Code No.: ME304PC

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CMR ENGINEERING COLLEGE: : HYDERABAD UGC AUTONOMOUS

II-B.TECH-I-Semester End Examinations (Supply) - February- 2024 PRODUCTION TECHNOLOGY (MECH)

[Time: 3 Hours] [Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

	PART-A	(20 Marks)
1. a) b) c) d) e) f) g) h) i)	List the various types of casting process. What are the different types of patterns? Explain the factors to be considered in selection of weld joint. What are the safety precautions observed in welding? What is soldering process? Why do most welding failures occur in Heat affected zone? What are wrought products? Outline the functions of die angle in wire drawing. Define extrusion. What are defects in forged parts?	[2M] [2M] [2M] [2M] [2M] [2M] [2M] [2M]
2.	Explain the principle of investment casting process with neat sketch.	(50 Marks) [10M]
3.	OR Explain different types allowances used in patterns making.	[10M]
4.	Explain the principle of thermit welding with neat sketch. OR	[10M]
5.	Explain the principle of resistance welding with neat sketch.	[10M]
6.	Write the principle of operation of explosive welding process with neat sketch. OR	[10M]
7.	Differentiate between friction welding and induction welding.	[10M]
8.	Explain recrystallization and grain growth processes and their effect on properties metal worked component.	of a [10M]
9.	Write a note on control of hot rolling mills.	[10M]
10.	Explain different forging methods with neat sketches.	[10M]
11.	What are the various equipment used in extrusion of metals? Briefly describe them	n. [10M]