

Roll No.

24862

B. Tech. 7th Sem. (Fire Tech. & Safety)

Examination – December, 2016

INDUSTRIAL ENGINEERING

Paper : FT-403-F

Time : Three Hours] [Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in total. Question No. 1 is compulsory and must be attempt one question from each Section.

1. (a) What do you mean by Work Measurement ?
- (b) Explain THERBLIGS.
- (c) What is EBQ ?
- (d) Differentiate between Fixed and Variable Cost.
- (e) Define PPC.

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(f) What do you mean by MIS ?

(g) Explain the sequencing in a production shop.

(h) What do you mean by JIT ? $8 \times 2\frac{1}{2} = 20$

SECTION – A

2. Explain the method study with definition, procedure and technique. 20

3. (a) Explain the various incentive payment scheme. 10

(b) Write the short note on PMTS. 10

SECTION – B

4. Differentiate between cost accounting and cost estimation. Explain also the method of costing and elements of cost. 20

5. From the following informations, calculate Minimum stock level, Max. stock level and Re-ordering level : 20

(i) Max. consumption = 200 units per day

(ii) Min. consumption = 120 units per day

(iii) Normal consumption = 160 units per day

(iv) Re-order period = 10-15 days

(v) Re-order quantity = 1600 units

(vi) Normal re-order period = 10 days

SECTION – C

6. (a) What is SQC ? Explain the benefit of the SQC. 10

(b) Explain the procedure for conducting the $\bar{X} - R$ chart. 10

7. Find the sequence that minimizes the total elapsed time required to complete the following tasks : 20

Tasks	A	B	C	D	E	F	G
Time on Machine I	3	8	7	4	9	8	7
Time on Machine II	4	3	2	5	1	4	3
Time on Machine III	6	7	5	11	5	6	12

SECTION – D

8. Explain the MIS with their importance and what are the role of MIS in the decision making. 20

9. What is 3S's ? Explain in detail. 20