

BHARATI VIDYAPEETH DEEMED UNIVERSITY

College of Engineering

Department of Civil Engineering

Consistency of Mission of the institute with PEOs

| Consistency Mapping | | Correlation |
|----------------------------|----|--------------------|
| PEO1 with | M1 | H |
| | M2 | M |
| | M3 | H |
| PEO2 with | M1 | H |
| | M2 | H |
| | M3 | H |
| PEO3 with | M1 | H |
| | M2 | H |
| | M3 | L |

The consistency of the Mission statement of the department with the PEOs

| Consistency Mapping | | Correlation |
|----------------------------|----|--------------------|
| PEO1 with | M1 | H |
| | M2 | M |
| | M3 | H |
| PEO2 with | M1 | M |
| | M2 | H |
| | M3 | H |
| PEO3 with | M1 | H |
| | M2 | H |
| | M3 | L |

Mapping of PO with PEO

| PO | PEOs | | |
|----|-------|-------|-------|
| | PEO 1 | PEO 2 | PEO 3 |
| 1 | H | H | L |
| 2 | M | H | L |
| 3 | M | H | M |
| 4 | M | M | H |
| 5 | M | M | H |
| 6 | H | H | L |
| 7 | L | M | L |
| 8 | H | H | M |
| 9 | H | H | L |
| 10 | H | H | H |
| 11 | M | H | M |
| 12 | M | M | H |

CO – PO Mapping

B.Tech. (Civil) –SEM I and SEM –II

K70101

Engineering Mathematics I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | M | M | L | L | M | M | - | - | - | - | H |
| 2 | M | M | M | M | M | - | - | - | - | M | - | M |
| 3 | H | M | - | L | - | M | M | M | - | - | - | H |
| 4 | M | H | - | M | - | L | M | M | - | M | - | M |
| 5 | M- | M | M | - | M | M | - | M | M | - | M | M |
| 6 | M | M | M | M | M | L | M | M | M | M | L | H |

K70102

Engineering Science-I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | L | - | M | M | M | M | - | L | M | - | M |
| 2 | H | - | - | M | M | M | L | - | L | M | - | M |
| 3 | H | M | L | M | H | M | M | - | M | M | - | M |
| 4 | M | - | - | M | H | M | L | M | M | M | L | H |
| 5 | M | L | L | M | M | M | M | M | - | M | - | M |
| 6 | M | - | - | M | H | M | M | M | L | L | M | H |

K20103

Elements of Mechanical Engineering

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | L | L | - | - | - | L | M | - | L | M | - | L |
| 2 | M | M | L | - | - | - | - | - | L | L | - | L |
| 3 | L | L | - | - | - | L | - | - | L | L | - | L |
| 4 | L | L | - | - | - | - | - | - | - | - | - | L |
| 5 | L | L | - | - | - | - | - | - | L | L | - | L |
| 6 | L | L | - | - | - | - | - | - | L | L | - | L |

K20104

Elements of Civil Engineering

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | - | - | - | - | - | - | - | - | - | - | L |
| 2 | M | - | - | - | - | - | - | - | M | M | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | M | - | M | - | H | - | - | - | H | M | H | - |
| 4 | H | - | H | - | H | M | M | H | H | M | - | M |
| 5 | H | M | M | M | M | - | - | M | M | M | - | M |
| 6 | M | - | - | - | - | - | - | M | M | - | M | H |

K20105

Environmental Studies

| COs | POs | | | | | | | | | | | |
|----------------|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | L | L | L | L | M | L | L | L | L | L | L |
| 2 | H | L | L | L | L | M | M | L | L | M | L | M |
| 3 | H | L | L | L | L | M | M | L | L | M | L | L |
| 4 | H | L | L | L | L | L | M | L | L | M | L | L |
| 5 | H | L | L | L | L | M | M | M | M | M | L | L |
| 6 | M | L | L | L | L | M | M | M | M | M | L | L |
| K 60106 | | | | | | | | | | | | |

