

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL / MAY 2013

INDUSTRIAL ENGINEERING
Semester III

5

IE9201 WORK SYSTEM DESIGN

(Regulation 2008)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Differentiate production and productivity.
2. How productivity is linked with standard of living?
3. What are the objectives of method study?
4. Draw a two handed process chart for a simple application of your choice.
5. What is the task hierarchy of work measurement methods?
6. What is the role of computers in developing labor standards?
7. What is group timing technique?
8. List the types of PMTS
9. How work measurement of office work is different from that of industrial task?
10. What are the types of organizations?

Part – B (5 x 16 = 80 marks)
(Each sub division carries 8 marks)

11. i) What are the ineffective time components added with the basic work content?
ii) Explain any one of productivity measurement model.
 12. a) i) Explain the steps of method study.
ii) What is flow process chart? Explain man type flow process chart with an example.
- OR**
- b) i) What are the principles of motion economy? List any six of them.
ii) Explain the ineffective THERBLIGs.
13. a) i) Explain the procedure followed in the stop watch time study.
ii) Why allowances are added to get standard time?
- OR**
- b) i) Explain the process of establishing time standard using standard data.
ii) What is learning curve? How cost is computed using doubled quantity cost data.

Roll No.

--	--	--	--	--	--	--	--	--	--	--

14. a) i) What is work sampling? Explain the random sample data collection procedure?
ii) Explain the quantitative method of determining sample size in work sampling study.

OR

- b) i) Explain the characteristics associated with 'reach' and 'move' motions in MTM.
ii) What are the requirements of a good wage incentive plan?

15. a) i) Explain the charting methods used in the method study of office work.
ii) Explain any one work measurement method suitable to an office work.

OR

- b) i) Explain the critical examination methods used in the method study of office work.
ii) Explain about form design and control.