

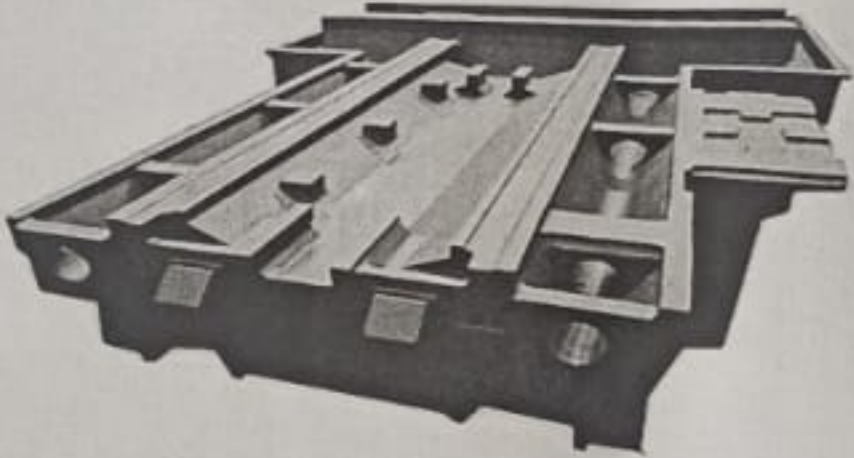


SCHOOL OF MECHANICAL ENGINEERING
CONTINUOUS ASSESSMENT TEST - I
FALL SEMESTER 2025-2026

Programme Name & Branch	: B.Tech - Mechanical Engineering, Smart Manufacturing, and Electrical Vehicle
Course Code	: BAMEE101
Course Name	: Manufacturing Processes
Faculty Name(s)	: Dr.T.Sampath Kumar, Dr..R. Ramanujam, Dr. Chinmaya P. Mohanty, Dr. G. Sundaramali, Dr. Venkateshwarlu B
Class Number(s)	: VL2025260106888, 6896, 6955, 6911, 7520
Date of Examination	: 19.08.25
Exam Duration	: 90 minutes
Maximum Marks: 50	

General instruction(s):

- Answer All Questions
- M - Max mark; CO - Course Outcome; BL - Blooms Taxonomy Level (1 - Remember, 2 - Understand, 3 - Apply, 4 - Analyse, 5 - Evaluate, 6 - Create)
- Course Outcome Statements:
CO1: Explain the principles and steps involved in casting and particulate processing, including powder metallurgy and ceramic techniques.
CO2: Describe forming and welding processes, identify common defects, and discuss basic inspection methods.

Q. No	Question	M	CO	BL
1./	Discuss the casting process with neat sketch used for Machine Tool Bases as shown in Fig.1  Fig. 1.	10	01	BL4
2./	Explain briefly all the basic steps involved in the casting process in which the pattern is melted or lost for making Jewellery Ornaments with neat sketch.	10	01	BL4
3./	What will be the solidification time required for a 1000 mm diameter and 30 mm height casting of aluminium if the mould constant is 2.1 sec/mm^2	10	01	BL4
4./	What is the significance of backup rollers used in rolling mills and explain why multiple backup rollers are required in some of the rolling mills?	10	02	BL3
5./	Distinguish between open die and closed die forging processes and state how flash less forging is carried out with neat sketch?	10	02	BL3