SP - 171

Total No. of Pages : 3

Seat No.	

Fourth Year B.Tech. (Civil Engineering) (Semester - VII) Examination, December - 2023

QUANTITY SURVEY AND VALUATION

Sub. Code : 83734

9685

Day and Date : Tuesday, 05 - 12 - 2023 **Total Marks : 70**

Time : 10.30 a.m. to 1.30 p.m.

Instructions :

1) **Questions No. 3 is compulsory. Attempt any 2 questions from remaining in Section I and any 3 questions from Section II.**
2) **Figures to the right indicate full marks.**
3) **Make suitable assumptions wherever necessary and mention it clearly.**
4) **Use of non-programmable calculator is allowed.**

9685

SECTION - I

Q1) a) Write down the unit of measurement with reason in short for the following items: **[5]**

i) Site cleaning

ii) Collapsible gate

iii) Fabrication of steel truss

iv) Excavation in earthwork

v) U.C.R. masonry

b) What is DSR. Name at least four main heads of items covered in DSR. **[5]**

9685

Q2) a) What are the specifications? Explain in brief its need to write detailed specifications. **[5]**

b) Explain briefly about rate analysis. **[5]**

P.T.O.

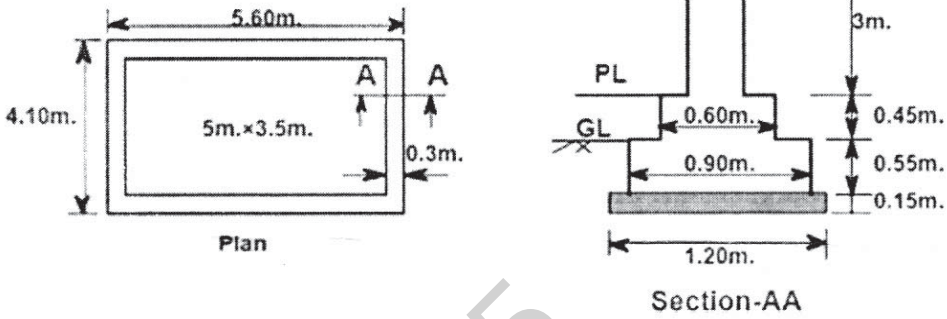
Q3) a) Work out the quantities of following items using long wall and short wall method. **[10]**

i) Earthwork in excavation

ii) PCC 1:4:8 in foundations

iii) Brickwork in foundation & Plinth

iv) Brick work in superstructure.



b) Explain in short 'Long wall - Short wall method' for taking out quantities. **[5]**

Q4) Write a note on (Any two): **[10]**

a) Price escalation.

b) Measurement sheet and abstract sheet.

c) Provisional sum and Provisional quantities.

SECTION - II

Q5) A room 600 cm long × 500 cm wide has a flat roof. There is one T-beam in the direction of 500 cm length (cross section below the slab 30 cm × 50 cm) and the slab is 15 cm thick. Estimate the quantity of steel for reinforcement (for the T beam only) from the data given below:

Main bars - 8 nos. 25 mm dia. in 2 rows of 4 each (all 4 in the bottom being straight & hooked at ends and other are cranked & hooked at ends)

Stirrups - 10 mm dia. 15 cm Centre to Centre throughout

Anchor bars -2 nos. 16 mm dia. straight and hooked at ends. **[11]**

Q6) a) Explain Price, cost and value with examples. **[6]**

b) What is mean by valuation? What are factors affecting valuation of property. **[5]**

Q7) a) An RCC framed G+2 building is constructed on a plot having details, Workout the fair value of property. **[9]**

i) Plot of land 500sq.m., Present rate is 3000/- per sq. m.

ii) Net yield9%

iii) B.U.A.is 350 sq. m/floor @ construction rate of 6500/sq. m

iv) Life of building is 50 years

v) Repair and maintenance @ 1/12th of gross rent.

vi) Municipal tax @ 15 %

vii) Management and miscellaneous charges @ 8%ofgrossrent.

viii) Insurancepremium @ 1%

ix) Gross rent Rs.5 lakh per annum.

x) Compound interest on sinking fund @ 9%.

xi) Property taxes @ 5% of gross rent.

b) What is meant by depreciation? Explain. **[3]**

Q8) Write a note on: **[12]**

a) Free hold & leasehold property.

b) Bar bending schedule.

c) Belting method of valuation.

9685