



Manufacturing Engineering - II (1130)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Figures to the right indicate full marks.
6. Draw neat sketches wherever necessary.

1. Solve any two.

- a) Describe the Merchant's force circle with different force relations. **10**
- b) Describe different types of chips. **10**
- c) With the help of neat sketch describe various types of tool wears. **10**

2. Solve any two.

- a) Differentiate between Jigs and fixtures. **10**
- b) Explain different types of Bushes used in Jigs. **10**
- c) Design a Milling fixture for a component of your choice. **10**

3. Solve any two.

- a) Describe simple die and compound die. **10**
- b) Design a strip layout for 'I' section. **10**
- c) Explain designing steps for drawing die. **10**

4. Solve any two.

- a) Define CNC and explain various steps of programming CNC. **10**
- b) Classify CNC ? Explain steps in CNC manufacturing with flow diagram. **10**
- c) Explain 'Geometric statement' and 'Motion statement' of APT programming. **10**

5. Solve any two.

- a) With the help of neat sketch explain working principle, advantages, limitations of lapping process. **10**
- b) Explain construction and working of Laser Beam Machining. **10**
- c) Write short notes on. **10**
 - i) Hening.
 - ii) EBM.
