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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION, 2017

M.TECH II SEMESTER

COURSE CODE: 10M11CE211   MAX. MARKS: 35

COURSE NAME: CONSTRUCTION CONTRACTS AND LAWS

COURSE CREDITS: 03   MAX. TIME: 2 HRS

Note: All questions are compulsory. Draw figure, sketches and give suitable example to illustrate your answers. Assume missing data suitably if required. Standard normal distribution table signed by the course coordinator is allowed in the examination.

1. Briefly describe the price escalation clause in a CPWD contract taking care of material price escalation, labor wage escalation and fuel price escalation. [4]

2. Write short notes on [4]

    (i) Pre bid meeting (ii) Performance Guarantee

3. Differentiate between Conciliation and Arbitration process. [3]

4. For a construction project, the contractor has estimated direct cost of civil, electrical and mechanical items is Rs 3000 lakh. The contractor has further estimated his overheads to be Rs 300 lakh. The contractor has also estimated the likely escalation in cost over the total duration of the project. The escalation is estimated to be Rs 50 lakh. If the contractor desires to operate at 15 percent mark- up on his bid price, what would be the bid price of the contractor given that the liability of contractor towards work contract tax is Rs 80 lakh? However the contractor does not want to earn his profit on work contract tax. [3]

5. Briefly describe five salient features of FIDIC form of contract. [5]

6. What are the criteria that ensure validity of a contract? [3]

7. Contractor X is developing his bidding strategy against competitor Y. The following table shows the details of B/TC ratio for the 10 previous in which Contractor X has competed against contractor Y. (B/TC ratio indicates $\frac{Y's\ bid\ price}{X's\ total\ cost}$) [13]

B/TC	Number of bids
1.04	2
1.08	4
1.12	1
1.16	2
1.20	1

i.   Based on the bidding behavior, what is the markup value that this competitors uses on average? What is the probability of winning against this competitor Y if contractor X uses a markup of 14 percent?

ii.   In a new project with an estimated cost of Rs 50,000,000 what is your optimum markup strategy against four typical competitors using Friedman's model? What is the expected markup amount at optimal mark up?

iii.   In the same project what is your optimum markup strategy against four typical competitors using Gate's model? What is the expected markup amount at optimal mark up?

iv.   What would be your suggested markup level?