**BBDNITM**

**MECHANICAL DEPARTMENT**

**SESSION (2018-19)**

**Subject- Material Science [RME-301]**

**Assignment No. - 2**

**Short Answer Type question**

1. What do you understand by slip and twinning?
2. What is creep?
3. What is fatigue?
4. What is endurance limit?
5. Define the term Hardness, toughness, brittleness.
6. What is NDT?

**Long answer type question**

1. Draw and explain Stress-strain diagram showing ductile and brittle behaviour of materials.
2. What is creep is curve? Explain briefly Type I, Type II and Type III creep.
3. Explain at least two-methods of the hardness testing.
4. Draw and explain S-N curve. What is the significance of S-N curve?
5. What are the factors which affect the fatigue fracture?
6. What are the factors which affect the Creep fracture? how creep fracture is different from fatigue fracture.
7. Explain any one Non-destructive testing (NDT) of material.