1. The lateral strain is \_\_\_\_\_\_\_\_\_\_\_
2. The ratio of axial deformation to the original length
3. The ratio of deformation in area to the original area
4. **The strain at right angles to the direction of applied load**
5. The ratio of length of body to the tensile force applied on it
6. Some structural members subjected to a long time sustained loads deform progressively with time especially at elevated temperatures. What is such a phenomenon called?
7. Fatigue
8. Fracture
9. **Creep**
10. Creep relaxation
11. Limit of proportionality depends upon \_\_\_\_\_\_\_\_\_\_\_\_
12. **Area of cross-section**
13. Type of loading
14. Type of material
15. All of the mentioned
16. The stress at which extension of a material takes place more quickly as compared to the increase in load is called \_\_\_\_\_\_\_\_\_\_\_\_
17. Elastic point
18. Plastic point
19. Breaking point
20. **Yielding point**
21. Elastic limit is the point \_\_\_\_\_\_\_\_\_\_\_\_
22. Up to which stress is proportional to strain
23. At which elongation takes place without application of additional load
24. **Up to which if the load is removed, original volume and shapes are regained**
25. None of the mentioned
26. In a body loaded under plane stress conditions, what is the number of independent stress components?
27. 1
28. 2
29. **3**
30. 6
31. What is the strain energy stored in a body due to gradually applied load?
32. σE/V
33. σE2/V
34. σV2/E
35. **σV2/2E**
36. The point at which the total area of a plane figure is asssumed to be concentrated is called \_\_\_\_\_\_\_\_\_\_\_\_
37. **Centroid**
38. Centre of gravity
39. Central point
40. Inertial point
41. Where will be the center of gravity of an I section will be if the dimension of upper web is 2x10cm, lower web is 2×20 and that of flange is 2x15cm If the y-axis will pass through the center of the section?
42. 7.611cm
43. **9.51cm**
44. 9.31cm
45. 11.5cm
46. The axis about which moment of area is taken is known as \_\_\_\_\_
47. Axis of area
48. Axis of moment
49. **Axis of reference**
50. Axis of rotation
51. What is the formula of theorem of parallel axis?
52. IAB = IG + Ah
53. **IAB = Ah2 + IG**
54. IAB = IG – Ah2
55. IAB = IG + Ixx
56. What is the moment of inertia of a rectangular section about an horizontal axis through C.G?
57. b3d/12
58. bd2/12
59. b2d2/12
60. **bd3/12**
61. U.D.L stands for?
62. Uniaxial developed length
63. Uniformly developed loads
64. Uniaxial distributed loads
65. **Uniformly distributed loads**
66. Continuous beams are \_\_\_\_\_\_\_\_\_
67. Statically determinate beams
68. **Statically indeterminate beams**
69. Statically gravity beams
70. Framed beams
71. In simple bending, \_\_\_\_\_\_ is constant.
72. Shear force
73. Loading
74. Deformation
75. **Bending moment**
76. Maximum Shearing stress in a beam is at \_\_\_\_\_
77. **Neutral axis**
78. Extreme fibres
79. Mid span
80. Action of loading
81. Curvature of the beam is \_\_\_\_\_\_\_\_\_\_ to bending moment.
82. Equal
83. **Directly proportional**
84. Inversely proportional
85. Coincides
86. \_\_\_\_\_\_\_\_\_ of a beam is a measure of its resistance against deflection.
87. Strength
88. **Stiffness**
89. Deflection
90. Slope
91. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a column is the distance between the points of zero bending moments.
92. Slenderness ratio
93. Eccentricity
94. Radius of gyration
95. **Effective length**
96. In cantilever beam the deflection occurs at \_\_\_\_\_\_
97. **Free end**
98. Point of loading
99. Through out
100. Fixed end
101. A frame which is composed of members just sufficient to keep it in equilibrium, such frame is \_\_\_\_\_\_\_\_\_\_\_
102. Redundant frame
103. **Perfect frame**
104. Imperfect frame
105. Deficient frame
106. Which of the following stress can also be known as hoop stress?
107. Axial stress
108. Longitudinal stress
109. Fluid stress
110. **Circumferential stress**
111. The ratio of hoop stress to maximum shear stress is \_\_\_\_\_\_\_\_\_
112. 2
113. 3
114. **4**
115. 6
116. The tensile test is carried on \_\_\_\_\_\_\_\_ material.
117. **Ductile**
118. Brittle
119. Malleable
120. Plastic
121. Long columns fail due to \_\_\_\_\_\_\_\_\_\_\_\_
122. Direct stress
123. **Buckling stress**
124. Lateral stress
125. Tensile stress
126. The slenderness ratio is the ratio of effective length to least \_\_\_\_
127. Ultimate load
128. Actual length
129. **Radius of gyration**
130. Factor of safety
131. The slenderness ratio is \_\_\_\_\_\_\_\_ to critical stress.
132. Directly proportional
133. **Inversely proportional**
134. Equal
135. Transverse
136. The hooks law is valid only for \_\_\_\_\_\_\_\_\_
137. **Uni axial forces**
138. Bi axial forces
139. Tri axial forces
140. Lateral forces
141. Which of the following is also known as endurance limit?
142. Proportionality limit
143. Rupture limit
144. Elastic limit
145. **Fatigue limit**
146. Mathematically, strain energy = \_\_\_\_\_\_\_\_\_
147. Power
148. **Work done**
149. Young’s Modulus
150. Energy