WORKSHOP CALCULATION & SCIENCE TEST FOR THE MONTH OF JAN-26

January 2026   **GOVT ITI CHINCHOLI**   Question Paper

Duration: 30 Mins   **Total Marks: 10**   **ID: ITISKILL6409DU**

Student Name: _____   Roll No: _____

1. Which force acts on crank shaft?

A) Compressive stress   B) Tensile stress
C) Shear stress   D) Torsional stress

2. What is the ratio between stress and strain?

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

3. Which one is the ratio of stress?

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

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

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

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

A) l   B) e
C) L   D) delta l

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

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

7. 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/mm^2 B) 125 kg/mm^2
C) 12.5 kg $/mm^2$ D) 12500 kg/mm^2

8. What is the safe stress if the ultimate stress of a material is 35 kg/mm^2 and factor of safety is 5?

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

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

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

10. 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) 0.001   B) 0.1
C) 0.0001   D) 0.01