

DEPARTMENT OF CIVIL ENGINEERING: IIT DELHI
CEL 766: Systems Design and Value Analysis

2007-2008

MAJOR TEST

Time: 90 minutes

All questions carry equal marks

1. (a) Is the basic function of an item always fixed? Or can it change? Illustrate.
(b) Using numerical evaluation technique express your preference for the following fruits: Banana, Apple, Orange, Pear and Avocado.
(c) Draw FAST diagram for any one of the following:
 - (i) Road Construction
 - (ii) Health Service
2. Write short notes on the following:
 - (i) Basic principles of Methods Design
 - (ii) Objectives of work measurement program
 - (iii) Work Design principles
3. (a) Define systems problem and give the characteristics of such a problem with an example.
(b) How do you justify that the construction contracting is a systems problem?
(c) Describe the procedure adopted in Systems Design.