

**Manufacturing Processes-II**  
**(ME-212, Dec-07)**

**Note:** Section A is compulsory. Attempt any four questions from Section B and any two from Section C.

**Section-A**

1. a) Define rolling.  
b) What is the difference between wire and tube drawing?  
c) What is difference between press forging and drop forging?  
d) Define bending.  
e) Define powder metallurgy.  
f) Write the properties of high carbon steel.  
g) Write the function of lubricants in metal cutting.  
h) Differentiate between shaping and planing machine.  
i) Define boring operation.  
j) Write the composition of grinding wheel.

**Section-B**

2. Classify the metal forming processes.
3. Explain in detail extrusion process with the help of diagram.
4. Define twist drill and explain various angles and terms related to twist drill.
5. Write note on various lathe operations.
6. Write the principle of milling machine and write its types and explain any one in detail.

**Section-C**

7. (a) Classifies the rolling mills and writes rolling defects.  
(b) Write the function of coolants and what is the effect of coolants on speeds and feed in metal cutting.
8. (a) Write note on working principle of shaper and shows its main parts with the help of diagram.  
(b) Explain the principle and working of slotting machine with help of diagram.
9. Write a short note on
  - (i) Deep drawing
  - (ii) Main variable in rolling
  - (iii) Cutting tool material
  - (iv) Lubricants