



# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by A.I.C.T.E., New Delhi, & Permanently Affiliated to J.N.T.U.K., Kakinada)

NAAC "B++" Accredited Institute

Cherukupally (Village), Near Tagarapuvalasa Bridge, Bhogapuram (Mandal), Vizianagaram -531162.

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## 2.6.2 Attainment of program outcomes and course outcomes are evaluated by the Institution

| Sl. No | Particular   | Page No |
|--------|--|---------|
| 1      | CIVIL Engineering Department                       | 2-7     |
| 2      | Electrical & Electronics Engineering Department    | 8-13    |
| 3      | Mechanical Engineering Department                  | 14-19   |
| 4      | Electronics & Communication Engineering Department | 20-25   |
| 5      | Computer Science Engineering Department            | 26-31   |
| 6      | Management Studies Department                      | 32-35   |



  
Principal

PRINCIPAL  
AVANTHI INSTITUTE OF ENGG. & TECH  
Cherukupally (V), Chittivalasa (SAO)  
Bhogapuram (M),  
Vizianagaram (Dist.)-531162



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## Department of Civil Engineering

### CO-PO Attainment for Academic Year 2020-2021

| Subject Code | Subject Name                              | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | P10  | P11  | P12  | PSO1 | PSO2 | PSO3 |
|--------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C111         | English – I                               |      |      | 3.00 | 3.00 |      | 2.67 | 2.00 |      |      | 2.67 | 3.00 | 1.67 | 3.00 |      | 3.00 |
| C112         | Mathematics - I                           | 3.00 | 2.50 |      |      | 2.00 |      |      |      |      |      |      |      | 2.33 | 2.50 | 3.00 |
| C113         | Engineering Chemistry                     | 3.00 | 2.50 |      |      | 2.00 | 2.50 | 3.00 |      | 3.00 | 2.00 | 2.00 |      | 2.00 | 2.50 | 2.50 |
| C114         | Engineering Mechanics                     |      |      |      |      |      | 2.20 | 2.83 |      |      | 2.00 |      |      | 3.00 | 2.50 | 2.67 |
| C115         | Computer Programming                      | 2.54 | 2.96 | 2.45 | -    | 2    | -    | -    | -    | 2.15 | -    | 3    | 3    | 2.98 | 2.88 | 2.54 |
| C116         | Environmental Studies                     | 2.54 | -    | -    | -    | -    | 2.15 | 1.54 | 1.87 | -    | -    | -    | 2    | 2    | 1.87 | 2.85 |
| C117         | Engineering /Applied Chemistry Laboratory |      | 2.33 |      |      | 2.67 |      |      |      |      |      |      |      | 2.00 | 2.00 |      |
| C118         | English - Communication Skills Lab - I    |      | 3.00 |      | 2.50 |      | 2.00 |      | 3.00 |      | 2.00 |      |      |      | 2.00 | 3.00 |
| C121         | English – II                              |      |      |      |      |      |      |      | 2.67 |      | 2.00 |      | 2.00 | 1.33 | 3.00 | 1.00 |
| C122         | Mathematics – II (Mathematical Methods)   | 3.00 | 2.50 |      |      | 2.00 |      |      |      |      |      |      |      | 2.33 | 2.50 | 3.00 |
| C123         | Mathematics – III                         | 3.00 | 2.33 |      |      | 2.33 |      |      |      |      |      |      | 3.00 | 2.00 | 2.25 |      |



