

G 1173

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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Mechanical Engineering

PRODUCTION PLANNING AND CONTROL (M)

(Regular/Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

Each question carries 4 marks.

1. Explain correlation analysis.
2. Explain need for PPC.
3. Explain bill of materials.
4. Explain benefits of MRP.
5. Brief Johnson's rule.
6. What is meant by Job-flow time ?
7. Briefly explain throughput in stores management.
8. Explain role of IT in SCM (Supply Chain Management).
9. What are the duties of despatch ? Discuss.
10. What is master scheduling ?

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. (a) Discuss the various criteria for selecting time series methods.

Or

- (b) Demand for scooter from January to June is given. Calculate the demand for July using simple moving average method :

Months	: Jan.	Feb.	Mar.	Apr.	May	June
Demand	: 108	112	200	100	150	175

12. (a) Explain how a master production schedule developed.

Or

- (b) What is process planning ? Explain its various steps.

Turn over

13. (a) Explain with suitable example the processing n jobs through three machines.

Or

(b) The American machine company receive an order to repair 5 motors were damaged. The motors will be repaired at 2 work stations in the following manner.

WS1 → Dismantle and clean

WS2 → Replace parts, testing :

Motor		WS1	WS2
M1	...	12 hrs.	22 hrs.
M2	...	4 hrs.	5 hrs.
M3	...	5 hrs.	3 hrs.
M4	...	15 hrs.	16 hrs.
M5	...	10 hrs.	8 hrs.

Find out optimal sequence.

14. (a) Discuss the components of integrated material management.

Or

(b) Explain the following in SCM :—

(i) Inventory control.

(ii) Supply contracts.

(iii) Distribution strategies.

(iv) Out sourcing.

15. (a) Write a note on algorithms used for flow shop scheduling.

Or

(b) What is meant by scheduling ? With a suitable example, explain the scheduling done in an industry.

(5 × 12 = 60 marks)