Marks: **20**	Unit Test-1

Subject: Production Planning & Control Duration: **01 hour**

Class: **BE, Sem VII** Branch: **Mechanical**

Q.1. Attempt any four of the following five questions: (2marks x 4 = 8 marks)

a. What is the difference between production planning and production control?

b. What is the difference between scheduling and loading?

c. What are the basic categories of forecasting methods?

d. State the difference between job production and batch production.

e. What are the advantages of Layout by Fixed Position?

Q.2. Attempt any four of the following five questions: (6 marks x 2 = 12 marks)

a. Five jobs are to be assigned to five operators such that the total processing time is minimized. The matrix entries represent the processing time in hours.

		Operators				
		1	2	3	4	5
Jobs	1	10	12	15	12	8
	2	7	16	14	14	11
	3	13	14	7	9	9
	4	12	10	11	13	10
	5	8	13	15	11	15

Which job should be assigned to which operator? What will be the corresponding processing time?

b. There are seven jobs, each of which have to go through the machines A and B in the order AB. Processing times in hours are as given in the table below:

Job	1	2	3	4	5	6	7
Machine A	3	12	15	6	10	11	9
Machine B	8	10	10	6	12	1	3

Determine the sequence of these jobs that will minimize the total elapsed time. Find the total elapsed time. Find the idle time for the machines A and B.

c. The following data gives the sales of a company for various years. Fit the straight line. Forecast the sales for the years 1998 and 1999.

Year	1989	1990	1991	1992	1993	1994	1995	1996	1997
Sales(,000)	13	20	20	28	30	32	33	38	43