



BE CIVIL VII-Sem A&B Sections A.Y. 2024-25

ESTIMATION & SPECIFICATIONS

Assignment

1. Write in detailed about general specifications of first class and second-class buildings.
2. Calculate the steel quantity of a doubly reinforced beam, length is 9m and bearing on either side is 300 mm. It is provided with top 2No. of bars 18mm \emptyset and bottom 4No. of bars 22mm \emptyset , 4No. of bars 20mm \emptyset with 10mm \emptyset @ 150mm c/c as stirrups. Width and Depth of the beam is 400mm X 750mmmm, Prepare Bar Bending Schedule.
3. Define BOT, BOOT and PPP projects
4. What do you understand by the word “MB”.
5. Compute the unit rate for 1: 4: 8 with over burnt brick for 7.5 cm thick cement flooring. The labour requirement per cum is Head Mason 1/2no, Masons 10 no's and mazdoors 20 no's and the corresponding rate are Rs.450/-, Rs.400/-, Rs.350/-respectively. The cost of cement bag is Rs.350/- brick chips 20mm down Rs.2000/- per cum and sand Rs.1200/- cum.
6. Estimate the quantity of earthwork required for the following data for a road work. The standard length of chain used is 20m. The formation width of road is 9m and the side slopes in banking 2 : 1.

Chainage	14	15	16	17	18	19	20
Ground Level	88.1	87.54	87.60	88.24	90.75	90.25	89.90

7. Write about long wall and short wall method & centre line method.
8. Calculate unit weight of steel in Newton's, 10mm \emptyset ,12mm \emptyset ,16mm \emptyset , 22mm \emptyset .