Engineering Graphics - I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | M | - | - | - | - | - | - | H |
| 2 | H | - | - | - | M | - | - | - | - | - | - | H |

K 60107

Workshop Practice-I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | - | M | - | M | L | H | - | - |
| 2 | H | - | - | - | - | H | - | M | M | M | - | M |
| 3 | M | - | - | M | M | M | - | - | M | M | L | L |
| 4 | H | - | - | - | - | M | - | - | M | L | - | M |
| 5 | H | - | - | - | M | M | - | M | M | M | - | M |
| 6 | - | - | L | - | - | - | - | - | - | - | - | - |

K70108

Engineering Mathematics II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | M | M | L | L | M | M | - | - | - | - | H |
| 2 | M | M | M | M | M | - | - | - | - | M | - | M |
| 3 | H | M | - | L | - | M | M | M | - | - | - | H |
| 4 | M | H | - | M | - | L | M | M | - | M | - | M |
| 5 | M | M | M | - | M | M | - | M | M | - | M | M |
| 6 | M | M | M | M | M | L | M | M | M | M | L | H |

K70109

Engineering Science-II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | M | - | M | M | L | M | - | - | M | - | M |
| 2 | M | M | - | L | L | L | M | - | - | L | - | M |
| 3 | M | - | - | L | L | M | M | - | - | L | - | M |
| 4 | H | M | - | L | L | M | M | - | -- | L | - | H |
| 5 | M | L | - | - | L | M | M | - | - | M | - | M |
| 6 | L | - | - | M | M | L | L | - | - | M | - | M |

K20110**Engineering Mechanics**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | H | L | M | - | - | - | M | M | L | M |
| 2 | H | L | L | - | L | - | - | L | L | L | - | H |
| 3 | H | H | M | L | L | - | - | M | - | - | L | M |
| 4 | H | L | L | L | - | - | - | L | L | - | - | M |
| 5 | H | L | L | L | - | - | - | L | L | - | - | M |
| 6 | H | L | M | L | - | - | - | L | - | - | - | M |

K20111**Engineering Graphics - II**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | M | - | - | - | - | - | - | H |
| 2 | H | - | - | - | M | - | - | - | - | - | - | H |
| 3 | H | - | - | - | M | - | - | - | - | - | - | H |
| 4 | H | - | - | - | M | - | - | - | - | - | - | H |

K 40112**Elements of Electrical & Electronics Engineering**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | - | - | - | - | L | L | M | M | M | L | - | M |
| 2 | - | - | - | - | L | L | M | L | M | L | - | M |
| 3 | - | - | - | - | L | L | M | M | M | L | - | M |
| 4 | - | - | - | - | L | L | M | M | M | L | - | M |
| 5 | - | - | - | - | L | L | M | M | M | L | - | M |
| 6 | - | - | - | - | L | L | M | M | M | L | - | M |

K30113**Computer Fundamentals & Information Technology**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | L | L | M | - | H | - | L | M | M | M | - | M |
| 2 | L | L | M | - | H | - | L | M | M | M | - | M |
| 3 | L | L | M | - | H | - | L | M | M | M | - | M |
| 4 | L | L | M | - | H | - | L | M | M | M | - | M |
| 5 | L | L | M | - | H | - | L | M | M | M | - | M |
| 6 | L | L | M | - | H | - | L | M | M | M | - | M |

K60114

Workshop Practice-II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | - | M | - | M | L | H | - | - |
| 2 | H | - | - | - | - | H | - | M | M | M | - | M |
| 3 | M | - | - | M | M | M | - | - | M | M | L | L |
| 4 | H | - | - | - | - | M | - | - | M | L | - | M |
| 5 | H | - | - | - | M | M | - | M | M | M | - | M |
| 6 | - | - | - | - | - | - | - | - | - | - | - | - |

