

Assignment 3

1. List a few important biometallic materials. Also provide their applicability as various implants in body.
2. Show the differences in terms of density, modulus, and corrosion resistance between the major types of metallic biomaterials.
3. What is the major problem in metallic implants?
4. List the typical special properties of Ta alloy.
5. How is the grain size measured in metallic biomaterials?
6. What is the role of grain refinement in affecting mechanical properties? List the processes that can be utilized for grain refinement?
7. Show a comparison between the longitudinal and transverse microstructure of cold-worked (rolled) steel.
8. Which type of steels possess superior corrosion resistance?