Code No.: ME304PC	R20	H.T.No.			8	R						

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–I–Semester End Examinations (Supply) - December- 2025
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)	List the advantages of casting process.	[2M]
b)	What are the functions of patterns?	[2M]
c)	What is carburizing flame?	[2M]
d)	What are the basic types of weld joints?	[2M]
e)	What is Brazing?	[2M]
f)	Explain briefly the fluxes and filler rods used in gas welding.	[2M]
g)	What is meant by strain hardening?	[2M]
h)	How would you differentiate hot and cold rolling processes?	[2M]
i)	How do we make collapsible tubes?	[2M]
j)	Write a short note on forging hammer.	[2M]

PART-B **(50 Marks)**

2.	Explain the working principle of shell mould casting, hot chamber and cold chamber die casting process.	[10M]
	OR	
3.	List several ways to clean casting surfaces, also write advantages and dis- advantages of each.	[10M]
4.	Write the difference between Arc welding and forge welding.	[10M]
	OR	
5.	Explain the principle of resistance welding with neat sketch.	[10M]
6.	Explain the inert-gas metal arc welding. How does it differ from metal arc welding?	[10M]
	OR	
7.	Explain destructive and non- destructive testing of welds.	[10M]
8.	What are the main characteristics of hot working as compared with cold working processes?	[10M]
	OR	
9.	Derive an expression for the force acting on metal during rolling.	[10M]
10.	Explain different forging methods with neat sketches.	[10M]
	OR	
11.	What are the main characteristics of hot extrusion as compared with cold extrusion?	[10M]

****