Question Bank (MID TEST – II)

1. Write the types of screw threads are used in power screw.
2. Calculate the example of Bell-Cranked lever for below given data:
   \( l = 300 \text{mm}, \ L = 400 \text{mm}, \ x = 100 \text{mm}, \ P = 400 \text{N}, \) Bending stress- 50MPa, Shear Stress- 40MPa
3. Derive the equation for torque required to raising the load by square threaded screw.
4. Derive the equation for torque required to lower the load by square threaded screw.
5. Write the definition of: (1) Efficiency of Square thread screw. (2) Welded Joint and Riveted Joint
6. Write the design procedure with equation (step by step) for Power screw below components:
   (1) Design of Screw for Spindle
   (2) Design of Nut
7. Write the difference between riveted and welded joint
8. Derive the equation for strength of single and double fillet welded joint
9. Write the type of Riveted joint with neat sketch of figure and material used for riveted joint
10. Derive the equation for strength of Parallel fillet welded joint