

Roll No. ....

**23005/23056**

**M. Tech. Manufacturing Tech. &  
Automation 1st Semester (Mech. Engg.)  
Examination – January, 2012**

**FOUNDRY TECHNOLOGY**

**Paper : M-609-A**

*Time : Three hours ]*

*[ Maximum Marks : 100*

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*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 examination.*

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

1. What do you mean by "Foundry Technology" ?  
Explain the advantage and limitations of Foundry Technology and other manufacturing processes. 20
  
2. (a) What do you mean by "castability" ? Explain the various factors favouring the castability ? 10  
(b) Explain in detail the furnace which is used for the melting of cast steel. 10

3. Write short notes on the following :
- (i) Pattern and core design considerations, 10
  - (ii) Traffic rules applications. 10
4. Write short notes on the following :
- (i) Types of pouring basin, 10
  - (ii) Type of gates. 10
5. Explain the Investment Casting, centrifugal casting and continous casting in detail. 20
6. Write short notes on the following :
- (i) Surface cleaning of casting, 10
  - (ii) Casting inspection. 10
7. Explain the Heat treatment and quality control of casting in detail. 20
8. Write short notes on the following :
- (i) Tubes of risers, 10
  - (ii) Pollution control in foundry. 10
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