Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII(NEW) • EXAMINATION – WINTER 2016

Date: 18/11/2016

Subject Code:2172502

Subject Name:Productivity Improvement Methods Time: 10.30 AM to 1.00 PM **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. (a) Discuss causes of low productivity. Explain various techniques for their 07 0.1 elimination. (b) Explain main contributors to productivity improvement. Discuss advantages 07 from increased productivity. Define method study. Discuss step by step basic procedure of method study. 07 0.2 Define flow process chart. Draw and explain flow process chart for making the 07 casting ready for machining. (b) Explain flow diagram and string diagram with neat sketch. How does a string 07 diagram differ from a flow diagram? Write a note on the principle of motion economy with examples. 07 0.3 (a) (b) Prepare a two handed process chart for following operations: (I) filling ink in a 07 fountain pen (ii) Replace a cut washer of a bicycles air pump. OR Define Therbligs. Explain each Therbligs with a suitable example. **07 Q.3** Write a note on SIMO Chart. Explain construction of SIMO Chart. 07 0.4 Explain various methods used to determine the basic time required to perform **07** (a) any operation from time study record. Define Ergonomics. State its objective and advantages. 07 **(b)** OR Discuss important aspects of man-machine system interfaces. Give its 0.4 (a) **07** classification in reference to Ergonomics. Define incentive. Discuss various incentive schemes followed by organization. **07 Q.5** Write a note on Contemporary issues in productivity. 07 (a) Enlist time estimating techniques. Explain any two in brief. **(b) 07** OR Q.5 Discuss approach to re-engineering. Explain re-engineering tools. **07** (a) **(b)** Explain fundamentals and implementation methodology of BPR. **07**