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|       |  |      |      |      |      |      |      |      |  |      |      |      |      |      |      |      |
|-------|--|------|------|------|------|------|------|------|--|------|------|------|------|------|------|------|
| C124  | Engineering Physics  | 2.00 | 3.00 | 3.00 | 2.00 | 2.50 | 3.00 | 2.00 |  |      |      |      | 2.00 | 2.00 | 1.50 | 1.80 |
| C125  | Elements of Mechanical Engineering                         | 3.00 | 3.00 |      | 3.00 | 2.00 | 2.00 |      |  |      |      | 2.00 | 2.00 | 3.00 |      | 2.00 |
| C126  | Engineering Drawing  |      | 3.00 | 2.50 |      | 3.00 | 3.00 |      |  |      | 2.00 | 3.00 | 2.00 | 3.00 | 2.50 |      |
| C127  | English - Communication Skills Lab - II                    | 3.00 | 3.00 |      | 3.00 | 2.00 | 2.00 |      |  |      |      | 2.00 | 2.00 | 3.00 |      | 2.40 |
| C128  | Engineering /Applied Physics Lab                           |      | 3.00 | 2.50 |      | 3.00 | 3.00 |      |  |      | 2.00 | 3.00 | 2.00 | 3.00 | 2.20 | 2.30 |
| C129  | Engineering / Applied Physics – Virtual Labs - Assignments |      | 2.00 | 3.00 |      | 2.33 |      |      |  |      | 2.00 |      |      | 3.00 | 2.50 |      |
| C1210 | Engg. Workshop & IT Workshop                               |      | 2.00 | 3.00 |      | 2.33 |      |      |  |      | 2.00 |      |      | 3.00 | 2.60 | 2.70 |
| C211  | Probability & Statistics                                   | 2.75 | 2.50 |      |      | 2.50 |      |      |  |      |      | 1.00 | 2.67 | 2.00 |      |      |
| C212  | Basic Electrical & Electronics Engineering                 |      | 2.50 | 3.00 | 3.00 | 2.40 | 1.00 |      |  |      |      | 2.00 | 2.33 | 1.00 | 2.50 |      |
| C213  | Strength of Materials-I                                    | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      |      | 2.00 | 2.67 | 1.00 |      | 2.40 |
| C214  | Building Materials & Construction                          | 3.00 | 2.50 |      |      | 2.00 | 2.50 | 3.00 |  | 3.00 | 2.00 | 2.00 |      | 2.00 | 2.50 | 2.50 |
| C215  | Surveying  | 3.00 | 2.50 |      |      | 2.00 | 2.50 | 3.00 |  | 3.00 | 2.00 | 2.00 |      | 2.00 | 2.50 | 2.50 |
| C216  | Fluid Mechanics  | 2.00 | 3.00 | 3.00 |      | 2.00 | 3.00 | 2.00 |  |      |      |      |      | 2.00 | 1.50 |      |
| C217  | Survey Field Work - I                                      | 2.00 |      | 3.00 | 2.00 | 3.00 |      |      |  |      |      |      | 2.00 |      | 3.00 |      |



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|------|---|------|------|------|------|------|------|------|--|--|------|------|------|------|------|------|------|------|
| C218 | Strength of Materials Lab                 |      | 2.00 | 3.00 |      | 2.33 |      |      |  |  | 2.00 |      |      | 3.00 | 2.20 |      |      |      |
| C219 | Professional Ethics & Human Values        |      | 2.50 | 3.00 | 3.00 | 2.40 | 1.00 |      |  |  |      | 2.00 | 2.33 | 1.00 |      | 2.30 |      |      |
| C221 | Building Planning & Drawing               | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |  |      | 2.00 | 2.67 | 1.00 | 2.24 |      |      |      |
| C222 | Strength of Materials - II                |      |      |      |      |      | 2.20 | 2.83 |  |  |      | 2.00 |      |      | 3.00 | 2.50 | 2.67 |      |
| C223 | Hydraulics & Hydraulic Machinery          | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |  |      | 2.00 | 2.67 | 1.00 |      |      |      |      |
| C224 | Concrete Technology                       | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |  |      | 2.00 | 2.67 | 1.00 |      |      |      |      |
| C225 | Structural Analysis - I                   |      |      |      |      |      | 2.20 | 2.83 |  |  |      | 2.00 |      |      | 3.00 | 2.50 | 2.67 |      |
| C226 | Transportation Engineering - I            | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |  |      | 2.00 | 2.67 | 1.00 |      | 2.70 |      |      |
| C227 | FM & HM Lab                               | 2.00 | 2.00 | 3.00 | 2.00 | 2.50 |      |      |  |  |      | 2.00 |      | 2.00 | 3.00 | 2.10 | 2.50 |      |
| C228 | Survey Field Work - II                    |      | 2.50 | 3.00 | 3.00 | 2.40 | 1.00 |      |  |  |      |      | 2.00 | 2.33 | 1.00 | 2.80 | 2.50 |      |
| C229 | Managerial Economics & Financial Analysis | 2.00 | 2.00 | 3.00 | 2.00 | 2.50 |      |      |  |  |      | 2.00 |      | 2.00 | 3.00 | 2.20 | 2.40 |      |
| C311 | Management Science                        |      | 2.50 | 3.00 | 3.00 | 2.40 | 1.00 |      |  |  |      |      | 2.00 | 2.33 | 1.00 | 2.80 |      |      |
| C312 | Engineering Geology                       | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |  |      |      | 2.00 | 2.67 | 1.00 |      | 2.30 |      |
| C313 | Structural Analysis -II                   |      |      |      |      |      | 2.20 | 2.83 |  |  |      |      | 2.00 |      |      | 3.00 | 2.50 | 2.67 |



