S.B. Roll No.....

# ENGINEERING MATERIALS 3<sup>rd</sup> Exam/MECH/3053/Jan/2022 (FOR BATCH 2018 ONWARDS)

Duration: 1.15Hrs. M.Marks:25

### **SECTION-A**

## Q1. Attempt any three questions.

3x5=15

- i. Classify various engineering materials.
- ii. Write a short note on Fatigue and Creep.
- iii. What is Plastic deformation by slip?
- iv. State the purpose of Alloying.
- v. State the effect of alloying chromium on properties of steel.
- vi. Write a short note on copper.
- vii. What is the purpose of heat treatment?

#### **SECTION-B**

## Q2. Attempt any one question.

1x10=10

- a. What is deformation? Explain Elastic and Plastic deformation.
- b. Explain Cupola furnace with a neat sketch.
- c. Discuss Normalising in detail.
- d. What is Plastic Coating? How Plastic Coating is done?