NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR
B..TECH. (4th YEAR, VIII SEM.), Session: 2022-2023 (Even Semester)
End Sem Theory Examination May 2023

CE- 422 Quantity Surveying   **Course Coordinator- Dr. Manendra Singh**

**Time: 3 hours**   **Marks: 50**

Note: Assume missing data if any.

Q. 1 Estimate the quantities by PWD Method and Centre Line Method of the following items of a two roomed building from the given plan and section:
a) Earthwork in excavation in foundation,
b) Lime concrete in foundation,
c) 1st class brick work in cement mortar 1:6 in foundation and plinth
d) 2.5 cm c.c damp proof course
e) 1st class brick work in lime mortar in superstructure.
All walls of same section Lintels over doors. Window and Shelves are 15cm thick R.B., Door D- 1.2m x 2.1m, Windows W- 1m x 1.5m, Shelves S- 1m x 1.5 m.   **15 marks**
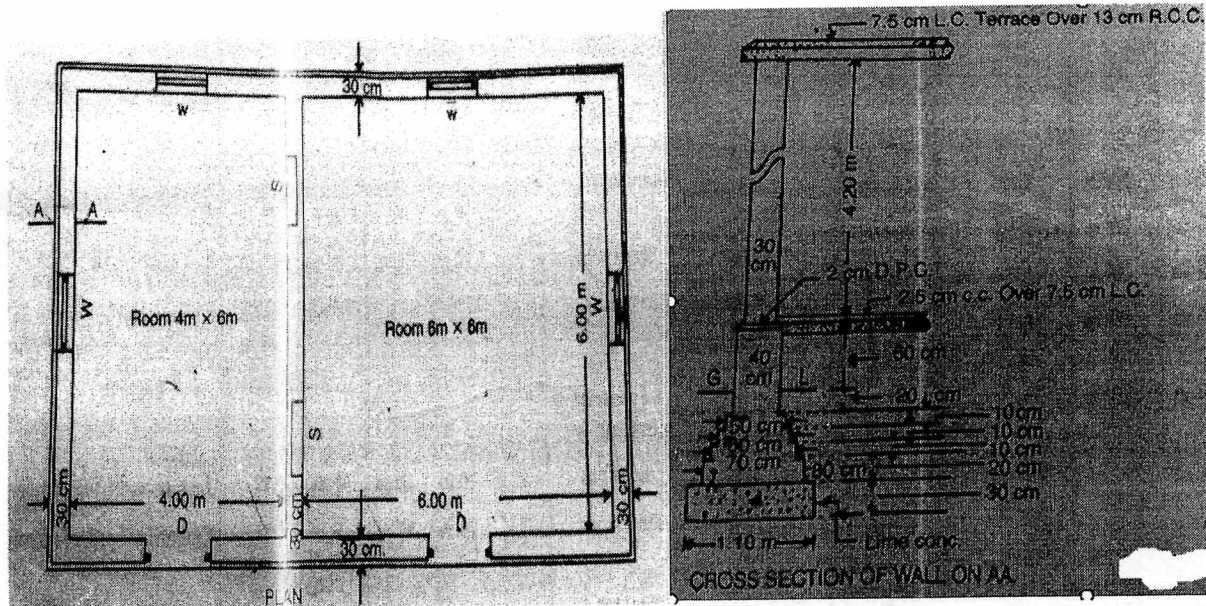
Q. 2 Calculate the quantity of materials for first class brickwork of 50cum in super structure with cement mortar (1:6). Also give the rate analysis. Assume local rate of your city. Show the values in tabular form.   **5 marks**

Q. 3 a) Write the general specifications of fourth class buildings.

b) Explain the Earnest Money Deposit, Security Deposit, Retention Money Muster roll and Regular establishment.   **5+5=10 marks**

Q.4 Explain the following:
a) Salvage Value, b) Year's Purchase (Y.P), c) Sinking Fund, d) Mortgage, e) Free Hold Property

<p align="center">or</p>

Work out the value of a premises to let for Rs. 900/- P.M. inclusive of all taxes. The building is in such a condition that the effective life cannot be more than 20 years and after this period, the building will have to be rebuilt at an estimate cost of Rs. 100000/-. The rent being paid is fair and likely to be maintained provided yearly repairs are regularly carried out. Assume cost of annual repair 7% of the gross rent. Years purchase for 20 years @ 7% allowing for the redemption of estimated cost to rebuilt, the building @4%. Other outgoing are 18% of gross rent. Consider one year rent shall be lost due to rebuilding.   10 marks

Q. 5 Prepare a detailed estimate of a R.C.C column with foundation from the given drawing:
<p align="right">10 marks</p>