JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- MAY 2018

M.Tech IInd Semester

COURSE CODE: 10M11CE213   MAX. MARKS: 35

COURSE NAME: Construction cost analysis

COURSE CREDITS: 3   MAX. TIME: Two Hr

Note: Attempt all the questions. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. Explain different stages of LCCA.   (5)
2. What do you understand by B/C analysis? Why is it required? Explain the methods in detail used for B/C analysis.   (6)
3. (a) Explain the conceptual cost estimation technique in detail. Explain different steps involved in conceptual cost estimation.   (8)

    (b) Find out the economical acceptability of the public project using modified and conventional benefit-cost ratio method. Use FW methods to find out the equivalent worth of costs, benefits and disbenefits. The cash flow details of a public project is as follows

    Initial cost = Rs.22000000

    Annual operating cost = Rs.1700000

    Worth of annual benefits = Rs.6000000

    Worth of annual disbenefits = Rs.1200000

    Salvage value = Rs.4000000

    Interest rate per year = 8% and useful life = 30 Years   (8)

4. There are four mutually exclusive alternatives for a public project. Select the best alternative using incremental B/C ratio analysis if interest rate is 6% per year. The cash flow details of the alternatives are shown in the following table. Each alternative has the useful life of 30 years.   (8)