# GUJARAT TECHNOLOGICAL UNIVERSITY <br> BE - SEMESTER- VII (New) EXAMINATION - WINTER 2019 

Subject Code: 2170610
Date: 03/12/2019
Subject Name: Professional Practices \& Valuation
Time: 10:30 AM TO 01:00 PM
Total Marks: 70

## Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
Q. 1 (a) Write formulas for the following: (1) Area of Segment of Circle (2) Volume of ..... 03 frustum of cone (3) Volume of sphere
(b) Define following terms - Estimate, Contingencies, Spot Item, Prime Cost ..... 04
(c) For the following given figure a, calculate the quantities of following items by ..... 07 Centre line method
a) Earthwork in Excavation in foundation
b) Cement Concrete bed in Foundation
c) Brick masonry work in foundation up to plinth in cm 1:6.
Q. 2 (a) Discuss accuracy criteria for concrete ..... 03
(b) Compare revised estimate and supplementary estimate. ..... 04
(c) What is Contract? List out Various types of Special contract and explain ..... 07 Turnkey Contract in detail.
OR
(c) Enlist different types of tenders \& explain anyone them ..... 07
Q. 3 (a) Provide the Prevailing market rate of the following materials in your city: ..... 03
10 mm diameter MS Bar, Gully Trap, Kota Stone.
(b) Define rate analysis. How we can fix rate per unit of item in rate analysis? ..... 04
(c) Calculate the following: ..... 07
4. No. of bricks required for $5 \mathrm{cu} . \mathrm{m}$. brickwork.2. Materials required for M20 Grade of Concrete
OR
Q. 3 (a) Write short note on Schedule of rates (S.O.R) \& Task of Work ..... 03
(b) Differentiate between Estimation \& Valuation ..... 04
(c) Write short note on : ..... 07
5. Scrutiny of tender 2. Classification of tender
Q. 4 (a) A person requires Rs. 20000 after 5 years for the repair of his house. What ..... 03amount he needs to invest at $7 \%$ to get required amount after said years?
(b) What should be the amount of loan instalment if loan amount is Rs. 12,00,000 ..... 04
to be paid at annual interest rate of $13.78 \%$ in 363 months
(c) Calculate rent of newly constructed building from given data. 1) Cost of ..... 07 Land $=7,00,000,2$ ) Cost of Construction $=5,50,000,3$ ) Total outgoings including sinking fund $=15.8 \%$ of GI , 4) Net return @ $10 \%$ on construction and 5\% on Land

(b) Differentiate between Earnest Money Deposit \& Security Deposit. 04
(c) Define the following terms: 1. Scrap value 2. Estimating 3. Cost 4. Salvage 07 value 5. Book Value 6. Free hold property 7. Lease hold property
Q. 5 (a) Explain following terms - Liquidated Damages, Unbalanced Tender, 03 Arbitration
(b) Discuss various reasons for rejection of the lowest tender.

04
(c) Discuss mode of payment to the contractor. How the first and final bill, running 07
or interim bills are paid to contractor?

OR
Q. 5 (a) Write difference between: 'Depreciation and Obsolescence.' 03
(b) Define specification. What are the purpose of writing $\mathbf{0 4}$
(c) Explain in brief various principles of writing good specifications $\mathbf{0 7}$


ALL DIMENSIONS IN METRE

Figure: a
In figure: In section-AB consider data for section starting from pcc (from bottom) pcc : 0.9 m , of step 1: 0.6 m , of step 2: 0.5 m , of step 3: 0.4 m , wall : 0.2 m