K20201

Building Construction Practices

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | - | M | H | H | H | L | M | - | H | H | L | H |
| 2 | - | - | H | L | M | - | - | - | H | H | L | H |
| 3 | - | - | H | - | H | - | - | - | H | H | L | H |
| 4 | - | - | H | - | H | - | M | - | H | H | L | H |
| 5 | - | - | H | - | H | - | - | - | H | H | L | H |
| 6 | - | - | - | - | M | - | L | H | - | H | - | H |

K20202

Engineering Geology

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | M | M | L | M | M | M | - | - | M |
| 2 | H | M | - | M | M | H | H | M | M | - | L | M |
| 3 | H | M | L | M | M | H | - | M | M | L | - | M |
| 4 | H | M | L | M | M | M | M | M | M | - | - | M |
| 5 | H | H | - | H | M | M | M | M | M | L | - | M |
| 6 | H | H | - | M | M | M | M | M | M | - | L | M |

K20203

Mechanics of Materials

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | M | H | M | L | L | M | M | H | L | H |
| 2 | H | H | M | H | M | L | L | M | M | H | L | H |
| 3 | H | H | M | H | M | L | L | M | M | H | L | H |
| 4 | H | H | M | H | M | L | L | M | M | H | L | H |
| 5 | H | H | M | H | M | L | L | M | M | H | L | H |
| 6 | H | H | M | H | M | L | L | M | M | H | L | H |

K20204

Concrete Technology

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | L | L | L | L | L | L | L | M | L | L | M |
| 2 | H | M | L | L | L | L | L | L | M | L | L | M |
| 3 | H | M | M | L | L | L | L | H | H | M | L | M |
| 4 | H | H | H | M | H | M | M | H | M | M | L | M |
| 5 | H | H | H | M | L | H | H | H | H | M | L | M |
| 6 | H | H | H | H | H | M | L | H | H | L | L | M |

K20205

Engineering Economics & Management

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | - | - | - | M | - | - | - | L | - | H | L |
| 2 | H | M | - | - | M | - | - | - | M | H | H | - |
| 3 | M | - | - | - | H | H | L | H | H | H | H | M |
| 4 | H | - | - | - | - | M | M | L | - | M | - | M |
| 5 | H | M | - | - | H | L | - | M | H | H | H | H |
| 6 | H | H | - | - | - | H | - | H | H | L | H | H |

K20206

Computer Applications-I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | - | - | M | - | H | M | L | M | M | M | - | H |
| 2 | - | - | M | - | H | M | L | M | M | M | - | H |
| 3 | - | - | M | - | H | M | L | M | M | M | - | H |
| 4 | - | - | M | - | H | M | L | M | M | M | - | H |
| 5 | - | - | M | - | H | M | L | M | M | M | - | H |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | - | - | M | - | H | M | L | M | M | M | - | H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

K70207

Engineering Mathematics- III

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | H | H | M | - | - | - | - | - | M | H |
| 2 | H | H | H | H | M | - | - | - | - | - | M | H |
| 3 | H | H | H | H | M | - | - | - | - | - | M | H |
| 4 | H | H | H | H | M | - | - | - | - | - | M | H |
| 5 | H | H | H | H | M | - | - | - | - | - | M | H |
| 6 | H | H | H | H | M | - | - | - | - | - | M | H |

K20208

Building Planning and Design

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | - | - | H | - | M | - | L | - | M | H | - | H |
| 2 | - | L | H | M | M | - | M | - | M | L | - | H |
| 3 | - | L | H | L | M | - | M | - | M | L | - | H |
| 4 | - | L | M | - | H | - | L | - | M | L | - | H |
| 5 | - | L | H | - | L | - | H | - | M | L | - | H |
| 6 | - | - | - | - | H | M | - | L | M | L | - | M |

K20209

: Surveying and Leveling.

