

# INSTITUTE OF ENGINEERING AND MANAGEMENT

## GOURAHARI VIHAR, PO: RANIPUT, JEYPORE – 764 005

### LESSON PLAN

**Name of the Subject:** Estimating & Cost Evaluation- II

**Name of the Faculty:** Nandi Ghosh Behera

**Semester:** Fifth Semester

**Semester From:** July to December

**Branch:** Civil Engineering

**No. of Weeks:** 15 Weeks

| Week            | Class Day       | Theory/ Practical Topics  |
|-----------------|-----------------|---|
| 1 <sup>st</sup> | 1 <sup>st</sup> | Detailed estimate of culverts and bridges<br>1.1 Detailed estimate of a simple Hume pipe culvert with right angled wing walls |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | problem   |
|                 | 4 <sup>th</sup> | problem   |
| 2 <sup>nd</sup> | 1 <sup>st</sup> | problem   |
|                 | 2 <sup>nd</sup> | 1.2 RCC deck slab culvert with right angled wing wall   |
|                 | 3 <sup>rd</sup> | problem   |
|                 | 4 <sup>th</sup> | problem   |
| 3 <sup>rd</sup> | 1 <sup>st</sup> | problem   |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | 1.3 RCC deck slab culvert with splayed wing wall  |
|                 | 4 <sup>th</sup> | problem   |
| 4 <sup>th</sup> | 1 <sup>st</sup> | problem   |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | problem   |
|                 | 4 <sup>th</sup> | 1.4 Quantity of steel for deck slab with bar bending schedule of the above jobs   |
| 5 <sup>th</sup> | 1 <sup>st</sup> | problem   |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | problem   |
|                 | 4 <sup>th</sup> | problem   |
| 6 <sup>th</sup> | 1 <sup>st</sup> | 2. Estimate of irrigation structures<br>2.1 Detailed estimate of simple type of vertical fall to given specification          |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | problem   |
|                 | 4 <sup>th</sup> | problem   |
| 7 <sup>th</sup> | 1 <sup>st</sup> | problem   |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | 2.3 Detailed estimate of siphon well drop to given specification.   |
|                 | 4 <sup>th</sup> | problem   |
| 8 <sup>th</sup> | 1 <sup>st</sup> | problem   |
|                 | 2 <sup>nd</sup> | problem   |
|                 | 3 <sup>rd</sup> | problem   |
|                 | 4 <sup>th</sup> | problem   |

|                  |                 |  |
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| 9 <sup>th</sup>  | 1 <sup>st</sup> | 3. Detailed estimate of roads<br>3.1 Detail estimate of a water bound macadam road   |
|                  | 2 <sup>nd</sup> | problem  |
|                  | 3 <sup>rd</sup> | problem  |
|                  | 4 <sup>th</sup> | problem  |
| 10 <sup>th</sup> | 1 <sup>st</sup> | problem  |
|                  | 2 <sup>nd</sup> | problem  |
|                  | 3 <sup>rd</sup> | 3.2 Detailed estimate of a National Highway in cutting / filling   |
|                  | 4 <sup>th</sup> | problem  |
| 11 <sup>th</sup> | 1 <sup>st</sup> | problem  |
|                  | 2 <sup>nd</sup> | problem  |
|                  | 3 <sup>rd</sup> | problem  |
|                  | 4 <sup>th</sup> | problem  |
| 12 <sup>th</sup> | 1 <sup>st</sup> | PWD accounts works<br>4.1 Works<br>1.1 Classification of work-original, major, petty, repair work, annual repair, special repair, quadrantal repair  |
|                  | 2 <sup>nd</sup> | Method of execution of works through the contractors, departmentally, contract and agreement, work order, item rate contract, lump sum contract, labour contract and daily labour, piece work agreement, scheduled contract, cost plus percentage contract                               |
|                  | 3 <sup>rd</sup> | Accounts of works 4.2.1 Explanation of various terms Administrative approval, technical sanction, contingency budget, tender, preparation of notice inviting tender, receiving of quotations, earnest money, security deposit, advance payment, on account payment, intermediate payment |
|                  | 4 <sup>th</sup> | Final payment, running bill, final, regular and temporary establishment, cash, major & subhead of account, temporary advance, issue rate, storage, supervision charges, suspense account, debit, credit, book transfer, voucher and related accounts                                     |
| 13 <sup>th</sup> | 1 <sup>st</sup> | 4.2.2 Measurement book use & maintenance, procedure of marking entries of measurement of work and supply of materials, labour employed, standard measurement books and common irregularity   |
|                  | 2 <sup>nd</sup> | <b>4.2.3 Master roll : Its preparation &amp; use for making payment of pay &amp; wages</b>   |
|                  | 3 <sup>rd</sup> | 4.2.4 Acquittance Roll : Its preparation & use for making payment of pay & wages   |
|                  | 4 <sup>th</sup> | <b>4.2.5 Labour &amp; labour report, method of labour payment, use of forms and necessity of submission</b>  |
| 14 <sup>th</sup> | 1 <sup>st</sup> | 4.2.6 Classification of stores, receipt / issue statement on standard form, method of preparation of stock account   |
|                  | 2 <sup>nd</sup> | Preparation and submission of returns, verification of stocks, shortage and excess   |
|                  | 3 <sup>rd</sup> | Doubt clearing classes   |
|                  | 4 <sup>th</sup> | Previous year question answer discussion   |
| 15 <sup>th</sup> | 1 <sup>st</sup> | REVISION   |