GUJARAT TECHNOLOGICAL UNIVERSITY PDDC - SEMESTER-VIII • EXAMINATION - SUMMER • 2014

Subject Code: X 80601 Date: 27-05-2014 **Subject Name: Professional Practice and Valuation** Time: 10:30 am - 01:00 pm **Instructions:**

Total Marks: 70

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- 0.1 (a) Define: approximate and detailed estimate, plinth area estimate, long wall short 06 wall and the centerline methods of estimate preparation
 - (b) Estimate the quantities for: earth work in excavation, foundation PCC 15 cm 08 thick, plinth area, earth required in plinth filling, for the plan given figure no1.



All Dimensions in meters.

The spread footing foundation for the building is 0.9 meter wide consisting of three lifts of brickwork 0.4, 0.5 0.6 m wide below the 0.3 meter thick wall and 15 cm thick foundation PCC below lift 3 which is 0.6 meter wide. Each lift is 10 cm thick. Total foundation depth is 0.9 meter. Plinth level is 30 cm high above the existing ground level.

- Give the unit of measurement of the following GI fencing, sawing of timber, 07 Q.2 **(a)** cornice, internal wall painting 6 inches wide. Give the approximate cross sectional area of the longitudinal column reinforcement in terms of the total cross sectional area of the column for the purpose of estimate preparation.
 - (i) Calculate the quantity of brickwork in a segmental circular arch of 2.20 **(b)** 07 meter span 50 cm rise and 30cm thick The width of the wall is 30 cm (ii) Explain revised estimates.

OR

(i) Calculate the quantity of arch work in flat arch over a door 1 meter wide, 07 **(b)** thickness of arch is 30- cm and width of wall is 30 cm. The arch subtends an angle of 60 degree at the centre to form equilateral triangle (ii) Explain lead and lift

- Q.3 (a) (i) State how deductions are to be made for brick work in superstructure for the openings provided in the form of doors, windows and ventilators. Explain how deductions are made for plastering in super structure to consider the openings. (ii) Explain cubical content method of estimates.
 - (b) Calculate the amount of labour and material required for 1:6 cement sand 07 mortar 12 mm thick for 100 m² area.

OR

- Q.3 (a) Explain the factors on which the rate of civil engineering materials depends. 07 Also explain task turn out.
 - (b) Give the specifications for earth work in foundation, finishing of excavated 07 trench, finds during excavation and specification for measurement of earthwork.
- Q.4 (a) (i) Explain earnest money, security deposit and cost of the tender form. How are they related to the total cost of the work. (ii) It is required to advertise a short tender notice in a news paper for engineering college buildings of cost 25 crore rupees. Explain the items you will make sure are clearly mentioned in the tender notice.
 - (b) Explain: brief and detailed specifications, General provisions and technical 06 provisions and standard specifications.

OR

- Q.4 (a) You are asked to prepare a valuation report of a building. Mention various data 07 which you will collect as valuator. State the purpose of valuation
 - (b) Differentiate between: scrape value and salvage value, rental method of 07 valuation and development method of valuation, market value and book value
- Q.5 (a)(i) Explain the depreciation methods of valuation.07(ii) Define years purchase and factors affecting it.
 - (b) Work out the valuation of a 20 years old building located in Ahmedabad having plinth area 300 m² and total life as 50 years.Plinth area rate including services such as water supply drainage and electricity are to be assumed as Rs 3600/m². Depreciation rate is 2%

OR

- Q.5 (a) Enlist different type of contracts. Discuss any three in detail
 - (b) An old building is purchased by a person at the cost of Rs 600000. Calculate 07 the amount of annual sinking fund if the rate of compound interest for sinking fund is 4%. Life of building is 30 years .Scrap value is 10% of cost of purchase.

07