

Exam.Code:0939

Sub. Code: 7044

1078

**B.E. (Mechanical Engineering)
Third Semester
MEC-305: Manufacturing Process**

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What is the function of flux in welding?
- b) Define hot working and cold working.
- c) Differentiate ductility and malleability?
- d) What is the composition of loam sand in foundry?
- e) What is the significance of 18/8 in stainless steel? (5x2)

UNIT – I

- II. a) Explain mechanical properties of engineering materials.
b) Explain with diagram wire drawing process and its application. (5,5)
- III. a) Differentiate punching and coining with diagram.
b) Write properties of Copper, Chromium and Nickel. (5,5)
- IV. a) Explain cast iron, pig iron and steel.
b) What is shot peening? Write its application. (5,5)

UNIT – II

- V. a) Explain causes and remedies of welding defects.
b) Explain pattern allowances. (5,5)
- VI. a) How metal solidification takes place in casting? Explain with sketch.
b) Differentiate TIG and MIG also write its application. (5,5)
- VII. a) Which polarity system is used in EAW? How metal transfer takes place in EAW?
b) How the moulding sand is prepared? Write composition of different moulding Sands. (5,5)

x-x-x