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APR-MAY2022

B. E. (Eighth Semester) Examination, 2020

(New Scheme)

(Mech., Automobile Engg. Branch)

INDUSTRIAL ENGINEERING & MANAGEMENT

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Part (a) of each question is compulsory. Attempt any two parts from (b), (c) and (d) in each question.

Unit-I

1. (a) What is the application of Industrial Engineering? 2

   (b) What is the place of Industrial Engineering in an organisation? 7

(c) What are the factors affecting plant location? 7

(d) What are the different types of plant layout? Explain linetype layout in detail. 7

Unit-II

2. (a) Define work study. 2

(b) Explain procedure to conduct work study. 7

(c) Explain scope, steps involved and selection of job for method study. 7

(d) The observed time and performance rating for the five elements are given. Compute the standard time assuming rest and personal allowance is 15% and contingency allowance 2% of the basic time. 7

Element observed	1	2	3	4	5
Observed time	0·2	0·8	0·5	0·12	0·1
Performance rating	85	80	90	85	80

Unit-III

3. (a) What are the objectives of Job Evaluation? 2

(b) Explain methods of job evaluation. 7

(c) Explain Taylors differential piece rate system. 7

(d) Define Merit rating. Also give benefits and methods of merit rating. 7

Unit-IV

4. (a) What are the objectives of basic function management? 2

(b) What is the scope of human resource planning? 7

(c) Explain authority and responsibility of a Manager. 7

(d) Explain Maslow hierarchy of need theory. 7

Unit-V

5. (a) What is Marketing Management? 2

(b) Explain marketing mix in detail. 7

(c) Explain channels of distribution in detail. 7

(d) ABC Company plans to sell an article at a local market. The articles are purchased at ₹ 5 on the

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condition that all unsold articles shall be returned. The rent for the space is ₹ 2,000. The article will be sold at ₹ 9. Determine the number of articles which must be sold. (i) To break even, (ii) To earn ₹ 400 as profit. (iii) If the company sells 750 articles calculate margin of safety and profit.   7