

**B.Tech. - VIEP - MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

00427

June, 2017

BIME-020(S) : INDUSTRIAL ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal marks.

1. (a) What is Industrial Engineering ? Outline the scope of Industrial Engineering. 7
- (b) Define the term Productivity. How is it different from production ? Give suitable examples. 7
2. (a) Explain the basic procedure for time study using a stopwatch. 7
- (b) Describe the procedure for conducting a work sampling study. 7
3. (a) What are the requirements of a good product design ? 7
- (b) Explain the concept of Value Engineering. Why is it important in the area of Industrial Engineering ? 7

4. (a) Define Ergonomics. Explain how Ergonomics help in improving the productivity of a firm. 7
- (b) Describe the procedure for Single sampling plan and Double sampling plan. 7
5. (a) Describe the procedure for method study. 7
- (b) Explain various work measurement techniques. 7
6. (a) What is the purpose of control charts ? Explain. 7
- (b) Explain the stages involved in a product life cycle. 7
7. Write short notes on any *two* of the following : 7+7
- (a) Micro Motion Study
- (b) FAST Diagram
- (c) Acceptance Sampling
- (d) Design for Manufacturing
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