

GATE 2024 Mechanical (ME) Daily Practice Questions

Question 1: A final examination is the _____ of a series of evaluations that a student has to go through

1. **Culmination**
2. Consultation
3. Desperation
4. Insinuation

Question 2: The fluidity of molten metal of cast alloys (without any addition of fluxes) increases with increase in

1. Viscosity
2. Surface Tension
3. Freezing Range
4. **Degree of Superheat**

Question 3: The cold-forming process in which a hardened tool is pressed against a workpiece (when there is relative motion between the tool and the workpiece) to produce a roughened surface with a regular pattern is

1. Roll Forming
2. Strip Rolling
3. **Knurling**
4. Chamfering

Question 4: A wire of circular cross-section of diameter 1.0 mm is bent into a circular arc of radius 1.0 m by application of pure bending moments at its ends. The Young's modulus of the material of the wire is 100 GPa. The maximum tensile stress developed in the wire is _____ MPa.

Question 5: Water enters a circular pipe of length $L = 5.0$ m and diameter $D = 0.20$ m with Reynolds number $Re_D = 500$. The velocity profile at the inlet of the pipe is uniform while it is parabolic at the exit. The Reynolds number at the exit of the pipe is _____.