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|------|--|------|------|------|------|------|------|------|--|------|------|------|------|------|------|------|
| C314 | Design & Drawing of Reinforced Concrete Structures |      |      | 3.00 |      |      | 2.20 | 2.83 |  |      | 2.00 |      |      | 3.00 | 2.50 | 2.67 |
| C315 | Transportation Engineering - II                    | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      | 2.00 | 2.67 | 1.00 | 2.70 |      |      |
| C316 | Concrete Technology Lab                            | 2.00 |      | 3.00 | 2.00 | 3.00 |      |      |  |      |      | 2.00 |      | 2.20 |      |      |
| C317 | Geology Lab  | 2.00 |      | 3.00 | 2.00 | 3.00 |      |      |  |      |      | 2.00 |      |      |      | 2.80 |
| C318 | Transportation Engineering Lab                     | 2.00 |      | 3.00 | 2.00 | 3.00 |      |      |  |      |      | 2.00 |      | 2.40 |      |      |
| C321 | Design & Drawing of Steel Structures               |      |      | 3.00 |      |      | 2.20 | 2.83 |  |      | 2.00 |      |      | 3.00 | 2.50 | 2.67 |
| C322 | Geotechnical Engineering - I                       | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      | 2.00 | 2.67 | 1.00 |      |      | 2.67 |
| C323 | Environmental Engineering -I                       | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      | 2.00 | 2.67 | 1.00 |      |      | 2.00 |
| C324 | Water Resource Engineering -I                      | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      | 2.00 | 2.67 | 1.00 |      |      | 2.00 |
| C325 | Waste water Management                             | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      | 2.00 | 2.67 | 1.00 |      |      | 2.00 |
| C326 | Geotechnical Engineering Lab                       |      | 2.00 | 3.00 |      | 2.33 |      |      |  | 2.00 |      |      | 3.00 | 2.50 |      |      |
| C327 | Environmental Engineering Lab                      |      | 2.00 | 3.00 |      | 2.33 |      |      |  | 2.00 |      |      | 3.00 | 2.50 |      |      |
| C328 | Computer Aided Engineering Lab                     |      | 2.00 | 3.00 |      | 2.33 |      |      |  | 2.00 |      |      | 3.00 | 2.50 |      |      |
| C411 | Environmental Engineering - II                     | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |  |      | 2.00 | 2.67 | 1.00 |      |      | 1.80 |



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|------|--|------|------|------|------|------|------|------|------|--|------|------|------|------|------|------|
| C412 | Water Resource Engineering - II              | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 | 1.90 |      |
| C413 | Geotechnical Engineering - II                | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 | 2.00 | 2.00 |
| C414 | Remote Sensing & GIS Applications            | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 |      | 1.90 |
| C415 | Ground Improvement Techniques                | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 | 2.00 |      |
| C416 | Environmental Impact Assessment & Management | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 |      | 2.00 |
| C417 | IPR & Patents                                |      | 2.50 | 3.00 | 3.00 | 2.40 | 1.00 |      |      |  |      | 2.00 | 2.33 | 1.00 |      | 1.80 |
| C418 | GIS & CAD Lab                                |      | 2.00 | 3.00 |      | 2.33 |      |      |      |  | 2.00 |      |      | 3.00 | 1.80 |      |
| C419 | Irrigation Design & Drawing                  |      | 2.00 | 3.00 |      | 2.33 |      |      |      |  | 2.00 |      |      | 3.00 |      | 2.00 |
| C421 | Estimation Specification & Contracts         |      |      | 3.00 |      |      | 2.20 | 2.83 |      |  | 2.00 |      |      | 3.00 | 2.50 | 2.67 |
| C422 | Construction Technology & Management         | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 |      |      |
| C423 | Prestressed Concrete                         |      |      | 3.00 |      |      | 2.20 | 2.83 |      |  | 2.00 |      |      | 3.00 | 2.50 | 2.67 |
| C424 | Solid and Hazardous Waste Management         | 1.33 | 3.00 | 2.50 | 2.00 | 2.67 | 2.00 |      |      |  |      | 2.00 | 2.67 | 1.00 | 2.25 | 2.00 |
| C425 | Seminar                                      |      |      |      |      |      |      |      |      |  |      |      |      |      |      |      |
| C426 | Project                                      | 3.00 | 1.50 | 1.50 |      | 2.33 | 2.00 |      | 1.00 |  | 2.00 | 2.67 | 1.50 | 3.00 | 2.00 | 2.00 |



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## Overall Attainment

|                      | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Direct Attainment    | 1.97 | 2.64 | 2.74 | 2.25 | 2.49 | 2.07 | 2.63 | 2.28 | 2.79 | 2.04 | 2.10 | 2.39 | 2.02 | 2.36 | 2.39 |
| In Direct Attainment | 2.1  | 2    | 2.5  | 2.34 | 2.88 | 2.1  | 2.44 | 2.4  | 2.2  | 2.8  | 2.3  | 2.4  | 2.5  | 2.6  | 2.4  |
| Final PO Attained    | 1.99 | 2.51 | 2.70 | 2.27 | 2.57 | 2.07 | 2.59 | 2.31 | 2.67 | 2.19 | 2.14 | 2.39 | 2.12 | 2.41 | 2.39 |

