

22/12/2022

Reg. No.																			
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Question Paper Code	11509
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B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022
Sixth Semester
Production Engineering
IE8693 - PRODUCTION PLANNING AND CONTROL
(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|------------------------------------------------------------|-------------------------------|
| 1. Define Production Planning and Control. | 2,K1,CO1 |
| 2. Explain about design for manufacture. | 2,K2,CO1 |
| 3. Define Work Study. | 2,K1,CO2 |
| 4. What do you understand by micro motion study? | 2,K2,CO2 |
| 5. List the factors affecting the selection of batch size. | 2,K1,CO3 |
| 6. What is Process Planning? | 2,K2,CO3 |
| 7. Differentiate aggregate planning and master scheduling. | 2,K2,CO4 |
| 8. What is scheduling? | 2,K1,CO4 |
| 9. What is Kanban system? | 2,K1,CO5 |
| 10. Define EOQ. | 2,K1,CO5 |

PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

- | | |
|-------------------------------------------------------------------------------------|-----------|
| 11. a) Discuss in details the various functions of production planning and control. | 13,K2,CO1 |
| OR | |
| b) Briefly explain the types of production systems. | 13,K2,CO1 |
| 12. a) Describe about Method study and its procedure in detail. | 13,K2,CO2 |
| OR | |
| b) Explain the concept of Predetermined motion time standard with examples. | 13,K2,CO2 |
| 13. a) Explain the various steps involved in value analysis. | 13,K2,CO3 |

OR

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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b) Discuss in detail about quantity determination in batch production with suitable examples. 13,K2,CO3

14. a) Explain the concept, inputs, characteristics, working, output and benefits of MRP. 13,K2,CO4

OR

b) Explain Line of balance in detail with suitable example. 13,K2,CO4

15. a) What do you mean by ABC analysis? Explain about it in detail and apply with numerical example. 13,K2,CO5

OR

b) Explain in detail about effect of demand on inventories. 13,K2,CO5

PART - C (1 × 15 = 15 Marks)

16. a) Five jobs are to be processed on three machines. The processing times in hours are given below. Determine the optimal sequence of jobs so that total elapsed time is minimized. 15,K3,CO4

Job	J1	J2	J3	J4	J5
A	5	7	6	9	5
B	2	1	4	5	3
C	3	7	5	6	7

OR

b) Explain in detail about computer integrated production planning system. 15,K3,CO5