

**SIES Graduate School of Technology, Nerul**

Subject: Production Process - III

Semester: V

Class: T.E.(Mechanical)

Academic Year: 2015-2016

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**ASSIGNMENT NO. 1**

- Q1. Explain types of automats and its tooling.
- Q2. Write a short note on: Mass production machines.
- Q3. Write a short note on: Transfer line and transfer machining. Also explain various types of transfer machines.
- Q4. What are special purpose machines?
- Q5. Comment on High speed machines.

**ASSIGNMENT NO. 2**

- Q1. Discuss the different press working operations.
- Q2. Write in brief about 'scrap strip layout'.
- Q3. Explain various types of bending dies. Also explain bend allowance and method of reducing spring back in bending.
- Q4. Compare compound and progressive die with neat sketches.
- Q5. What factors should be considered for selecting appropriate press for a given job? Discuss the method of reducing cutting forces in press tool with neat sketches.

**ASSIGNMENT NO. 3**

- Q1. Explain different types of jigs and fixtures.
- Q2. Write short note on: Types of bushes.
- Q3. Compare jig & fixture, and explain 3-2-1 method of location. Also explain principles of pin locations.
- Q4. Explain different types of locating and clamping devices for Jigs and Fixtures.
- Q5. Explain design principles common to jigs and fixtures.

### **ASSIGNMENT NO. 4**

- Q1. Explain in detail: Plasma Arc Machining (PAM).
- Q2. Write detailed notes on: Abrasive Jet Machining.
- Q3. Compare EDM and ECM in detail.
- Q4. Explain the construction, working, application of Ultrasonic Machining process. Discuss its advantages and disadvantages.
- Q5. Enlist the different types of non-conventional machining processes. Explain Laser Beam Machining (LBM).

### **ASSIGNMENT NO. 5**

- Q1. Write a short note on: Innovative mold components.
- Q2. Explain the basic concepts of mold standardization.
- Q3. Explain the concept of split molds.
- Q4. Explain the concept of three plate molds.
- Q5. Write a short note on: Basic systems of the mold.

### **ASSIGNMENT NO. 6**

- Q1. Write a short note on: Flexible Manufacturing Systems (FMS).
- Q2. Write a short note on: Agile supply chain management.
- Q3. Comment on: Application of IT/IS concepts in Agile Manufacturing.
- Q4. Explain the Integration of Product/Process Development in case of Agile Manufacturing.
- Q5. Write a short note on: Agile Manufacturing.

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