**Head of the Department**

Head of the Department  
Civil Engineering  
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## Department of Electrical & Electronics Engineering

### CO-PO Attainment for Academic Year 2020-2021

| Subject Code | Subject Name                         | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|--------------|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C111         | English – I                          | -    | 2.20 | 2.60 | 3.00 | -    | 2.70 | 2.70 | 2.42 | -    | 2.71 | -    | 2.45 | 2.70 | 2.50 |
| C112         | Mathematics - I                      | 1.40 | 1.40 | 1.27 | 1.00 | -    | -    | -    | -    | -    | -    | -    | 1.16 | 1.00 | 1.48 |
| C113         | Applied chemistry                    | 1.60 | 1.95 | 2.40 | -    | 2.08 | 2.11 | 2.10 | -    | -    | -    | 2.00 | 1.80 | 1.91 | 2.30 |
| C114         | Engineering mechanics                | 1.96 | -    | 1.93 | 2.24 | 2.00 | 2.00 | 2.10 | -    | -    | -    | -    | -    | 2.30 | 1.80 |
| C115         | Computer Programming                 | 1.96 | 2.40 | 1.60 | -    | 1.76 | -    | -    | -    | 1.93 | -    | 2.20 | 2.30 | 2.16 | 1.90 |
| C116         | Environment studies                  | 1.40 | -    | -    | -    | -    | 1.40 | 1.48 | 1.47 | -    | -    | -    | 1.50 | 1.30 | 1.80 |
| C117         | Applied / Engineering chemistry Lab  | 2.33 | 2.00 | 2.67 | 2.50 | 3.00 | -    | 3.00 | -    | -    | -    | 2.50 | 3.00 | -    | -    |
| C118         | English - communication laboratory-1 | -    | 2.33 | -    | -    | -    | 2.00 | 2.50 | 2.33 | 2.50 | 3.00 | -    | 2.75 | 2.25 | 2.00 |
| C119         | Computer Programming Laboratory      | 2.75 | 2.00 | 3.00 | -    | 2.50 | -    | -    | -    | 2.20 | -    | 2.00 | 2.00 | 2.50 | 3.00 |
| C121         | English – II                         | 3.00 | 3.00 | -    | -    | -    | 2.70 | -    | 2.60 | -    | 2.69 | -    | 2.60 | 3.00 | 2.60 |



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|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C122  | Mathematics – II<br>(Mathematical<br>Methods)                       | 2.03 | 1.96 | 2.40 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.25 | 2.13 | 2.13 |
| C123  | Mathematics – III   | 1.80 | 1.80 | 1.40 | 1.20 | -    | -    | -    | -    | -    | -    | -    | 1.40 | 1.34 | 1.62 |
| C124  | Applied Physics   | 1.40 | 1.50 | 1.80 | -    | 1.48 | 1.69 | 1.80 | -    | -    | -    | 1.50 | 1.40 | 1.44 | 1.80 |
| C125  | Electrical Circuit<br>Analysis - I                                  | 2.11 | 2.06 | 2.13 | 2.24 | -    | -    | -    | -    | -    | -    | -    | -    | 1.96 | 2.40 |
| C126  | Engineering<br>Drawing  | 3.00 | 3.00 | 2.75 | 1.50 | 2.50 | -    | -    | -    | 2.50 | -    | 2.50 | 2.00 | 2.67 | 2.67 |
| C127  | English -<br>Communication<br>Skills Laboratory -<br>II             | 3.00 | 2.00 | -    | -    | -    | 1.67 | 1.50 | 2.00 | -    | 2.83 | -    | 2.67 | 2.40 | 2.00 |
| C128  | Applied /<br>Engineering<br>Physics Laboratory                      | 3.00 | 2.50 | 3.00 | 2.33 | 2.00 | 2.67 | 2.50 | -    | 2.50 | -    | -    | 1.00 | 2.33 | 2.67 |
| C129  | Applied /<br>Engineering<br>Physics – Virtual<br>Labs - Assignments | 2.50 | -    | 2.75 | 2.50 | 2.00 | 2.00 | 2.00 | -    | -    | -    | -    | -    | 2.67 | 2.00 |
| C1210 | Engg. Workshop &<br>IT Workshop                                     | 2.33 | 2.00 | 2.67 | 2.50 | 3.00 | -    | 2.50 | -    | -    | -    | 2.50 | 2.67 | 2.67 | 2.67 |
| C211  | Electrical Circuit<br>Analysis - II                                 | 1.85 | 1.70 | 2.00 | 1.77 | 2.06 | -    | -    | -    | -    | -    | -    | -    | 1.87 | 1.83 |
| C212  | Electrical<br>Machines-I  | 2.08 | 1.84 | 2.11 | 1.60 | 1.94 | 2.20 | -    | -    | -    | -    | -    | -    | 2.00 | 2.00 |
| C213  | Basic Electronics<br>and Devices                                    | 0.93 | -    | 1.20 | 0.84 | 0.88 | -    | -    | -    | 0.97 | -    | -    | -    | 0.86 | 0.93 |



