

ME - 701(D)  
B.E. VII Semester  
Examination, December 2014  
Work Study & Ergonomics  
Time : Three Hours  
Maximum Marks : 70  
<http://www.rgpvonline.com>

*Note:* Attempt any one question in each unit. All questions carry equal marks.

Unit - I

1. What are the objectives, significance, and applications of Work Study? Discuss briefly.

OR

2. Describe various recording techniques in Method Study. Explain in brief.

Unit - II

3. Discuss the criteria in selection of the task for conducting time study,

- a) When such study has already been carried out earlier.
- b) When no time study has been conducted earlier.

OR

4. In a time study for a job done by a worker whose rating is 90, the data are as follows:

Observed time = 20 minutes, Personal needs allowances = 4% of Basic time,  
Fatigue allowance = 2.5% of Basic time, Contingency work allowance = 2% of  
Basic time, Contingency delay allowance = 1% of Basic time. Find:

- i) Basic time
- ii) Work content and
- iii) Standard time

Unit - III

5. "Incentives are necessary for smooth and efficient running of a factory". In this context discuss the significance and relevance of Incentive schemes.

OR

6. Explain the method of job evaluation with the help of suitable example.

Unit - IV

7. Discuss the ergonomic considerations for the design of work place layout.

OR

8. What do you understand by Man-Machine system? Explain its characteristics.

Unit - V

9. What do you understand by 'display' and hence describe various types of visual display and visual indicators.

OR

10. What is importance of warning signals; factorial and graphic display?