(a) 0 (b) 1 (c) ∞ (d) 1/2

4. The force of action whose line of action are lie on same plane is known as

(a) Non-coplanar force (b) coplanar force
(b) Parallel force (d) collinear force

5. Find the correct statement

(a) A force is an agent which produce or tends to produce motion
(b) A force is an agent which stops or tends to stop motion
(c) A force may be balance a given number of forces acting on a body
(d) Both (a) & (b)

6. To determine the force of effect s of a force acting on a body, we must know

(a) Its magnitude and direction of the line along which it acts
(b) Its nature (Whether pull or push)
(c) Point through which it acts on the body
(d) All of the

7. If a number of forces are acting simultaneously on a particle, then the resultant of these forces will have the same effect produced by the all forces . This is known as
(a) Principle of physical independence of forces
(b) Principle of transmissibility of forces
(c) Principle of resolution of forces
(d) None of the above

8. Those quantity which having only magnitude is known as
(a) Scalar quantity
(b) Vector quantity
(c) Both (a) & (b)
(d) None of the above

9. The resultant of two forces P & Q acting at an angle θ is equal to
(a)
(b)
(c)
(d)

10. If the resultant of two forces P & Q acting at an angle (αwith P, then
(a) Tan α= $psin\theta/p + Qcos\theta$
(b) Tan α= $pcos\theta/p + qcos\theta$
(c) Tan α= $qsin\theta/p + qcos\theta$
(d) Tan α= $qcos\theta/p + qcos\theta$

11. The moment of force about any point is geometrically equal to...area of triangle whose base is the line representing the force and vertex is the point about which the moment is taken as

(a) Half
(b) Same
(c) Twice
(d) None of the above

12. In a clockwise moment, we actually use wall clock in order know the time for which the moment is applied

(a) Right
(b) Wrong

13. If a number of coplanar forces are acting simultaneously on a particle, the algebraic sum of the forces about any point is equal to the moment of their resultant force about the same point. This principle is known as

(a) Principle of moments
(b) Principle of levers
(c) Principle of transmissibility
(d) None of the above

14. In the study of levers, we.....the principle of moments

(a) Use
(b) Don't use

15. In a compound lever, the leverage of all the simple levers is

(a) Added
(b) Subtracted
(c) Multiplied
(d) Divided

16. The term 'leverage' and 'mechanical advantage' in a compound lever have got the same meaning

(a) Agree
(b) Disagree

17. The force of friction between two bodies in contact

(a) Depends upon the area of their contact
(b) Depends upon the relative velocity between them
(c) Is normal surface of their contact
(d) All of the above

18. The force of friction always acts in a direction opposite to that

(a) In which the body tends to move
(b) In which the body is moving
(c) Both (a) & (b)
(d) None of the above

19. The magnitude of force of friction between two bodies, one lying above the other, depends upon the roughness of the

(a) Upper body
(b) Lower body
(c) Both the bodies
(d)The two body having more roughness

20. Which of the following statement is correct ?

(a) The force of friction doesn't depends upon the area of contact
(b) The magnitude of limiting friction bars a contact ratio to minimum reaction between two bodies
(c) The static friction is slightly less than limiting friction
(d) All (a), (b) & (c)