ITI Quiz - 10-Mar-2026 01:17 PM Q. ID: ITISKILL6940XC

March 2026 **Dr. J. J. Magdum ITI college sambhajipur** Question Paper

Student: Sanskar golangade
Score: 25/25 (100.00%) **Code: 9305**

1. Which is elastic material?

A) Nylon (Correct) B) Polystyrenes
C) Celluloid D) Polycarbonates

2. Which is thermo plastic material?

A) Butyl rubber B) Nylon
C) Neoprene **D) Vinyl polymers (Correct)**

3. What is the maximum percentage of stretch of its original length is allowable for elastic materials?

A) 100% B) 200%
C) 300% (Correct) D) 400%

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

A) Stress **B) Strain (Correct)**
C) Poisson's ratio D) Factor of safety

5. What is the unit of strain?

A) Kg/cm² B) Newton/metre²
C) Metre **D) No unit (Correct)**

6. What is the ratio of change in length to original length?

A) Linear strain (Correct) B) Lateral strain
C) Volumetric strain D) Poisson's ratio

7. What is the ratio between lateral strain and longitudinal strain?

A) Hooks law B) Young's modulus
C) Bulk modulus **D) Poisson's ratio (Correct)**

8. Which symbol is used to express change in length?

A) L **B) delta l (Correct)**
C) I D) e

9. Which one is the ratio of stress?

A) Load and area (Correct) B) Load and direction
C) Load and diameter D) Load and time

10. Which force acts on rivets?

A) Tensile force B) Compressive force
C) Shear force (Correct) D) Bending force

11. What is the formula for bulk modulus?

A) Tensile stress/Tensile strain B) Compressive stress/Compressive strain
C) Volumetric stress/Volumetric strain (Correct) D) Shear stress/Shear strain

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

A) Newtons law **B) Hooks law (Correct)**
C) Joules law D) Charles law

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

A) Tensile stress B) Compressive stress
C) Working stress **D) Ultimate stress (Correct)**

14. What is the ratio between ultimate stress to working stress?

A) Bulk modulus B) Young's modulus
C) Factor of safety (Correct) D) Modulus of rigidity

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

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

16. What is the ratio of shear stress to shear strain?

A) Modulus of elasticity **B) Modulus of rigidity (Correct)**
C) Bulk modulus D) Yield point

17. What is the ratio between stress and strain?

A) Yield point B) Factor of safety
C) Youngs Modulus (Correct) D) Poisson's ratio

18. Which force acts on crank shaft?

A) Shear stress **B) Torsional stress (Correct)**
C) Tensile stress D) Compressive stress

19. Which is thermosetting plastic?

A) Vinyl polymers
B) Polystyrenes
C) Celluloid
D) Melamine resins (Correct)

20. What force will be required to punch a hole of 10 mm dia in a 1 mm thick plate, if the allowable shear stress is 50N/mm²? (Pi = 22/7)

A) 1757 N
B) 1575 N
C) 1571.4 N (Correct)
D) 1577 N

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

A) 1 kg/mm²
B) 10 kg /mm² (Correct)
C) 100 kg/mm²
D) 1000 kg/mm²

22. 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) 0.0001786 (Correct)
B) 0.0001687
C) 0.0001867
D) 0.0001968

23. How much strain is developed in an iron rod of 1 metre length gets elongated by 1 cm, if a force of 100 kg is applied at one end?

A) 0.1
B) 0.01 (Correct)
C) 0.001
D) 0.0001

24. What is the youngs modulus if a wire of 2m long, 0.8 mm2 in cross section increases its length by 1.6 mm on suspension of 8 kg weight from it?

A) 1.25 kg/mm²
B) 12.5 kg /mm²
C) 125 kg/mm²
D) 12500 kg/mm² (Correct)

25. What is the safe stress if the ultimate stress of a material is 35 kg/mm² and factor of safety is 5?

A) 0.143
B) 0.7
C) 1.43
D) 7 (Correct)