

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII • EXAMINATION – WINTER 2013

Subject Code: 170601**Date: 26-11-2013****Subject Name: Construction Management and Equipments****Time: 10:30 TO 01:00****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) Write short note on scope of construction management. **07**
 (b) Define construction management and state objectives of construction management. **07**
- Q.2** (a) What is critical path? Distinguish between CPM and PERT. **07**
 (b) Mention the important points to be considered while drawing the CPM network. **07**
 For the following data draw the network.

Job	Immediate predecessor
a	-
b	-
c	-
d	a, b
e	b, c

OR

- (b) Define and explain the following terms. **07**
 (i) Total float (ii) Independent float (iii) Free float.
- Q.3** (a) Explain the term depreciation and discuss any one method to determine depreciation. **07**
 (b) Find out sinking fund for accumulating `5/- lakhs in five years at the rate of interest of 8%. **07**

OR

- Q.3** (a) Discuss sinking fund method of finding depreciation. **07**
 (b) A contractor takes a loan of `500000/- for purchase of construction equipment. If rate of interest is 9% and he wishes to repay the loan in 10 yearly installments, find out value of installment. **07**
- Q.4** (a) Write short note on “Draw bar pull” **07**
 (b) Define and explain (i) coefficient of traction (ii) Gradability. **07**

OR

- Q.4** (a) Discuss safety measures for construction sites. **07**
 (b) Draw job lay out for the dam site. **07**
- Q.5** (a) Discuss various basic criteria for selection of construction equipment. **07**
 (b) How truck production is calculated? Explain step by step. **07**

OR

- Q.5** (a) List out various pumps for lifting water and discuss centrifugal pumps. **07**
 (b) Write short note on “clam shell”. **07**
