Roll No. Total No. of Pages: 02

Total No. of Questions: 09

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

B. Tech. (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.
- 2. Attempt any FOUR questions from SECTION-B.
- 3. Attempt any TWO questions from SECTION-C.

SECTION-A $(10 \times 2 = 20 \text{ Marks})$

- 1. (a) Differentiate between Hot Forging and Cold Forging.
 - (b) List various types of products obtained by rolling process.
 - (c) What is the method of obtaining seamless tubes?
 - (d) Sketch the schematic diagram of extrusion process?
 - (e) Differentiate between forward and backward extrusion process.
 - (f) Explain the advantage of briquelting process.
 - (g) Discuss the composition of a CBN tool.
 - (h) What is the importance of chiesel edge in a twist drill?
 - (i) Briefly describe the process conventional milling.
 - (j) Give the nomenclature of grinding wheels.

SECTION-B $(4 \times 5 = 20 \text{ Marks})$

2. Explain metal forming process used for making a headed nut.

- 3. What is the deep drawing process? On what factors is the drawing force dependent.
- 4. What are the typical coating process for coated tools used ? Discuss the characteristics of various coated tools.
- 5. Explain the mechanism of differential indexing used in milling machines.
- 6. Discuss the process of hydrostatic wire extrusion.

SECTION-C $(2 \times 10 = 20 \text{ Marks})$

- 7. What is meant by the kniematic scheme of Lathe machines? What are the common progression ratios used for gear box of Lathe machine. Discuss with suitable example.
- 8. Explain the steps involved in Powder Metallurgy. Give the advantages of this process.
- 9. What are the main variables of rolling process? Give the various defects and their reasons.