

INDUSTRIAL ENGINEERING

Paper-ME-307 N

Time allowed : 3 hours]

[Maximum marks : 75

Note : Attempt any five questions, selecting at least one question from each unit.

Unit-I

1. Write briefly on steps and procedure to do method study. What factors affect the selection of a process for carrying out method study? 15
2. Write briefly on :
- (a) Performance Rating. 8
- (b) SIMO Charts. 7

Unit-II

3. Describe various preplanning activities. Discuss the concept of master schedule, daily schedule and Gantt charts. 15
4. Write briefly on 'classical organization theory' and 'modern organization theory'. Discuss characteristics of a good organization. 15

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[Turn over

Unit-III

5. Make a forecast for the year 2020 for the given data by time series analysis :

| Year | Quarter | Sales (kg) |
|------|---------|------------|
| 2018 | 1 | 156 |
| | 2 | 178 |
| | 3 | 140 |
| | 4 | 187 |
| 2019 | 1 | 168 |
| | 2 | 187 |
| | 3 | 172 |
| | 4 | 196 |
| 2020 | 1 | 185 |
| | 2 | 199 |
| | 3 | 188 |
| | 4 | 216 |

15

6. A company uses 3200 castings per month. Each casting costs rupees 5,200 and inventory carrying cost is 8 percent while ordering cost is rupees 1450 per order. Calculate EOQ, Number of orders per year and order interval. 15

Unit-IV

7. Describe concept and objectives of supply chain management. 15
8. Write briefly on :
- (a) Wages and incentives 8
- (b) Significance of value engineering. 7

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