

09ARC66

## Sixth Semester B.Arch. Degree Examination, June/July 2023 Estimation and Costing

Time: 3 hrs.
Max. Marks: 100

## Note: 1. Answer Q.No. 1 compulsory and any FOUR from Q.No. 2 to Q.No.8. <br> 2. Follow written dimensions only. <br> 3. Missing data, if any, may be suitably assumed.

1 Estimate the below mentioned items of work [ Refer Fig.Q1 ].
a. Calculate centre line-calculations
b. Earthwork excavation for foundation @ Rs. 200 per cu.m
c. P.C.C Bed foundation $(1: 4: 8) @$ Rs. 300 per cu.m.
d. First class brick masonry foundation @ Rs. 1500 per cu.m.


Fig.Q1
2 Write detailed technical specification for:
a. Earthwork in excavation.
(05 Marks)
b. DPC 1:3:6.
(05 Marks)
c. Glazed tiles in skirting and Dado.
(05 Marks)
3 Write technical specification for any three of the following :
a. Ashlar masonry
b. White washing
c. Cement Mortar - Plastering
d. Brick work $1^{\text {st }}$ class.
(15 Marks)
4 Explain briefly :
a. Explain briefly the types of estimate.
(10 Marks)
b. Annual repair maintenance, annual maintenance $A B$ and $A M$.
(05 Marks)
5 a. Define rate analysis and mention its purposes.
(05 Marks)
b. Define the term contract. What are the essential requirements of a valid contract?
(05 Marks)
c. What is tender? Explain different classifications of Tender.

Calculate the quantity of earth work for 400 mt length for a portion of road in a uniform ground the height of bank at two ends begin 7 and 1.4. The formation width is 7.0 mt and side slope 2:1 (horizontal to vertical). Assume that there is no transverse slope. Calculate the quantity using method -I .
( 15 Marks)

Explain Analysis of Rates and over head costs.

8
Prepare a detailed estimate of a R.C.C. beam of 8 m clear span and $75 \mathrm{~cm} \times 40 \mathrm{~cm}$ in section from the given drawings. Steel in detail and R.C.C. work shall be calculated separately. [Refer Fig.Q8].


Fig.Q8
(15 Marks)

