



# JHARKHAND Rai University

UGC RECOGNISED UNIVERSITY

ACCREDITED BY NAAC

## COURSE SCHEME

### DIPLOMA (L) CE 2020-2022

#### SEMESTER III

| S. No                       | CODE     | COURSE TITLE                | Periods |   |   | Evaluation Scheme |    |       |              | Subject Total | Credit    |
|-----------------------------|----------|-----------------------------|---------|---|---|-------------------|----|-------|--------------|---------------|-----------|
|                             |          |                             | L       | T | P | Assign ment       | TA | Total | ESE          |               |           |
| 1                           | 9D.204   | Applied Mathematics         | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 2                           | 7D.205   | Strength of Material        | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 3                           | 5AD.201  | Fluid Mechanics             | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 4                           | 5AD.202  | Construction Technology     | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 5                           | 5AD.203  | Surveying                   | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 6                           | 40D.201  | Communication & Soft Skills | 2       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 2         |
| 7                           | 40D.101  | Life Skills I***            | 2       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 0         |
| 8                           | 14D.201  | **Disaster Management       | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 0         |
| <b>PRACTICAL /SESSIONAL</b> |          |                             |         |   |   |                   |    |       |              |               |           |
| 1                           | 7DP.205  | Strength of Material Lab    | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 2                           | 5ADP.201 | Fluid Mechanics Lab         | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 3                           | 5ADP.203 | Surveying Field Work I Lab  | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
|                             |          |                             |         |   |   |                   |    |       | <b>TOTAL</b> | <b>950</b>    | <b>20</b> |

#### SEMESTER IV

| S. No                       | CODE     | COURSE TITLE                  | Periods |   |   | Evaluation Scheme |    |       |              | Subject Total | Credit    |
|-----------------------------|----------|-------------------------------|---------|---|---|-------------------|----|-------|--------------|---------------|-----------|
|                             |          |                               | L       | T | P | Assign ment       | TA | Total | ESE          |               |           |
| 1                           | 5AD.251  | Advance Surveying             | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 2                           | 5AD.253  | Geo Technical Engineering     | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 3                           | 5AD.254  | Transportation I              | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 4                           | 5AD.255  | Hydraulics                    | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 5                           | 5AD.256  | Concrete Technology           | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 6                           | 40D.401  | Professional Skills           | 2       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 2         |
| 7                           | 40D.151  | Life Skills II ***            | 2       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 0         |
| <b>PRACTICAL /SESSIONAL</b> |          |                               |         |   |   |                   |    |       |              |               |           |
| 1                           | 5ADP.251 | Surveying Field Work II       | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 2                           | 5ADP.253 | Geo Technical Engineering Lab | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 3                           | 5ADP.254 | Transportation I Lab          | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 4                           | 5ADP.255 | Hydraulics Lab                | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 5                           | 5ADP.256 | Concrete Technology Lab       | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
|                             |          |                               |         |   |   |                   |    |       | <b>TOTAL</b> | <b>950</b>    | <b>22</b> |

| SEMESTER V   |          |                                  |         |   |   |                   |    |       |              |               |           |
|--|----------|----------------------------------|---------|---|---|-------------------|----|-------|--------------|---------------|-----------|
| S. No  | CODE     | COURSE TITLE                     | Periods |   |   | Evaluation Scheme |    |       |              | Subject Total | Credit    |
|  |          |                                  | L       | T | P | Assignment        | TA | Total | ESE          |               |           |
| 1  | 5AD.302  | Civil Estimation & Costing       | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 2  | 5AD.303  | Theory of Structure              | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 3  | 5AD.304  | Transportation II                | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 4  | 5AD.305  | Design of Steel Structure        | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| 5  | 40D.401  | **Seminar in Executive Communi   | 2       | 0 | 0 | 20                | 10 | 30    | 20           | 50            | 0         |
| <b>DEPARTMENTAL ELECTIVE ( Choose Any one from the followings)</b> |          |                                  |         |   |   |                   |    |       |              |               |           |
| 6  | 5AD.325  | Irrigation Engg.                 | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.321  | Quantity surveying               | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.322  | River Engineering and Flood Cont | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.323  | Water Supply & Sanitary Enginee  | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.324  | Waste Management                 | 3       | 0 | 0 | 20                | 10 | 30    | 70           | 100           | 3         |
| <b>PRACTICAL /SESSIONAL</b>  |          |                                  |         |   |   |                   |    |       |              |               |           |
| 1  | 5ADP.302 | Civil Estimating & Costing Lab   | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 2  | 5ADP.303 | Theory of Structure Lab          | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
| 3  | 5ADP.305 | Design of Steel Structure Lab    | 0       | 0 | 2 |                   |    | 30    | 20           | 50            | 1         |
|  |          |                                  |         |   |   |                   |    |       | <b>TOTAL</b> | <b>700</b>    | <b>18</b> |

| SEMESTER VI  |          |                             |         |   |    |                   |    |       |              |               |           |
|--|----------|-----------------------------|---------|---|----|-------------------|----|-------|--------------|---------------|-----------|
| S. No  | CODE     | COURSE TITLE                | Periods |   |    | Evaluation Scheme |    |       |              | Subject Total | Credit    |
|  |          |                             | L       | T | P  | Assignment        | TA | Total | ESE          |               |           |
| 1  | 5AD.352  | Contracts and Accounts      | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
| 2  | 5AD.353  | Environment Engineering     | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
| 3  | 5AD.354  | Design of RCC Structures    | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
| 4  | 40D.451  | **Human Values And Ethics   | 2       | 0 | 0  | 20                | 10 | 30    | 20           | 50            | 0         |
| <b>DEPARTMENTAL ELECTIVE ( Choose Any one from the followings)</b> |          |                             |         |   |    |                   |    |       |              |               |           |
| 5  | 7D.351   | Principles of Management    | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.381  | GIS                         | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.382  | Green Building              | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
|  | 5AD.383  | Watershed Management        | 3       | 0 | 0  | 20                | 10 | 30    | 70           | 100           | 3         |
| <b>PRACTICAL /SESSIONAL</b>  |          |                             |         |   |    |                   |    |       |              |               |           |
| 1  | 5ADP.353 | Environment Engineering Lab | 0       | 0 | 2  |                   |    | 30    | 20           | 50            | 1         |
| 2  | 5AD.395  | Project                     | 0       | 0 | 10 |                   |    | 100   | 50           | 150           | 5         |
|  |          |                             |         |   |    |                   |    |       | <b>TOTAL</b> | <b>650</b>    | <b>18</b> |

**NOTE-Introduced MOOCS online course Upto 20% OF CREDIT TO BE EARNED BY moocs Swayam Portal of UGC**

|                      |           |
|----------------------|-----------|
| Sem3                 | 20        |
| Sem 4                | 22        |
| Sem5                 | 18        |
| Sem 6                | 18        |
| <b>Total Credits</b> | <b>78</b> |

**\*\*Indicates qualifying papers**

**\*\*\*Indicates qualifying papers for Lateral students only**