

LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (Regular/ Backlog), March-April, 2016

B. Tech in Civil Engineering, Semester VI



Roll No.....

CE 609: Estimation, Costing and Evaluation Engineering

Time: 3 hours

Max. Marks: 100

Instructions to students:

- Do not write anything other than your roll number on question paper.
- Assume suitable data wherever required and mention it clearly.
- Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q.1 A Objective type multiple choice questions (10 questions @ 1 mark) 10

- The damp proof course (D.P.C.) is measured in (a) Cub.m (b) Sq m (c) Metres (d) None of the above.
- Preparing estimate beforehand gives idea related to; (a) Rates (b) Measurement (c) Quantity (d) All of the above
- Rate analysis gives; (a) Rates (b) Measurement (c) Quantity (d) None of the above.
- Thickness of slab is measured in (a) mm (b) Inch (c) Metres (d) All of the above.
- Partition wall is in (a) 0.23 m (b) 0.3 m (c) 0.2 m (d) None of the above.
- The concrete work for the following part of the building of specified thickness is measured in square metres; (a) Floor (b) Slab (c) Wall Panels (d) All of the above.
- The concrete work for the following part of the building of specified thickness is measured in cubic metres; (a) Floor (b) Slab (c) Wall Panels (d) None of the above.
- The most reliable estimate is; (a) Detailed (b) Supplementary (c) plinth area (d) all of the above.
- The main factor to be considered while preparing a detailed estimate is; (b) Quantity of the materials (b) Availability of materials (c) Transportation of materials (d) Location of site and local labour charges. (d) All of the above.
- Concreting work is measured in (a) Metres (b) Sq m (c) Cub.m (d) None of the above.

Q.2 Short answer type questions (4 questions @ 2.5 marks) 10

- Describe B.O.Q in detail?
- Define estimate and list down various types of estimate?
- Describe detail estimate briefly?
- What data you will consider for preparing rate analysis?

- Q.3A Explain the importance & purpose of estimation? 05
 Q.3B Explain the factors affecting rate analysis? 05
 Q.4A Write note on methods of estimation? 05
 Q.4B Write short note on abstract sheet? 05
 Q.5A Write note on methods of estimation? 05
 Q.5B Explain work charged establishment in detail? 05
 Q.6A Explain the purpose of rate analysis? 05
 Q.6B Write units of measurements for 05
 a) R.C.C. Work, b) Skirting, c) D.P.C., d) Plastering e) Distempering.

OR

- Q.6B Write short note on measurement sheet & abstract sheet? 05
 Q.7A Write note on revised and supplementary estimate? 05
 Q.7B Write units of measurements for; 05
 a) Distempering; b) Wood work; c) Brick wall; d) Painting on walls e) Paints.

OR

- Q.7B Write note on annual repair & maintenance and preliminary estimate? 05
 Q.8A Enlist & explain various stages for construction of a building? 10
 Q.9A Calculate the estimate for the following work by any of the method: 10
 a) Earthwork in excavation
 b) Concrete in foundation
 c) Brick-work in foundation
 d) Brick-work in superstructure, for the figure as shown below-

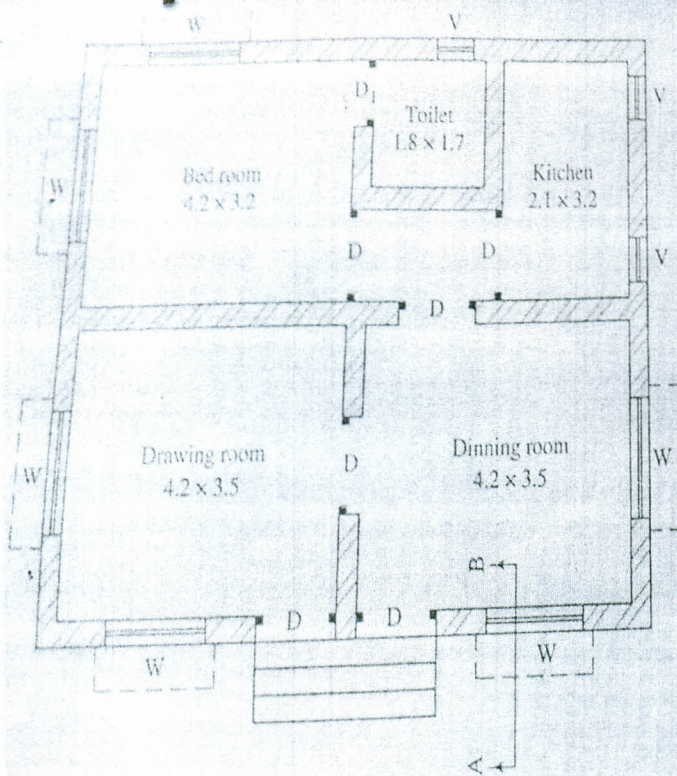
- Q.9B Calculate volume of earthwork for the proposed road for the following data; 10

Chainage (m)	0	30	60	90	120	150	180
G.L. (m)	10.55	10.50	10.40	10.35	10.20	10	9.80

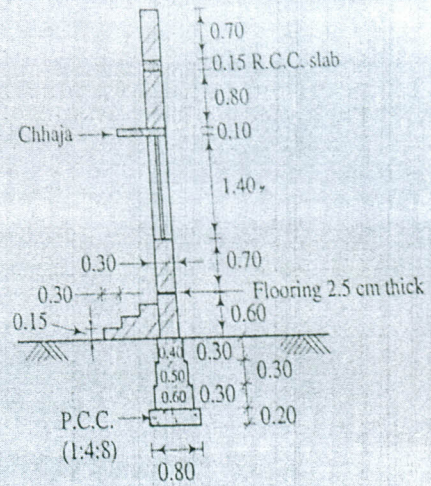
Width of road is 7.5 m. R.L. of formation level is 10 throughout the chainage. Side slope is 2:1. Also draw L-section and cross for cutting & filling section.

OR

- Q.9B Calculate the estimate for the following work by any of the method: 10
 a) Earthwork in excavation
 b) Concreting work in foundation
 c) Brick-work in foundation
 d) D.P.C 25 cm thick, for the figure as shown below-



Plan



Section AB

Reference

- D - 1.2 m x 2.1 m
- D₁ - 0.9 m x 2.0 m
- W - 1.5 m x 1.4 m
- V - 0.6 m x 0.45 m



Best of Luck
