23056

M.Tech 1st Semester (Mech. Engg.) (Manufacturing and Automation) Examination-May, 2014

FOUNDRY TECHNOLOGY

Paper 835/M-609-A

Time: 3 hours

Max. Marks: 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note: Attempt any **five** questions. All questions carry equal marks.

1. (a) Define the Foundry? What are the advantages and limitations of foundry?

10

(b) What is solidification of casting?

10

2.	(a) What are various mould	design		
	considerations?	10		
	(b) What is castability and factors f	avouring		
	castability?	10		
3.	Explain the following:			
	(a) Melting furnace for the cast iron	10		
-	(b) Traffic rules applications	10		
4.	What is the role of gating system? Explain in			
	detail the objectives, practical rules	of gating		
	system. Also explain types of gates.	20		
5.	(a) What is gravity die casting?	10		
	(b) What is steel mould casting?	10		
6.	(a) What is casting inspection?	10		
	(b) What is repair and salvage of cas	sting?		
		10		

7.	Explain	the	following	:
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(a)	Quality control of casting			10
(b)	Centrifugal casting			10
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8. Write short notes on the following:

(a) Heat treatm	- 10		
(b) Modernizati	on of casting	10	