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## C.U. SHAH UNIVERSITY

 Summer Examination-2020
## Subject Name: Professional Practice \& Valuation

Subject Code: 4TE07PPV1
Semester: 7 Date: 27/02/2020

Branch: B.Tech (Civil)
Time: 10:30 To 01:30 Marks: 70

Instructions:
(1) Use of Programmable calculator \& any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

## Attempt the following questions

a) What is specification?
b) Define the Obsolescence.
c) What are the types of culvert?
d) Enlist the various methods of valuation.
e) What is rate analysis?
f) Define lead.
g) Define quantity surveying.
h) What do you mean by Gross income?
i) Give the service unit for water tank.
j) Define Tender.
k) Define Capital cost

1) What is arbitration?
m) What are the methods of taking out estimates?
n) Define the Salvage value.

Attempt any four questions from Q-2 to Q-8

## Q-2 Attempt all questions

A) Explain following related to contract
a. Earnest Money Deposit (EMD)
b. Security Deposit
c. Liquidated Damage.
B) Draft a tender notice for construction of public library with all criteria. Assume suitable data and write precise tender notice.

## Q-3 <br> Attempt all questions

A) What are the general principles for deciding the units of measurement of work ?

B) Write down the specification for first class brickwork in C.M 1:6.

Q-4 Attempt all questions
A) Calculate the following :
(1)No of bricks required for 1 cmt brickwork.
(2)No of cement bags for 1 cmt brickwork in cement mortar 1:4
(3)Quantity of sand for 1 cmt PCC in cement mortar 1:1.5:3
(4)Materials Concrete work of 1 cmt
B) Enlist the various types of excavation equipment and explain in details

## Q-5 Attempt all questions

A) Give the Rate analysis of 12 mm thick cement plaster in C.M 1:4.
B) Distinguish between the terms.
(1) Book value and market value
(2) Free hold property and lease hold property

Q-6 Attempt all questions
A) A person purchased a building for Rs. 100000 having construction cost is Rs. 60000 and land cost is Rs. 40000 , Life remaining is 25 years. If rate of interest is $6 \%$. Calculate the annual installment of sinking fund. Take scrap value as $10 \%$ of the construction cost.
B) Give the principles of writing specification.

## Attempt all questions

A) Estimate the cost of earthwork for a portion of a road from the following data. Road
width at the formation surface is 8 m . Side slopes $2: 1$ in banking and $1.5: 1$ in cutting. Length of chain is 30 m .

| Chainage | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 30 |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Ground <br> level | 71.20 | 71.25 | 70.90 | 71.25 | 70.80 | 70.45 | 70.20 | 70.35 | 69.10 | 69.70 |
| Formation <br> level | 70.00 | Upward gradient of <br> 1in 200 |  |  |  |  |  |  |  |  |

Take the rates of earthwork as Rs.275/percu.m in banking and Rs.350/percu.m in cutting.
B) Explain different types of outgoings and taxes. The owner of a property wants to sell his property at an offer of Rs. $10,00,000 /-$. The details are as under :

1) Monthly rent $=7500 /-$
2) Estimated life of property $=25$ years
3) Out goings $=30 \%$ of gross rent
4) Rate of interest on capital $7.25 \%$ and redemption on capital $5.2 \%$.

Whether it will be advisable to sell the property not?
Q-8 Attempt all questions
A) Calculate the following quantities of the residential building which is shown in Figure.
(1)Excavation in foundation (2) Plain Cement Concrete in foundation (1:4:8)
(3) First class brick work in foundation and plinth in cement mortar 1:6 (4) Inside plaster
(5) Outside plaster


