SHAHEED	BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR
ROLL NO:	
Total number	of questions:09

B. Tech. -ME/ 3rd Sem

# Manufacturing Process- I

Subject Code :PE-209

Paper ID : 10721

Batch:2004 onwards/2011onwards/2015 onwards[Tick Relevant]

Time allowed: 3 Hrs

Max Marks:60

#### **Important Instructions:**

- Section A is compulsory
- Attempt any four questions from section B
- Attempt any two questions from section C
- Assume any missing data
- Additional instructions, if any

#### PART A (2×10)

- Q. 1. Answer in brief:
  - (a) How would you define gas welding?
  - (b) Why does porosity have detrimental effect on mechanical properties of castings?
  - (c) Why quality of weld is produce better in submerged arc welding?
  - (d) How would you define arc stability?
  - (e) How would you explain the difference between short and long freezing range?
  - (f) How would you explain the difference between short and long freezing range?
  - (g) How would you explain core baking?
  - (h) How would you explain welding joint embrittlement?
  - (i) How would you explain the functions of filler material?
  - (j) How would you riser?

### PART B (5×4)

- Q. 2. How would you explain Thermit welding?
- Q. 3. How would you explain the process, advantages and limitations of centrifugal casting process?
- Q. 4. How would you explain the solidification process Steel?
- Q. 5. How would you differentiate brazing & soldering?
- Q. 6. How would you explain the factors through which directional solidification of casting can be controlled?

## PART C (10×2)

- How would you explain the different elements of a gating system & how riser & gating system Q. 7. is designed?
- How would you explain with the help of diagram resistance welding and also explain its types? Q. 8. Q. 9.
- How would you explain the equipment required for oxy-acetylene welding and cutting?