Gondwana University, Gadchiroli.

Practical exam sem-I (Winter-2020)
Shivaji Mahavidyalaya, Gadchiroli.
Subject: Physics

Time: 6 hrs   **Marks: 30**

Date: / / 2021

Name of Student:

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1. Hooke's law essentially defines_____
    [a] Stress   [b] Strain   [c] Yield Point   [d] Elastic limit

2. The dimensional formula of stress is_____.
    [a] $[M^0 L^1 T^2]$ [b] $[M^0 L^{-1} T^{-2}]$ [c] $[M^1 L^{-1} T^{-2}]$ [d] $[M^0 L^1 T^1]$

3. The nearest approach to the perfectly elastic body is _____.

    [a] Quartz fibre   [b] Putty   [c] Silver   [d] Platinum

4. The restoring force per unit area is called _____.

    [a] Stress   [b] Strain   [c] Elasticity   [d] Plasticity

5. The restoring force per unit area perpendicular to the surface is

    called _____ stress.

    [a] Longitudinal   [b] Tangential   [c] Normal   [d] Tensile

6. Compressibility of a material is reciprocal of _____.

    [a] Modulus of rigidity   [b] Young Modulus   [c] Bulk Modulus   [d] None

7. The work done per unit volume in stretching the wire is equal
    to_____.

[a] Stress *Strain   [b] (1/2)Stress *Strain   [c] Stress /Strain   [d] Strain/Stress

8. Units of modulus of elasticity is _____

   a] dyne/cm   [b] dyne/cm^2 [c] N/m   [d] dyne

9. The ratio of longitudinal stress to linear strain is called _____.

   [a] Young modulus   [b] Bulk modulus   [c] Modulus of rigidity   [d] None

10. The time period of a torsional pendulum is directly proportional to the square root of _____

    [a] Distance   [b] Vibration   [c] Moment of inertia   [d] Force

11. The period of simple pendulum its time period will _____

    [a] Increase   [b] Decrease   [c] remains same   [d] infinite

12. The time period of simple pendulum having infinite length is _____

    [a] Zero   [b] One   [c] infinite   [d] half

13. The compound pendulum is also known as _____.

    [a] Simple   [b] Physical   [c] Katers   [d] Torsional

14. The katers pendulum is also known as _____ pendulum.

    [a] reversible   [b] conical   [c] simple   [d] torsional

15. The time period of compound pendulum do not depends on _____ of the body.

    a] size   [b] shape   [c] length   [d] mass

16. The bar pendulum is also known as _____ Pendulum.

    [a] simple   [b] compound   [c] katers   [d] torsional

17. If we increase the length of simple pendulum its time period will _____

    [a] increase   [b]decrease   [c] remain same   [d] infinite

18. Youngs modulus is the property of _____

    [a] Gas   [b] both solid and liquid   [c] liquid   [d] solid

19. Energy is store in a flywheel in the form of _____

[a] heat energy [b] solar energy [c] kinetic energy [d] potential energy

20. The moment of inertia of a solid circular disk is given by _____

[a] $mR^2/2$ [b] $mR^2/3$ [c] $2mR^2/3$ [d] $mR^2/4$

21. Torsional pendulum is used to determine mass moment of inertia of _____

[a] flywheel   [b] rigid bar   [c] both a. and b   [d] none of the above

22. Which of the following shape of the body can be considered as compound pendulum?

[a] Cylindrical [b] Cubical [c] Cuboidal [d] Any rigid body

23. In order to double the period of a simple pendulum, the length of the string should be

[a] halved [b] doubled [c] quadrupled [d] none of the mentioned

24. The periodic time of a compound pendulum will be _____when the axis of rotation passing through the CG.

[a] Remain same [b] Minimum [c] None of the these [d] Maximum

25. Modulus of rigidity is defined as the ratio of _____

[a] longitudinal stress and longitudinal strain

[b] volumetric stress and volumetric strain

[c] lateral stress and lateral strain

[d] shear stress and shear strain

26. The ratio of stress and strain is known as _____

[a] modulus of elasticity [b] youngs modulus

[c] both a and b   [d] none of the above

27. The surface of the water in contact with the glass wall is _____

   [a] plane   [b] concave   [c] convex   [d] both a and b

28. when impurity is added to a liquid, its surface tension _____.

   [a] decreases   [b]increases   [c] remains same   [d] none of these

29. SI unit of surface tension is _____.

   [a]Nm^2 [b]Nm   [c] N/m   [d] N/m^2

30. Rain drop are spherical in shape because of_____

   [a]surface tension   [b] capillary
   [c] downward motion   [d] acceleration due to gravity