

**ME/AU - 701(D)****B.E. VII Semester**

Examination, December 2013

**Work Study & Ergonomics***Time : Three Hours**Maximum Marks : 70**Note:* All questions carry equal marks.  
ii

1. a) Write in brief scope and purpose of work study. Discuss various steps to carry out work study project.
- b) "Flow Diagrams are drawn to support flow process charts" Explain with suitable examples.

OR

2. a) Write merits and demerits of travel charts over string diagrams.
- b) Discuss principles of motion economy applicable to use of Human Body.
3. a) "What do you understand by Standard time?" Why it is necessary to rate the operator? Discuss.
- b) Write in brief the procedure of work-sampling? Write merits and demerits of work-sampling over stop-watch time study.

OR

4. a) Explain performance Rating. Discuss any one method of performance rating.

- b) How will you estimated standard time by work sampling? Explain.
5. a) Write in brief the importance of Job-evaluation. Differentiate between Job description and job specification.
- b) Write merits and demerits of Merrick's differential piece rate system over Taylor's differential piece rate system:

OR

6. Write brief note on any two of the following:
  - a) Gantt incentive plan
  - b) Predetermined motion time system.
  - c) Therbligs.
  - d) Work-Factor System. #
  - e) MOST.
7. a) "Ergonomics is a Multidisciplinary subject". Discuss.
- b) Compare Relative capabilities of Human being over Machines.

OR

8. a) Discuss different types of Man-Machine systems.
- b) Explain how information is received and processed by Human Body.
9. a) What do you Know about displays? Explain various types of displays used in Practice.
- b) What is the importance of warning signals? Explain. Differentiate between factorial and graphic displays.

OR

10. a) What are the general principles of auditory and tacheal displays? Explain
- b) Differentiate between indicators and displays with suitable example.