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | - | - | M | L | - | - | H | L | M | M |
| 2 | H | M | - | - | M | L | - | M | L | H | - | M |
| 3 | M | H | H | L | - | - | M | M | H | H | - | L |
| 4 | H | - | - | - | H | - | - | M | L | M | - | L |
| 5 | H | M | - | - | M | M | L | H | M | H | L | M |
| 6 | H | - | - | - | H | M | - | M | M | L | L | M |

K20210

Structural Mechanics-I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | H | H | M | - | - | - | L | M | - | - |
| 2 | H | H | H | H | M | - | - | - | L | M | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | H | H | H | H | M | - | - | - | L | M | - | - |
| 4 | H | H | H | H | M | - | - | - | L | M | - | - |
| 5 | H | H | H | H | M | - | - | - | L | M | - | - |
| 6 | H | H | H | H | M | - | - | - | L | M | - | - |

K20211

Fluid Mechanics I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | L | M | H | L | L | L | L | H | L | M |
| 2 | H | H | M | H | H | L | L | L | L | H | L | M |
| 3 | H | H | H | H | H | L | L | L | L | H | L | H |
| 4 | H | H | H | H | H | M | L | L | L | H | L | H |
| 5 | H | H | H | H | H | L | L | L | L | H | L | H |
| 6 | H | H | H | H | H | L | L | L | L | H | L | H |

K20212

Computer Application in Civil Engineering – II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | M | L | L | H | H | M | H | H | L | L | H |
| 2 | H | H | H | H | H | M | M | M | H | L | L | H |
| 3 | H | H | H | H | H | M | M | H | H | L | L | H |
| 4 | H | M | M | M | H | M | M | H | M | L | L | H |
| 5 | H | H | H | H | H | M | M | M | M | L | L | H |
| 6 | H | M | M | M | H | M | M | M | M | L | L | H |

K20301

Geotechnical Engineering

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | M | M | L | L | L | - | L | L | L | L | M |
| 2 | H | H | H | M | M | L | - | L | L | M | L | M |
| 3 | H | H | H | H | M | L | - | M | L | M | L | M |
| 4 | H | H | H | H | M | L | - | L | L | M | L | M |
| 5 | H | H | H | H | H | L | - | L | L | M | L | M |
| 6 | H | H | H | H | H | L | - | L | L | M | L | M |

K20302

Construction Operations & Equipment

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | H | - | L | M | - | L | - | H | H | H | H |
| 2 | L | H | - | H | M | - | L | - | H | L | L | L |
| 3 | H | - | - | H | - | - | - | - | L | - | L | M |
| 4 | H | M | - | L | M | - | - | - | - | L | H | L |
| 5 | - | - | - | H | M | - | L | - | - | - | L | M |
| 6 | L | - | - | - | - | - | - | L | - | L | - | L |

K20303

Structural Design-I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | H | M | M | H | M | H | M | M | L | L |
| 2 | H | H | H | M | M | H | M | H | M | M | L | L |
| 3 | H | H | H | M | M | H | M | H | M | M | L | L |
| 4 | H | H | H | M | M | H | M | H | M | M | L | L |
| 5 | H | H | H | M | M | H | M | H | M | M | L | L |
| 6 | H | H | H | M | M | H | M | H | M | M | L | L |

K20304

Fluid Mechanics II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | H | H | H | M | M | M | M | H | L | M |
| 2 | H | H | H | H | H | M | H | M | M | H | L | M |
| 3 | H | H | H | H | H | M | M | M | M | H | L | H |
| 4 | H | H | H | H | H | M | M | M | M | H | L | H |
| 5 | H | H | H | H | H | M | M | M | M | H | L | H |
| 6 | H | H | H | H | H | M | M | M | M | H | L | H |

K20305

: Structural Mechanics-II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | H | H | M | - | - | - | L | M | - | - |
| 2 | H | H | H | H | M | - | - | - | L | M | - | - |
| 3 | H | H | H | H | M | - | - | - | L | M | - | - |
| 4 | H | H | H | H | M | - | - | - | L | M | - | - |
| 5 | H | H | H | H | M | - | - | - | L | M | - | - |
| 6 | H | H | H | H | M | - | - | - | L | M | - | - |

