

Roll No.

23055

**M.Tech. 1st Sem. (Mech. Engg.)
(Manufacturing & Automation)
Examination-December, 2016**

**DESIGN PLANNING AND CONTROL OF
PRODUCTION SYSTEMS**

Paper : 834

Time : 3 hours

Max. Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt any **five** questions. All questions carry equal marks.

1. (a) What is the aim of production system ?
Explain in detail. (10)
- (b) What is the role of life cycle approach to
production management ? (10)
2. (a) Explain the generalized model of
production system. (10)

- (b) Explain the development process of new product line. (10)
3. Explain the following:
- (i) Use of decision making (10)
 - (ii) Assembling line balancing concept (10)
4. (a) What is break-even analysis? What is its importance? (10)
- (b) What is systematic layout planning? What are its objectives? (10)
5. What is forecasting? What are its different types? Explain the importance and objectives of forecasting. (20)
6. (a) What is MRP? What are its different objectives? (10)
- (b) Explain the importance of standard error of estimate. (10)
7. (a) Define sequencing and scheduling. Give the criteria for sequencing. (10)

- (b) Explain the n job 2 machine, n job 3 machine concept in detail. (10)

8. Write short notes on the following:

- (i) Element of monitoring (10)
- (ii) MRP model (10)