

Roll No. 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (IE-2008 & 2009 Batches / ME) (Sem.-4)

**MANUFACTURING PROCESS-II**

Subject Code : ME-210

Paper ID : [A0812]

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**

**1. Answer briefly :**

- i. List the main rolling variables.
- ii. Which manufacturing process is used for manufacturing tubes? Explain.
- iii. What do you mean by fullering?
- iv. Differentiate between forward extrusion and backwards extrusion.
- v. What is high velocity forming?
- vi. What do you mean by tool signature?
- vii. How the lathe machine is specified?
- viii. Differentiate shaping and planing operations.
- ix. What is centreless grinding?
- x. Give the composition of 18-4-1 HSS.

## **SECTION-B**

2. Explain the working of sendzimir rolling mill in detail.
3. Discuss in detail the effect of various extrusion variables on extrusion process.
4. Explain the working of quick return mechanism used in shaping machine.
5. Differentiate between up and down milling operations.
6. Write notes on the following :
  - (a) Spade drill
  - (b) Deep drawing

## **SECTION-C**

7. What are the various factors to be considered in selection of grinding wheel? Discuss each in detail.
8. Explain in detail the various methods used for producing powders for powder metallurgy process.
9. Explain the following :
  - (a) Press Working tools
  - (b) Jig boring