K20306

Computer Application in Civil Engineering - III

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | H | H | H | H | M | L | - | H | L | L | H |
| 2 | H | H | H | H | H | M | L | - | H | M | L | H |
| 3 | H | H | H | H | H | M | L | - | H | M | L | H |
| 4 | H | H | H | H | H | H | M | M | H | H | L | M |
| 5 | H | H | H | H | H | H | M | M | H | H | L | M |
| 6 | H | H | H | H | H | H | M | M | H | H | L | H |

K20307

Advanced Surveying

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | H | - | - | - | H | - | - | M |
| 2 | H | - | - | - | H | - | - | - | - | - | - | M |
| 3 | H | - | - | - | H | - | - | - | - | - | - | H |
| 4 | H | H | - | - | H | - | - | - | - | - | - | H |
| 5 | H | H | - | - | H | - | - | - | - | - | - | H |
| 6 | H | - | - | - | H | - | - | - | M | - | - | H |

K20308

Structural Design-II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | - | - | - | - | - | L | - | - |
| 2 | H | H | - | - | - | - | - | - | - | - | L | - |
| 3 | - | M | H | - | M | - | - | - | - | - | - | - |
| 4 | - | M | H | - | M | - | - | - | - | - | L | - |
| 5 | - | M | H | - | L | - | - | - | - | - | - | - |
| 6 | - | M | H | - | - | - | - | - | - | - | - | - |

K 20309

Environmental systems in Water and Waste Water Treatment

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | L | L | L | M | L | L | M | L | M | M | L | L |
| 2 | L | L | L | L | L | L | M | L | M | M | L | L |
| 3 | L | L | L | M | L | L | M | L | M | M | L | L |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|---|---|---|
| 1 | H | H | M | M | H | H | M | M | M | M | M | M |
| 2 | M | H | M | M | M | M | - | - | M | M | - | M |
| 3 | M | M | H | M | M | M | M | - | M | M | - | M |
| 4 | M | H | H | M | M | M | - | M | -- | M | - | M |
| 5 | M | H | H | M | M | M | - | M | - | M | - | M |
| 6 | - | M | M | M | M | H | M | M | M | M | M | H |

K20402

Structural Design-III

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | H | - | - | - | - | - | - | - | - | - | - |
| 2 | M | H | - | - | - | - | - | - | - | - | - | L |
| 3 | - | M | H | - | L | - | - | - | - | - | - | L |
| 4 | M | M | H | - | L | - | - | - | - | - | - | L |
| 5 | - | M | H | - | L | - | - | - | - | - | - | L |
| 6 | - | M | H | - | L | - | - | - | - | - | - | L |

K20403

ELECTIVE- I: Construction Management

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | H | M | M | M | H | M | M | M | M | M | H |
| 2 | M | H | M | L | L | L | M | L | - | L | M | M |
| 3 | M | M | L | L | L | M | M | -M | - | M | M | M |
| 4 | - | - | - | M | - | H | M | H | -- | H | M | H |
| 5 | M- | L | - | M | M | H | M | M | - | M | M | M |
| 6 | M | M | H | M | M | H | M | M | M | M | H | M |

K20404

: Environmental and Water Resources Engineering

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | M | L | L | M | L | H | L | M | M | L | L |
| 2 | M | M | L | L | M | L | H | L | M | M | L | L |
| 3 | L | M | L | M | M | L | H | L | M | M | L | L |
| 4 | M | M | L | H | M | L | L | L | M | M | L | L |
| 5 | M | H | L | H | H | L | M | L | M | M | L | L |
| 6 | M | H | L | H | H | L | M | L | M | M | L | L |

