MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Paper Code : CE(PC)602 Engineering Economics, Estimation & Costing
UPID : 006732

Time Allotted : 3 Hours   *Full Marks :70*

The Figures in the margin indicate full marks.
Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

1. Answer *any ten* of the following :   [1 x 10 = 10]
    - (I)   What is cash flow?
    - (II)   What is full form of BIM?
    - (III) Write down the specification of reinforcement.
    - (IV)   How many quantities of RCC work is done by a Mason in a day?
    - (V)   Write down the name of the contractor those are related with public work.
    - (VI)   What does book value mean?
    - (VII) What are easement right in Indian law?
    - (VIII) What is Price indices formula?
    - (IX)   What is time value of money?
    - (X)   What is the mass haul diagram?
    - (XI)   What are the general specification of 1st class brick?
    - (XII) How many head mason are required for 12mm thick plastering work?

Group-B (Short Answer Type Question)

Answer *any three* of the following :   [5 x 3 = 15]

2. What is the purpose of valuation?   [5]

3. What is analysis of rate & what are the purposes of rate analysis?   [5]

4. What are the limitations of microeconomic?   [5]

5. What is tender document?   [5]

6. Prepare the rough estimate for a proposed commercial complex for a municipal corporation for the   [5]
    following data.

    Plinth Area = 500m^2/floor Ht of each storey = 3.5m No. of storey's = G+2 Cubical content rate = Rs.
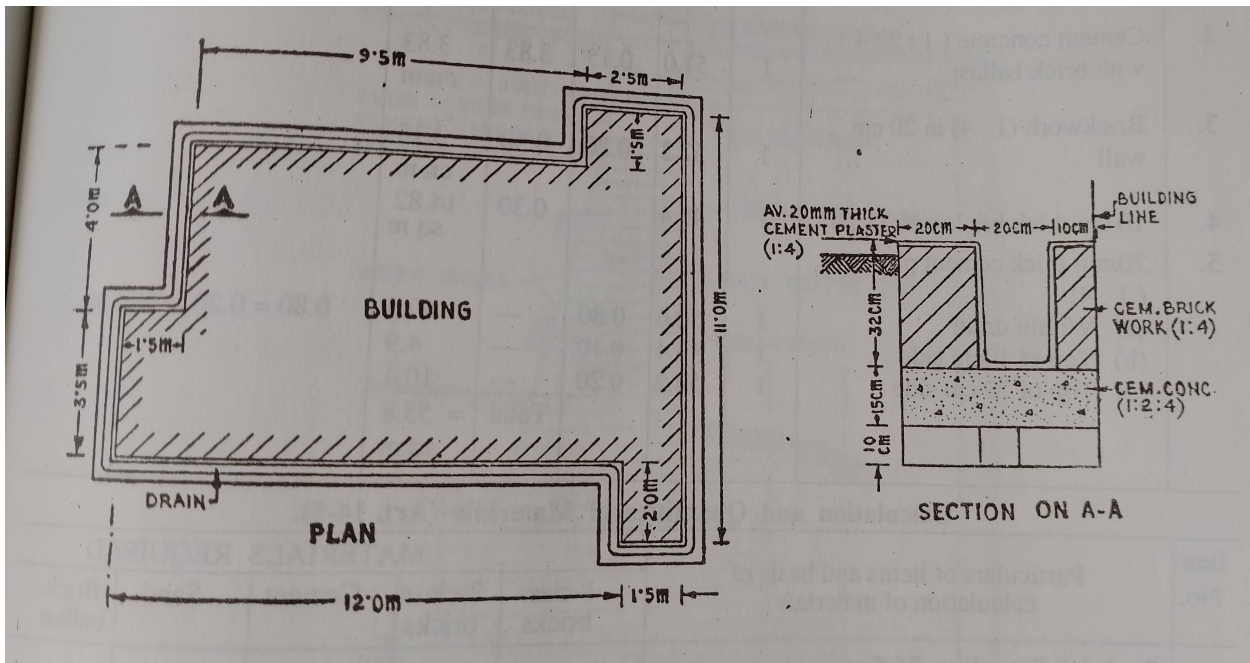   1000/m^3 Provided for a following as a percentage of structured cost water supply & Sanitary
    arrangement-8% Electrification -6% Fluctuation of rates - 5% Contractors profit - 10% Petty supervision &
    contingencies- 3%

Group-C (Long Answer Type Question)

Answer *any three* of the following :   [15 x 3 = 45]

7. A) What is sinking fund?   [5+5+5]
    B) Write down the method of determination sinking fund.
    C) What annul sinking fund at 4.5% must be invested to produce Rs.1/- at the end of 20 years?

8. A) What is contract document?   [5+8+2]
    B) What are the contain of engineering contract document?
    C) What is measurement book(MB)?

9. In the given figure, the plan of outline of a building and sec   tion of surface drain to be constructed all   [
    round the building. Calculate the quantities of cement, sand, and brick that may be required to construct 3+3+3+3
    the entire work.   ]

PLAN

SECTION ON A-A

10. A) Write down the specification of different categories of road.   [8+7]

    B) Write down the specification of cement concrete flooring work.

11. A) Carry out analysis of rate of 12 mm thick cement plastering 1:6, consider 100 sqm of work.   [8+7]

    B) Carry out analysis the rate of 25 mm thick cement concrete or artificial stone flooring (1:2:4) of 100 sqm work.

*** END OF PAPER ***