Kor. A.K. Gupla

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -1 EXAMINATION- Feb-2019

M.Tech. (CM) IInd Semester

COURSE CODE: 10M11CE214

MAX. MARKS: 15

COURSE NAME: Construction Financial Management

COURSE CREDITS: 03

MAX. TIME: 1Hour

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q.1 Derive the relationships for uniform series present worth factor and SFF.

(4)

Q2. Draw generalized cash flow diagram involving a positive uniform gradient with unknown F. (3) Derive the relation for UGFWF.

Q3. There are two alternatives for purchasing a concrete mixer. Both the alternatives have same useful life. The cash flow details of alternatives are as follows; Alternative-1: Initial purchase cost = Rs.250000, Annual operating and maintenance cost = Rs.20000, Expected salvage value = Rs.100000, Useful life = 5 years. Alternative-2. Initial purchase cost = Rs.275000, Annual operating and maintenance cost = Rs.35000, Expected salvage value = Rs.65000, Useful life = 5 years. Using future worth method, find out which alternative should be selected, if the rate of interest is 9.5% per year. Also compare the result with present worth method. (8)