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|------|---|------|------|------|------|------|------|------|------|------|---|------|------|------|------|
| C214 | Electro Magnetic Fields                   | 2.00 | 2.13 | 2.00 | 1.90 | -    | -    | -    | -    | -    | - | -    | -    | 2.06 | 1.94 |
| C215 | Thermal and Hydro Prime Movers            | 2.50 | 3.00 | 2.77 | -    | 2.67 | 2.60 | -    | -    | 2.20 | - | -    | -    | 2.52 | 2.60 |
| C216 | Managerial Economics & Financial Analysis | -    | -    | -    | -    | 1.80 | 1.80 | -    | -    | 1.80 | - | 1.80 | -    | 1.80 | 1.80 |
| C217 | Thermal and Hydro Laboratory              | 3.00 | 2.50 | 3.00 | 3.00 | 2.67 | 2.50 | -    | -    | 2.33 |   |      | 2.50 | 2.00 | 2.33 |
| C218 | Electrical Circuits Laboratory            | 2.00 | 2.25 | 2.33 | 2.67 | 2.33 | 2.00 | -    | -    | 2.00 | - | -    | -    | 2.00 | 2.00 |
| C221 | Electrical Measurements                   | 1.80 | 2.00 | 1.78 | 1.85 | 1.92 | -    | -    | -    | -    | - | -    | -    | 1.78 | 1.91 |
| C222 | Electrical Machines-II                    | 2.40 | 2.47 | 2.43 | 2.40 | 2.20 | -    | -    | -    | -    | - | -    | -    | 2.60 | 2.38 |
| C223 | Switching Theory and Logic Design         | 2.40 | 1.60 | 2.40 | 2.10 | 1.90 | -    | -    | -    | 1.60 | - | 2.40 | 2.40 | 2.16 | 2.17 |
| C224 | Control Systems                           | 1.68 | 1.60 | 1.72 | 1.67 | -    | -    | -    | -    | -    | - | -    | -    | 1.60 | 1.70 |
| C225 | Power Systems-I                           | 1.71 | -    | -    | -    | 1.90 | 1.70 | 1.83 | -    | 1.96 | - | -    | -    |      | 1.75 |
| C226 | Management Science                        | -    | -    | -    | -    | -    | 1.83 | -    | 1.83 | 1.78 | - | 1.69 | -    | 1.68 | 1.80 |
| C227 | Electrical Machines -I Laboratory         | 2.25 | 2.25 | -    | 2.40 | -    | -    | -    | -    | 2.20 | - | -    | -    | 1.67 | 2.25 |
| C228 | Electronic Devices & Circuits Laboratory  | 2.33 | 2.25 | 2.33 | 2.33 | 2.25 | -    | -    | -    | -    | - | -    | -    | 1.75 | 2.00 |
| C311 | Power Systems-II                          | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | -    | -    | -    | -    | - | -    | -    | 1.60 | 1.60 |



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|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C312 | Renewable Energy Sources                   | 1.70 | 1.60 | 1.75 | 1.60 | 1.60 | -    | 1.68 | -    | -    | -    | -    | -    | 1.66 | 1.60 |
| C313 | Signals and Systems                        | 2.00 | 1.84 | 2.20 | 2.17 | -    | -    | -    | -    | -    | -    | -    | -    | 2.00 | 2.17 |
| C314 | Pulse & Digital Circuits                   | 1.75 | 1.69 | 1.77 | 1.72 | -    | -    | -    | -    | -    | -    | -    | -    | 1.69 | 1.80 |
| C315 | Power Electronics                          | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | -    | -    | -    | -    | -    | -    | -    | 1.00 | 1.00 |
| C316 | Electrical Machines-II Laboratory          | 2.00 | 2.33 | 2.50 | 2.25 | -    | -    | -    | -    | 2.50 | -    | -    | -    | 2.00 | 2.33 |
| C317 | Control Systems Laboratory                 | 2.33 | 2.33 | 2.33 | 2.33 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.00 | 1.67 |
| C318 | Electrical Measurements Laboratory         | 2.00 | 2.25 | 2.33 | 2.67 | 2.33 | 6.00 | -    | -    | 2.00 | -    | -    | -    | 2.00 | 1.83 |
| C319 | IPR & Patents                              | -    | -    | -    | -    | -    | 3.00 | 2.50 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 3.00 |
| C321 | Power Electronic Controllers & Drives      | 1.80 | 1.77 | 1.67 | 1.73 | 1.72 | -    | -    | -    | -    | -    | -    | -    | 1.72 | 1.74 |
| C322 | Power System Analysis                      | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | -    | -    | -    | -    | -    | -    | -    | -    | 1.60 |
| C323 | Micro Processors and Micro controllers     | 1.90 | 2.17 | 1.82 | 1.96 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.00 | 1.87 |
| C324 | Data Structures                            | 2.40 | 1.60 | 2.40 | 2.10 | 1.90 | -    | -    | -    | 1.60 | -    | 2.40 | 2.40 | 2.16 | 2.17 |
| C325 | Energy Audit and Conservation & Management | 2.04 | -    | 2.06 | -    | 2.08 | -    | -    | -    | 2.40 | -    | 1.60 | 1.93 | 1.90 | 2.20 |



