Total No. of Questions : 8] SEA	T No. :
PA-3993	[Total No. of Pages : 1
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[5931]-71	
S.E. (Robotics and Automation)	
MANUFACTURING TECHNOLOGY	
(2019 Pattern) (211502) (Semester - I)	
)
Time: 1 Hour]	[Max. Marks: 30
Instructions to the candidates:	
1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.	3
2) Neat Diagram must be drawn wherever necessary.	
3) Figures to the right side indicate full marks.	
4) Assume Suitable data if necessary.	
5) Use of Logarithmic Table, Slide rule is Electronic pock	et calculator is allowed.
S. W.	
Q1) What are the different types of patterns used in foundries	es? [8]
OR	
Q2) Brief about stress concentration and explain how to rele	ease the stresses [8]
	[.]
Q3) What is plastic deformation in ductile material?	[7]
OR	[,]
Q4) Explain in brief sand Casting Process.	·[ଫ ୁ
Q4) Explain in oner sand custing inocess.	P. J.
Q5) What are the four major drawbacks of hot working?	[8]
OR	

Q6) Describe in brief: Theory of plasticity and yield criteria.

[8]

Q7) What are the methods of cleaning and finishing of forging dies? Why it is important. to clean the dies? [7]

OR

Q8) Explain the concept roll flattening and roll cambering.

[7]

