S.B. Roll No…………………………………………

QUANTITY SURVEYING & VALUATION
6th Exam/Civil/5156/May'18

Duration: 3Hrs.   **M.Marks:75**

SECTION-A

Q1. a) Fill in the blanks.   **15x1=15**
   i.   The value of a property building after its working tenure without being dismantled is known as …………
   ii. While analyzing the rates, contractor profit is added at the rate of………………%.
   iii. The attendance of the laborers is recorded daily in…………………..
   iv. While mixing cement mortar by volume, the volume of a cement bag is taken as……………… cu.m.
   v.   In the analysis of rate the number of bricks taken into account per cubic meter is……………..

   b) State the unit of measurement for the following:-

vi.	Electric Fitting	xi.	D.P.C
vii.	Cement Plaster	xii.	Steel doors and Windows
viii.	Supply of Bitumen/tar	xiii.	Supply of water closet(size specified)
ix.	Supply of varnish, oil	xiv.	Rain Water pipe
x.	Supply of bricks	xv.	Distempering

SECTION-B

Q2. Attempt any six questions.   **6x5=30**
   a. What are the various duties of quantity surveyor?
   b. What do you understand by estimate? Give the importance of estimate.
   c. What are the factors affecting the Analysis of rates.
   d. Find out the dry material required for 1cu.m cement concrete 1:4:8.
   e. Find out the dry material for 1cu.m brick masonry in cement sand mortar 1:4.
   f. Define valuation. Give the purpose of valuation.
   g. Calculate the value of year's purchase whose life is 20 years and the rate of interest is 6%.For sinking fund rate of interest is 5 %.
   h. Write a short note on scrap value, book value and outgoings.
   i.   Define Contract? What are the essential elements of contracts?

SECTION-C

Attempt any three questions.   **3x10=30**
Q3. A RCC simply supported beam with following data
   Clear Span=3.5m
   Bearing on Wall=200mm
   Thickness of wall=300mm
   Size of the beam=300mmX500mm
   Main Reinforcement=5-20mm ϕ HYSD bars
   (Three Bars up at l/7 from the inner face of support)
   Stirrups=8mm ϕ 2 legged @ 200mm c/c.
   Anchor Bars=2-12 ϕ mm
Calculate the total quantity of mild steel reinforcement also prepare the bar bending schedule.

Q4. Prepare a preliminary estimate of a building having plinth area equal to 2100 sq.m. Given that:-
   a. Plinth area rate – Rs. 1600/- per sq.
   b. Extra for Architectural work – 1% of the building cost.
   c. Extra for Electrical Installation (10%), + Water supply and sanitary installations (8%) = 10+8=18% of the building cost.
   d. Extra for other services- 10% of the building cost.
   e. Contingencies and supervision charges 10%.

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Q5. A short link road is to be constructed entirely in cutting at a uniform rising gradient 1 in 30.The N.S levels are given below:

Rd	N.S. level
0	70.40
30	69.70
60	71.10
90	74.05
120	75.40
150	74.00

If the formation level at Rd 0 is 65 meters, estimate the quantity of cutting for a formation width of 10 meters. The side slope is 2:1(Horizontal: vertical) and there is no cross slope. Also find out the cost of cutting @ Rs.450.00 cu m.

Q6. Workout the analyses of rates for brick masonry cement mortars 1:4 in superstructure. Labour for 10cu.m brick masonry 8 brick layer @ Rs. 500/- per day, 15 mazdor @ Rs. 300/- , 2 Bhisti @ Rs. 250/- per day. Rate of material: - cement bag Rs. 300/-, Sand Rs. 800/- per cu.m, Bricks 4000/- per thousand.

Q7. Explain general specifications of first class building.

Q8. Work out the quantity of following items from the given drawing:-
   a.   Excavation for foundation
   b.   Cement concrete 1:6:18 in foundation
   c.   Brick masonry in cement mortor 1:7 in foundation and plinth
   d.   Brick masonry in 1:7 super structures.