Code No.: ME304PC

[Time: 3 Hours]

R20

H.T.No.

8 R

[Max. Marks: 70]

## CMR ENGINEERING COLLEGE: : HYDERABAD UGC AUTONOMOUS

## II-B.TECH-I-Semester End Examinations (Supply)- June- 2022 PRODUCTION TECHNOLOGY

(MECH)

Note: 1. Answer any <u>FIVE</u> questions. Each question carries 14 marks.

	2.	All questions carry equal marks.  Illustrate your answers with NEAT sketches wherever necessary.	
	J.	musirate your answers with typin statement where	5X14=70
1.	a)	Describe various materials used for making patterns. What are its merits &	[7M]
	b)	demerits? Sketch and explain the features of different types of patterns.	[7M]
2.	a) b)	What are the applications of centrifugal casting? Explain investment casting process .discuss advantages and applications of the process.	[7M] [7M]
3.	a) b)	Analyze the features of sub merged arc welding. List out the Advantages, Limitations and applications of resistance welding?	[7M] [7M]
4.	a) b)	Discuss the characteristics features of MIG welding process.  Compare and contrast solid welding process with fusion welding process.	[7M] [7M]
5.	a) b)	Derive an expression for forces and power required for blanking process?  Derive the drawing force required to reduce the cross sectional areas.	[7M] [7M]
6.	a) b)	Explain about drop forging and rotary forging in details. What is extrusion? derive an expression for extrusion force.	[7M] [7M]
7.	a) b)	Explain laser welding, also mention it's applications? Explain briefly about friction stir welding?	[7M] [7M]
8.	a)	What are the difference between thermit welding and Forge welding with	[7M]
	b)	examples? Write the merits and demerits of gas welding?	[7M]

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