

24862

**B. Tech. 7th Semester (Fire Tech. & Safety)**

**Examination, December-2017**

**INDUSTRIAL ENGINEERING**

**Paper-FT-403-F**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

**Note :** *Question No. 1 is compulsory. Attempt any five questions in total. One question must be attempted from each section.*

1. (a) Discuss the technique of the Method Study.  
(b) Explain the Break Even Analysis.  
(c) Discuss the function of the PPC.  
(d) What do you mean by MIS ? 4×5=20

**Section-A**

2. Write the short note on following :  
(a) Various Incentive Payment Scheme  
(b) Factors effecting to improve the productivity. 10,10
3. Explain the various methods of Job evaluation and also explain the merit rating. 20

**Section-B**

4. A factory requires 1500 units of an item per month, each costing Rs. 27, the cost per order is Rs. 150 and the inventory carrying charges works out to be 20% of the inventory cost. Find out the economic order quantity and number of orders per year.

Would you accept a 2% price discount on a minimum supply quantity of 1200 numbers ? Compare the total cost in both the cases. 20

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[P.T.O.]

5. Explain the following Inventory Control Methods :  
 (a) ABC  
 (b) VED  
 (c) SDE

20

**Section-C**

6. What do you mean by the control chart for the attributes? Explain also the 'P' chart and 'C' chart in detail. 20
7. There are five jobs, each of which is to be processed through three machines A, B and C in the order ABC. Processing times in hours are

Jobs	A	B	C
1	3	4	7
2	8	5	9
3	7	1	5
4	5	2	6
5	4	3	10

Determine the optimum sequence for the five jobs and the minimum elapsed time. 20

**Section-D**

8. Explain the value analysis with their concept, aim, technique, procedure. Discuss also the difference between value engineering and value analysis. 20
9. What do you mean by MIS ? Explain the importance and role of the MIS in the decision making. 20