

CT Inst. of Eng

Roll No. 

Total No. of Pages : 2

Total No. of Questions : 09

B.Tech. ((ME)/(IE-2008-2009 Batch))/(PE-2004-2010 Batch) (Sem.-3<sup>rd</sup>)**MANUFACTURING PROCESS-I**

Subject Code : PE-209

Paper ID : [A0806]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

**SECTION-A****I. Write briefly :**

- a) Classify the welding processes.
- b) Write down the stages of casting.
- c) What is arc blow?
- d) What are the main ingredients of moulding sand?
- e) Write down the functions of gating.
- f) Classify the electrodes used in various welding processes.
- g) Write down the principle of electroslog welding.
- h) Define modulus of a casting.
- i) Write down the products of die casting, centrifugal casting, shell moulding and continuous casting.
- j) Define permeability of moulding sand.

**SECTION-B**

2. State the similarities and dissimilarities of casting
3. What are the functions of a riser? Write down design.
4. Compare MIG and TIG welding processes.
5. Explain briefly the factors that should be considered in welding process.
6. Name any three pattern allowances. State their purpose.

**SECTION-C**

7. Explain briefly the principle and major equipment used in gas welding. Also state the advantages and limitations.
8. Compare investment casting and shell moulding of view of method and applications.
9. Write short notes on :
  - (a) Welding defects
  - (b) Casting defects.