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|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C326 | Power Electronics Laboratory                  | 2.00 | 2.50 | 2.33 | 2.50 | 2.25 | -    | -    | -    | 2.00 | -    | -    | -    | 2.17 | 2.17 |
| C327 | Microprocessors & Microcontrollers Laboratory | 2.50 | 1.50 | 3.00 | 2.67 | 3.00 | -    | -    | -    | 3.00 | -    | 3.00 | 3.00 | 2.50 | 3.00 |
| C328 | Data Structures Laboratory                    | 2.00 | 2.33 | 2.67 | 3.00 | 3.00 | -    | -    | -    | 2.00 | -    | 3.00 | 3.00 | 2.00 | 3.00 |
| C329 | Professional Ethics & Human Values            | -    | -    | -    | -    | -    | 2.40 | 2.50 | 2.60 | -    | 2.25 | -    | -    | 1.50 | 2.33 |
| C411 | Utilization of Electrical Energy              | 2.55 | 2.33 | 2.60 | -    | 2.73 | -    | -    | -    | -    | -    | -    | 2.20 | 2.60 | 2.66 |
| C412 | Linear IC Applications                        | 1.60 | 1.60 | 1.60 | 1.60 | -    | -    | -    | -    | -    | -    | -    | -    | 1.60 | 1.60 |
| C413 | Power System Operation & Control              | 2.00 | 2.07 | 1.97 | 2.00 | -    | -    | -    | -    | -    | -    | -    | -    | 1.94 | 2.00 |
| C414 | Switchgear and Protection                     | 2.73 | 2.80 | 2.82 | 2.80 | 2.47 | -    | -    | -    | -    | -    | -    | -    | 2.75 | 2.75 |
| C415 | Instrumentation                               | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | -    | -    | -    | -    | -    | -    | -    | 2.20 | 2.20 |
| C416 | Electric Power Quality                        | 2    | 2.25 | 2.5  | -    | -    | -    | -    | -    | -    | -    | -    | -    | 1.9  | 2    |
| C417 | Electrical Simulation Laboratory              | 2.00 | 2.40 | 2.67 | 2.67 | 2.33 | -    | -    | -    | -    | -    | -    | -    | 2.00 | 2.17 |
| C418 | Power Systems & Simulation Laboratory         | 2.00 | 2.20 | 2.40 | 2.33 | 2.67 | -    | -    | -    | -    | -    | -    | -    | 2.33 | 2.33 |
| C421 | Digital Control Systems                       | 3.00 | 2.84 | 2.64 | 2.73 | 2.43 | -    | -    | -    | -    | -    | -    | -    | 2.75 | 2.73 |



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|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C422 | HVDC Transmission                                 | 2.7  | 2.82 | 2.67 | 2.77 | 2.70 | -    | -    | -    | -    | -    | -    | -    | 2.75 | 2.73 |
| C423 | Electrical Distribution Systems                   | 2.87 | 2.57 | 2.82 | 2.44 | 2.68 | -    | -    | -    | -    | -    | -    | -    | 2.67 | 2.60 |
| C424 | Flexible alternating Current transmission systems | 1.20 | 1.29 | 1.16 | 1.11 | 1.30 | -    | -    | -    | -    | -    | -    | -    | 1.22 | 1.29 |
| C425 | Seminar   | 2.33 | 2.67 | -    | 2.50 | -    | 2.00 | 3.00 | 2.50 | -    | 2.00 | -    | 3.00 | 2.50 | 2.33 |
| C426 | Project   | 2.00 | 2.33 | 2.50 | 2.67 | -    | 3.00 | 2.00 | -    | 2.50 | 3.00 | 2.00 | -    | 1.67 | 2.20 |

