

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-VII Examination-Nov/Dec.-2011

Subject code: 171502

Date: 22/11/2011

Subject Name: Work System Design

Time: 10.30 am-01.00 pm

Total marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Define and explain the concept of work study. How it is related to productivity, explain diagrammatically. **07**
- (b)** Enlist the objectives of method study and work measurement. **07**
- Q.2 (a)** “Application of work study is 10 % technical and 90% sycological” explain. **07**
- (b)** How work study is useful for management , society,labour and industrial productivity **07**
- OR**
- (b)** Importants of eargonomics in method study. **07**
- Q.3 (a)** Which are the factors for selection of a problem for method study. **07**
- (b)** Explain principles of motion economy. **07**
- OR**
- Q.3 (a)** Describe the suitable chart for “Repairing a fan by changing capasitor”. Mention the improvements by comparing existing method and proposed method. **07**
- (b)** Explain ‘Cycle graph’ and ‘chrono cycle graph’ **07**
- Q.4 (a)** Explain various types of allowances **07**
- (b)** Explain various types of elements. **07**
- OR**
- Q.4 (a)** Explain’ rating’ How it is important in W.M. **07**
- (b)** Why a job is broken down into elements in time study. **07**
- Q.5 (a)** Explain PMTS and MTM **07**
- (b)** Procedure of making work sampling study with example. **07**
- OR**
- Q.5 (a)** Which are the applications of W.M. **07**
- (b)** Taking hypothetical data of any job explain the procedure of calculation of standard time. **07**
