

Please write your Exam Roll No.

Roll No.

Online Mid Term Examination

FIRST SEMESTER [B. TECH], FEB-2021

Paper code: ETME-105

Subject-Manufacturing Process

Time: 1 hrs

Maximum Marks: 30

Note-Attempt any two questions out of three Question

Q1. Answer any five from the given below (5 x 3 = 15)

- (a) Classify plain carbon steel on the basis of percentage of carbon
- (b) Write important properties of the green sand used in the foundry shop
- (c) Define toughness and stiffness of the material
- (d) For ductile material, toughness is measure.....
- (e) Hot tearing in metal casting is due to.....
- (f) Hot chamber casting is not suited for.....

Q2. Answer any five from the given below (5 x 3 = 15)

- (a) Compare between hot working and cold working
- (b) Write short notes on following:
 - (i) Fullering
 - (ii) Upsetting
 - (iii) Strain hardening
- (c) For wire drawing operation, the work material should essentially be.....
- (d) Compare drop forging over press forging
- (e) Differentiate between closed die forging and open die forging
- (f) Write the difference between extrusion and wire drawing

Q3. Answer any three (3 x 5 = 15)

- (a) Gray cast iron block 200 x 100 x 10 mm are to be cast in sand molds. Shrinkage allowance for pattern making is 1 %. Calculate the ratio of the volume of the pattern to that of the casting.
- (b) Describe with neat sketch hot chamber and cold chamber process in die casting
- (c) Differentiate between tapping and dieing
- (d) Classify various files used in fitting shop

END