## Overall Attainment

|                      | PO1  | PO2 | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|----------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| Direct Attainment    | 2.04 | 2.1 | 2.18 | 2.03 | 2.04 | 1.93 | 1.84 | 1.68 | 2.02 | 1.92 | 1.96 | 2.15 | 1.9  | 2    |
| In Direct Attainment | 2.1  | 2.1 | 2.4  | 2.9  | 2.8  | 2.7  | 2.6  | 2.4  | 2.1  | 2.6  | 2.4  | 2.6  | 2.7  | 2.6  |
| Final PO Attained    | 2.05 | 2.1 | 2.22 | 2.2  | 2.19 | 2.09 | 1.99 | 1.83 | 2.03 | 2.05 | 2.05 | 2.24 | 2.06 | 2.12 |

Head of the Department

Head of The Department  
Department of Electrical and Electronics Engineering  
Avanthi Institute of Engg. & Tech.  
Cherukupally (V), Chittivalasa (SAO)  
Bhogapuram (M), Vizianagaram(Dist)-531163



Principal

PRINCIPAL  
AVANTHI INSTITUTE OF ENGG. & TECH.  
Cherukupally (V), Chittivalasa (SAO)  
Bhogapuram (M), 13  
Vizianagaram (Dist.)-531162



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## Department of Mechanical Engineering

### CO-PO Attainment for Academic Year 2020-2021

| Subject Code | Subject Name                           | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C111         | English – I                            | -    | 1.00 | 2.00 | 2.00 | -    | 3.00 | 2.00 | 2.67 | -    | 2.60 | -    | 2.67 | 2.67 | 2.67 | 2.52 |
| C112         | Mathematics - I                        | 2.00 | 2.00 | 1.87 | 1.89 | -    | -    | -    | -    | -    | -    | -    | 1.88 | 1.80 | 2.00 | 2.21 |
| C113         | Engineering Chemistry                  | 2.14 | 2.00 | 2.00 |      | 2.20 |      |      |      |      |      |      | 2.00 | 2.00 | 2.22 | 2.20 |
| C114         | Engineering Mechanics                  | 2.18 | 2.08 | 2.40 | 2.40 | 2.06 | -    | -    | -    | 2.40 | -    | -    | 2.40 | 2.13 | 2.40 | 2.00 |
| C115         | Computer Programming                   | 2.40 | 1.60 | 2.40 | 2.10 | 2.40 | -    | -    | 2.20 | 2.40 | -    | 2.40 | 2.40 | 2.40 | 1.80 | 2.21 |
| C116         | Environmental Studies                  | 2.00 | -    | -    | -    | -    | 2.50 | 2.67 | 2.75 | -    | -    | -    | 2.00 | 2.00 | 3.00 | 2.18 |
| C117         | Applied/Engineering Chemistry Lab      | 2.50 | 2.00 | 1.50 | -    | 2.67 | -    | 2.33 | -    | 2.33 | -    | -    | 2.67 | 2.00 | 3.00 | 2.33 |
| C118         | English - Communication Skills Lab – 1 | 3.00 | 2.00 | -    | -    | -    | 1.67 | 1.50 | 2.00 | -    | 3.00 | -    | 3.00 | 2.40 | 2.00 | 2.67 |
| C119         | Computer Programming Lab               | 2.75 | 2.00 | 3.00 | -    | 2.50 | -    | -    | -    | 2.20 | -    | 2.00 | 2.00 | 2.50 | 3.00 | 2.67 |
| C121         | English-II                             | 2.00 | 2.67 | -    | -    | -    | 2.67 | -    | 2.50 | -    | 2.40 | -    | 2.00 | 3.00 | 3.00 | 3.00 |
| C122         | Mathematics – II                       | 2.06 | 1.96 | 2.33 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.33 | 2.00 | 2.27 | 2.00 |



