

**QUIZ NO: 434**

**TOPIC : MECHANICS OF SOLIDS**

**DATE: 27/04/2021**

1. Stress developed due to application of a load suddenly is \_\_\_\_\_ that due to same load being applied gradually.?

[1] One – half

[2] Twice

[3] Thrice

[4] Four times

**Answer : B**

2. Two shafts of diameters 'd' and '2d' are considered. The ratio of polar modulus of shaft later to the earlier is?

[1] 1/8

[2] 8

[3] 16

[4] 1/16

**Answer : B**

3. The phenomenon of slow extension of materials having constant load over a longer period is known as?

- [1] Breaking
- [2] Yielding
- [3] Creeping
- [4] None of these

**Answer : C**

4. Along the principal plane in a stressed element?

- [1] Maximum shear stress acts
- [2] Minimum shear stress acts
- [3] Zero shear stress acts
- [4] None of these

**Answer : C**

5. The shape of bending moment diagram over the length of a beam, having no external load is always ?

[1] Parabolic

[2] Cubic

[3] Linear

[4] Elliptic

**Answer : C**

6. The ratio of effective length of a column and minimum radius of gyration of its cross sectional area is known as?

[1] Buckling factor

[2] Slenderness ratio

[3] Crippling factor

[4] None of these

**Answer : B**

7. A diagram which shows the variations of the axial load for all sections of the span of a beam, is called?

[1] Bending moment diagram

[2] Shear force diagram

[3] Thrust diagram

[4] None of these

**Answer : C**

8. A beam is a structural member predominantly subjected to?

[1] Transverse loads

[2] Axial forces

[3] Twisting moment

[4] None of the above

**Answer : A**

9. The maximum twisting moment a shaft can resist is the product of the permissible shear stress and?

- [1] Polar moment of inertia
- [2] Moment of inertia
- [3] Polar modulus
- [4] Modulus of rigidity

**Answer : C**

10. Poisson's ratio is?

- [1] Ratio of normal stress to normal strain
- [2] Ratio of shear stress to shea strain
- [3] Ratio of normal stress to volumetric strain
- [4] Ratio of lateral strain to longitudinal strain

**Answer : D**

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