## 2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

## I V B.TECH I I SEMESTER SUPPLEMENTARY EXAMINATIONS PRODUCTION PLANNING AND CONTROL (MECHANICAL ENGINEERING)

## APRIL/MAY 2006

TIME 3 HOURS MARKS: 80

## Answer any FIVE Questions All Questions carry equal marks

1. (a) Define:

i. Production

ii. Production Planning

iii. Production Planning and Control

(b) Write about the Principles of Production Planning and Control.

2. List the Production / operations management problems and key decisions in day to day operations. Explain briefly.

3. (a) Explain when judgmental techniques are used in forecasting.

(b) Explain when casual forecasting method is used.

4. (a) Explain how ABC analysis is useful in a foundry unit?

(b) Explain how VED analysis is applicable for spare parts management?

5. (a) Explain, in detail the procedural steps involved in MRP.

(b) State and explain the functions served by MRP.

6. (a) Explain the terms forward scheduling and backward scheduling.

(b) Explain with a neat sketch how Gantt chart is used to show schedules. Explain the symbols used in drawing Gantt chart.

7. (a) Define critical ratio.

(b) Today is day 22 on production control calendar and 4 jobs are on order as shown.

Job Due date Work day remaining A 28 8

B 26 2

C 24 2

D 30 12 Determine the critical ratio for each job and assign priority ranks.

8. Briefly explain the difference types of follow up.