K20405

Project Stage-I

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | M | L | M | | - | L | - | L | - | - | - |
| 2 | M | L | - | H | M | - | M | - | H | M | - | - |
| 3 | - | - | - | - | H | - | - | L | H | M | - | - |
| 4 | - | - | - | - | H | - | - | - | H | H | M | L |
| 5 | - | - | - | - | H | - | - | - | H | H | M | L |
| 6 | L | L | - | - | | - | - | - | H | H | | L |

K20406**Infrastructure Engineering II**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | M | M | L | M | M | M | L | M | M | M | M |
| 2 | M | L | L | - | L | L | L | - | - | - | - | L |
| 3 | - | M | L | L | L | L | L | L | L | - | - | - |
| 4 | M | L | L | L | M | - | - | - | L | - | L | - |
| 5 | - | - | - | - | - | L | L | L | L | - | L | - |
| 6 | M | L | L | L | M | L | L | - | - | - | M | L |

K20407**In-plant Training**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | L | - | L | L | - | - | - | H | H | H | M | M |
| 2 | - | - | - | - | - | L | L | - | H | H | - | - |
| 3 | - | - | - | - | - | M | - | - | M | H | - | M |
| 4 | - | - | - | - | - | M | - | - | M | H | L | M |
| 5 | - | - | - | - | M | - | M | - | H | H | - | M |
| 6 | - | - | - | - | - | - | - | - | H | H | L | L |

K20408**Earthquake Engineering and Disaster Management**

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | - | - | - | - | - | - | - | - | L | - | - |
| 2 | M | H | - | - | - | - | - | - | - | - | - | - |
| 3 | - | H | - | L | - | - | - | - | - | - | - | - |
| 4 | L | - | - | - | - | - | M | M | - | - | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | - | M | H | - | - | - | - | - | - | - | L | - |
| 6 | - | - | M | - | M | M | - | - | - | - | - | - |

K20409

Water Resources Engineering -II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | M | - | H | - | - | - | - | - | - | H | - |
| 2 | H | H | H | - | - | - | M | - | - | - | - | - |
| 3 | H | H | H | - | - | - | M | - | - | - | - | - |
| 4 | - | - | - | - | - | - | - | - | - | M | - | - |
| 5 | H | M | H | - | - | - | - | - | - | - | - | - |
| 6 | - | - | - | - | - | - | M | - | - | - | - | M |

K20410

Quantity Surveying and Valuation

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|----|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | H | H | M | M | H | M | M | M | M | M | H |
| 2 | M | H | M | M | M | H | M | H | M | M | - | M |
| 3 | - | M | - | M | M | H | M | -M | - | M | - | H |
| 4 | M | H | - | M | M | H | M | M | - | M | - | M |
| 5 | M- | H | M | M | M | H | M | M | M | M | M | M |
| 6 | M | M | M | M | M | H | M | M | M | M | L | H |

K20411

ELECTIVE-II :Advanced Engineering Geology with Rock Mechanics

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | H | M | - | M | M | - | M | M | M | M | M | M |
| 2 | H | M | M | M | M | - | M | M | M | M | - | M |
| 3 | H | M | - | H | M | M | - | M | M | - | - | H |
| 4 | H | M | - | M | M | M | - | M | M | - | M | M |
| 5 | H | M | - | H | M | M | M | M | M | - | - | M |
| 6 | H | M | - | M | M | M | M | M | - | - | - | M |

K20412

Project Stage-II

| COs | POs | | | | | | | | | | | |
|-----|-----|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | M | L | L | H | M | - | L | - | H | - | M | - |
| 2 | - | - | - | - | - | - | - | - | H | - | M | L |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|----|---|---|---|---|
| 3 | - | M | - | - | | M | M | - | | - | - | M |
| 4 | - | - | - | - | H | - | M | M | H | H | - | L |
| 5 | - | - | - | - | H | - | - | - | H | H | L | |
| 6 | - | - | - | - | - | - | - | Ms | H | H | - | L |