

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

Term-End Examination

December, 2013

BIME-020 : INDUSTRIAL ENGINEERING

Time : 3 hours

Maximum Marks : 70

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

1. (a) How do you define Industrial Engineering ? 7+7
What are its objectives ?

(b) Explain the principle of motion economy as applied to the use of human body.

2. (a) Explain the step by step procedure in 7+7
implementing work measurement.

(b) Write notes on "Performance rating".

3. (a) Explain the importance of ergonomics by 7+7
mentioning various areas of application.

(b) Briefly explain ergonomic design of displays and controls.

4. (a) List the types of control charts for attributes 7+7
and explain any one of them in detail.
(b) Briefly explain Double Sampling Plan.
5. (a) Discuss the procedure for product 7+7
development.
(b) What is value analysis ? What are the
various value engineering techniques ?
6. (a) Briefly explain ergonomic design of a 7+7
computer work station.
(b) Write the objectives and functions of
Inspection.
7. (a) Write short notes on : **3.5x4=14**
(i) allowances
(ii) standard time
(iii) value engineering
(iv) chrono cycle graph
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