

## Basic manufacturing processes

### Assignment 1

Last date of submission 08-02-16

- 1) Compare following properties:
  - (a) Brittleness and Ductility
  - (b) Resilience and Toughness
  - (c) Malleability and Ductility
  - (d) Plasticity and Elasticity
  - (e) Fatigue and Creep.
- 2) Differentiate between:
  - (a) Brittle fracture and Ductile fracture
  - (b) Fatigue fracture and Creep fracture
- 3) Classify plain carbon steel on the basis of percentage of carbon with their properties and uses.
- 4) What is cast iron. Write a short note on various types of cast iron.
- 5) Why stainless steel is corrosion resistant. Differentiate between martensitic stainless steel and austenitic stainless steel.
- 6) Differentiate between normalizing and annealing.
- 7) Differentiate between carburising and cyaniding.
- 8) Give composition and uses of following alloys
  - (a) Muntz metal
  - (b) Babbit metal
  - (c) Bell metal
  - (d) Duralumin
  - (e) Gun metal
  - (f) Super high speed steel
  - (g) Nichrome.
- 9) Draw stress-strain diagram for ductile and brittle material
- 10) Differentiate between brass and bronze.