BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI

(MID SEMESTER EXAMINATION)

CLASS: BE **SEMESTER : VI**
BRANCH: PRODUCTION **SESSION : SP/17**

SUBJECT: PE6005 PRODUCTION PLANNING AND CONTROL

TIME: 1.5 HOURS **FULL MARKS: 25**

INSTRUCTIONS:

1. The total value of the questions are 30 marks.
2. Candidates may attempt for all 30 marks.
3. In those cases where the marks obtain exceed 25 marks. The excess will be ignored.
***4*. Before attempting the question paper, be sure that you have got the correct question paper.**
5. The missing data, If any, may be assumed suitably.
6. Nothing should be written on front or back of the question paper except tick marking.

Q1. (a) How does production management differ from operation management? [2]
(b) Discuss with examples the various manufacturing processes. State the distinguishing features of any two of them. [3]

Q2. (a) Define forecast, and explain the characteristics which are common to all forecasts. [2]
(b) The sales of pen of ABC Pvt. Ltd. For last 13 quarters is as under: [3]
i) plot on a graph to demonstrate the presence of seasonal pattern.
ii) Isolate secular trend from the above figures.
iii) Establish magnitude of seasonal variation.
iv) Extrapolate demand for the year 1995.

Year	Sales			
	Jan-Mar	Mar- June	June-Sept	Sept-Dec
1991	1380	480	430	1273
1992	1620	640	620	1580
1993	1780	800	750	1950
1994	2300			

Q3. (a) What is meant by aggregate production planning? Why is it required? [2]
(b) Discuss various steps of dispatching procedure for each operation sequence. [3]

Q4. have 5 jobs, each of which must go through the 2 machines A and B in the order AB. [5]
Processing times in hrs are given in the table below. Determine sequence for the five jobs that will minimize the elapsed time T and total idle time on Machine B.

Job No	1	2	3	4	5
Machine A	5	1	9	3	10
Machine B	2	6	7	8	4

Q5. (a) Explain progress control. [2]
(b) Dispatching function executes planning functions. Explain. [3]

Q6. (a) Write Short notes on : [5]
a) Plant Lay out b) Cellular Manufacturing c) Routing
d) Product Mix e) Reconfigurable Manufacturing System

*******01.03.17*****M**