MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY,BHOPAL

MID TERM EXAMINATION, NOVEMBER-2024

Course: B. Tech. **Semester: I**
Subject: Manufacturing Science **Subject Code: ME-24109**
Time: 1.00 Hour **Maximum Marks: 20**
Note: 1. Attempt all questions.
2. Draw diagram wherever applicable.

Q.No	Question	CO/BT	Marks
1	(a) As per the industrial applications, list the materials commonly used for making the patterns. Enumerate the criteria used to select the material for pattern making. Write the types of pattern allowances. OR (b) What are the key stages involved in the carpentry process to make a mortise/tenon/cross/ L joint. step-by-step? Also draw the sketch of finished joints obtained by carpentry.	CO 1&3/ BT1	05
2	(a) Describe the different types of working and measuring tools commonly used in the fitting or carpentry sections. Support your explanation with clear and labeled sketches of any two tools. OR (b) In view of industrial application, explain briefly the forge and fusion welding. Also state the reason for coating of electrode.	CO 3&4/ BT2,3	05
3	(a) Draw neat sketches to explain the differences between solid and split patterns. Provide the suitable examples for each type of patterns used in industries. OR (b) Draw the flow chart to explain the process of fitting for making a L-shape sheet metal joint. Also draw the neat sketches of measuring tool used in fitting shop.	CO 2&4/ BT2,3	05
4	(a) How do carpentry, casting, fitting, and welding processes interconnect and complement each other in the production of a complete product, and what roles does each process play in achieving the final assembly? Provide suitable example. OR (b) With the help of suitable industrial application explain the seasoning of wood. Also state the reason for the seasoning of wood.	CO 1,2&3/ BT1,2	05