6th Sem /Civil Engineering/ Construction Management /
Civil Engg. (Spl. Highway Engg.)
Subject:- Quantity Surveying & Valuation

Time : 3Hrs.   M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory.
(10x1=10)

Q.1   Detailed estimate is also known as_____
   a)   Item rate estimate
   b)   Plinth area base estimate
   c)   Per unit base estimate
   d)   All of these

Q.2   The procedure of working out approximate cost of work by working out the quantities and then calculating the cost at suitable rates is known as _____
   a)   Estimate   b)   Valuation
   c)   Costing   d)   Expenditure

Q.3   This estimate shows addition of work in addition of original work_____
   a)   Revised estimate
   b)   Supplementary and revised estimate
   c)   Supplementary estimate
   d)   Annual repair estimate

Q.4   Determination of actual cost of the work before the execution of it is called_____
   a)   Estimate   b)   Valuation
   c)   Costing   d)   Expenditure

Q.5   The unit of measurement for steel works in trusses and its parts is in_____
   a)   Quintal   b)   Numbers
   c)   Cm   d)   Kilogram

Q.6   Weight of one bag of cement is_____
   a)   50 kg   b)   37 kg
   c)   50 g   d)   37 g

Q.7   General overhead includes_____
   a)   Handling of material   b)   Profit
   c)   Amenities of labour   d)   Rent and Taxes

Q.8   A reasonable profit, usually _____ for the contractor is also included in analysis of the rate
   a)   30%   b)   10%
   c)   20%   d)   15%

Q.9   The money of the contractor retained by the department whenever any claims for payment of sum of money arises out of or under the contract against contractor is called_____
   a)   Retention money   b)   Earnest money
   c)   Security deposit   d)   Both a and b

Q.10 The rent which may reasonable be expected to be obtained in open market_____
   a)   Rent value   b)   Contractual value
   c)   Ground value   d)   Standard rent

SECTION-B

Note: Objective type questions. All questions are compulsory.
(10x1=10)

Q.11 For sand filling the units of measurement is_____ and units of payment is_____ (Sqm & per Sqm / Cum & per Cum)

Q.12 For half brick with or without reinforcement the units of measurement is_____ and units of payment is _____ (Sqm & per Sqm / m & per m)

Q.13 _____ is an offer in writing for execution of certain specified work or for supply of specified materials subject to certain terms and conditions such as rates, time limits etc. (measurement book / Tender)

Q.14 For the analysis of rates the_____ % of cost of material and labour together is added as water charger. (1.5% / 3%)

Q.15 For laying of sanitary pipe line the units of measurement is_____ and units of payment is_____ (Sqm & per Sqm / m & per m)
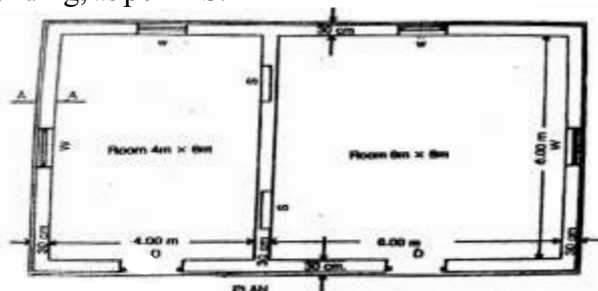
Q.16 Define the term WBM used in roads.
Q.17 Define the term "Work Charges Establishment"
Q.18 Define the term "Single Cover-bids".
Q.19 Define the term "Security Deposit".
Q.20 Define the term "Plinth Area Estimate".

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Describe the procedure of estimation of quantities using centre line method.
Q.22 Describe the rules for deduction of opening in brick walls in a building, as per BIS.

(Fig-1) Height 4.2 m. size of door (D) = 1.2mX2.1m, window = 1.0mX1.5m and shelves = 1.0mX1.5m

Q.23 Estimate the quantity 1st class bricks required in superstructure for the given plan (fig.-1) of a house .
Q.24 Estimate the quantity internal plaster of walls for the given plan(fig.-1) of a house.
Q.25 Estimate the quantity RCC in slab for the given plan (fig,-1) of a house.
Q.26 Calculate the quantities of materials required for RCC in slab(fig-1) having proportion of materials as 1:1.5:3
Q.27 Find the quantities of materials for, 10 cum of R.C.C. with 1:1.5:3 proportions.
Q.28 Prepare detailed analysis of rate for brickwork (one brick thick wall a plinth level) in cement mortar 1:6 in foundation and plinth for a hall of size 7m X 4m by taking the thumb rule for foundation dimensions. Adopt present market rates.
Q.29 Prepare detailed analysis of rate for Internal and External Plaster for a hall of size 7m X 4m having a door(1.2m X 2.1) and a window (1.8x X 1.2m) with 3.0m height above FFL or Plinth level. Assume any missing data.

Q.30 Explain the steps involved in the analysis of rates.
Q.31 Describe the purposes of contractor's profit and overheads.
Q.32 Write the purposes of writing the specifications of civil works.
Q.33 Prepare the tender document for R.C.C work in slab for a 2BHK redential house, by assuming the necessary data.
Q.34 Describe the significance of the term "Sinking Fund" used in valuation of civil structures.
Q.35 Write the purposes of valuation of a property.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Reduced levels of ground along the centre line of a proposed road from chainage 11 to chainage 15 are given below. The foundation level at the 11th chainage is 105.50 and the road is in downward gradient of 1 in 120 up-to the chainage 15. Formation width of road is 10m and side slope of braking are 2:1 (H:V). Length of the chainage is 30m. Estimate the quantity of earthwork and prepare the abstract of estimated cost at the rate of Rs 305.00% Cum.

Chainage	11	12	13	14	15
RL of Ground	104.95	105.50	105.40	105.60	105.35

Q.37 Write the procedure of preparation of "Detailed and Abstract Estimate for 10 user Septic Tank."
Q.38 The rates of the construction materials i.e. Bricks (1st Class), Cement bag, steel (8mm dia) and Vitrified tile (600 X 600 X10mm), and for their respective required quantities i.e. 53000 Nos, 50 bags, 532 kg and 975 Nos quoted by the firms C,D,B and A are as follows: Rs 5621, Rs 5759, Rs 5759, Rs 5612 and Rs 5635 repsectively for bricks (per 1000 nos of bricks); Rs 300, Rs 310, Rs 297 and Rs 299 respectively for Cement (per bag); Rs 59, Rs 58.93, Rs58.39 and Rs.95 respectively for tile (per tile); Prepare the comparative statement for this, calculate the total cost of the construction materials and also find which firm will get the order for the supply of materials.