



17. What is the tensile stress if a square rod of 10 mm side is tested for a tensile load of 1000 kg?

- A) 100 kg/mm<sup>2</sup>                      B) 10 kg /mm<sup>2</sup>  
C) 1 kg/mm<sup>2</sup>                      D) 1000 kg/mm<sup>2</sup>

18. Which law states that within elastic limit stress is directly proportional to strain?

- A) Charles law                      B) Joules law  
C) Newtons law                      D) Hooks law

19. Which is thermosetting plastic?

- A) Polystyrenes                      B) Vinyl polymers  
C) Celluloid                      D) Melamine resins

20. Which force acts on rivets?

- A) Compressive force                      B) Bending force  
C) Tensile force                      D) Shear force

21. What is the tensile strain if a force of 3.2 KN is applied to a bar of original length 2800 mm extends the bar by 0.5 mm?

- A) 0.0001867                      B) 0.0001968  
C) 0.0001687                      D) 0.0001786

22. What is the unit of strain?

- A) Kg/cm<sup>2</sup>                      B) Newton/metre<sup>2</sup>  
C) No unit                      D) Metre

23. What is the ratio of ultimate load to area of original cross section?

- A) Yield point                      B) Ultimate stress  
C) Youngs modulus                      D) Factor of safety

24. What is the term used for maximum stress attained by a material before rupture?

- A) Ultimate stress                      B) Tensile stress  
C) Working stress                      D) Compressive stress

25. What is the ratio between the change in dimension to its original dimension of the substance?

- A) Stress                      B) Poisson's ratio  
C) Strain                      D) Factor of safety