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|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C123  | Mathematics-III  | 2.60 | 2.75 | 2.00 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.75 | 2.00 | 3.00 | 2.13 |      |
| C124  | Engineering Physics                                      | 1.40 | 1.80 | 1.80 | -    | 1.48 | 1.80 | 1.80 | -    | -    | -    | 1.80 | 1.40 | 1.62 | 1.80 | 2.40 |      |
| C125  | Basic EEE  | 1.68 | 1.69 | -    | 1.67 | -    | -    | -    | -    | -    | -    | -    | 1.53 | 1.62 | 1.80 | 2.17 |      |
| C126  | Engineering Drawing                                      | 2.17 | 1.00 |      |      |      |      |      |      |      |      |      |      | 2.00 | 2.00 | 2.04 |      |
| C127  | English - Communication Skills Lab – 2                   | 3.00 | 2.00 | -    | -    | -    | 1.67 | 1.50 | 2.00 | -    | 3.00 | -    | 3.00 | 2.40 | 2.00 | 2.22 |      |
| C128  | Applied / Engineering Physics Lab                        | 3.00 | 2.50 | 3.00 | 2.33 | 2.00 | 2.67 | 2.50 | -    | 2.50 | -    | -    | 1.00 | 2.33 | 2.67 | 2.35 |      |
| C129  | Applied / Engineering Physics Virtual Labs – Assignments | 2.50 | -    | 2.75 | 2.50 | 2.00 | 2.00 | 2.00 | -    | -    | -    | -    | -    | 2.67 | 2.00 | 2.48 |      |
| C1210 | Engineering Workshop & It Workshop                       | 2.50 | -    | 2.75 | 2.50 | 2.00 | 2.00 | 2.00 | -    | -    | -    | -    | -    | 2.67 | 2.00 | 3.00 |      |
| C211  | MMS  | 2.00 | 2.00 |      |      |      |      |      |      |      | 2.00 |      | 2.00 | 2.00 | 2.00 | 2.00 |      |
| C212  | MOS  | 3.00 | 2.20 | 1.00 |      |      |      |      |      |      |      |      |      |      | 2.50 | 2.43 |      |
| C213  | TD   | 2.44 | 3.00 | 1.00 |      |      |      |      |      |      |      |      |      |      | 2.20 | 1.67 |      |
| C214  | MEFA   | 2.40 | 3.00 | 2.25 |      |      | 3.00 | 3.00 |      |      |      | 1.56 |      |      | 2.40 | 2.00 |      |
| C215  | FM&HM  | 2.50 | 2.00 | 2.50 | -    | -    | -    | -    | -    | -    | -    | -    | 2.00 | -    | 2.67 | 2.63 |      |
| C216  | CA&EDP   | 2.00 | 2.00 | 1.00 | -    | -    | -    | -    | -    | -    | 1.00 | 1.00 | -    | 1.00 | 1.00 | 2.00 | 2.80 |



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|------|--|------|------|------|------|------|------|------|------|---|------|------|------|------|------|------|
| C217 | Electrical & Electronics Engg. Lab       | 1.93 | 1.88 |      | 2.50 |      | 2.00 |      |      |   |      |      |      |      | 2.06 | 1.33 |
| C218 | Mechanics Of Solids & Metallurgy Lab -   | 2.40 | 3.00 | 1.00 |      |      | 2.00 |      |      |   |      |      |      |      | 3.00 | 2.50 |
| C221 | KOM                                      | 1.86 | 3.00 |      | 3.00 |      | 2.00 |      |      |   |      |      |      |      | 3.00 | 2.50 |
| C222 | TE-1                                     | 2.35 | 2.00 |      | 2.00 |      | 3.00 |      |      |   |      |      |      |      | 2.60 | 2.00 |
| C223 | PT-1                                     | 3.00 | 2.00 |      | 2.00 |      | 2.00 |      |      |   |      |      |      |      | 2.00 | 2.00 |
| C224 | DMM-1                                    | 2.50 | 2.50 |      | 3.00 |      |      |      |      |   | 2.50 | 2.50 |      |      |      | 2.53 |
| C225 | MD                                       | 2.50 | 2.40 |      | 3.00 |      |      |      |      |   | 2.50 | 2.50 |      |      |      | 1.50 |
| C226 | IEM                                      | 2.00 | 3.00 |      | 3.00 |      | 2.00 |      |      |   |      |      |      |      | 2.00 | 2.00 |
| C227 | Fluid Mechanics & Hydraulic Machines Lab | 3.00 | -    | 3.00 | -    | 3.00 | 2.00 | -    | -    | - | -    | 2.00 | 3.00 | 2.00 | 3.00 | 2.50 |
| C228 | Production Technology Lab                | 2.50 | 2.00 | 3.00 | -    | -    | -    | -    | -    | - | -    | 2.00 | 2.00 |      | 3.00 | 2.00 |
| C311 | DOM                                      | 2.25 | 2.75 |      | 3.00 |      |      |      |      |   | 2.30 | 2.30 |      |      |      | 2.00 |
| C312 | MC&MT                                    | 2.47 | 3.00 |      | 3.00 |      |      |      |      |   | 2.50 | 2.50 |      |      |      | 1.88 |
| C313 | DMM-2                                    | 2.50 | 2.50 |      | 3.00 |      |      | 3.00 | 3.00 |   |      |      |      |      |      | 2.00 |
| C314 | OR                                       | 2.60 | 2.70 |      | 3.00 |      |      |      |      |   |      |      |      |      |      | 2.40 |



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|------|------------------------------------|------|------|------|------|------|---|------|------|------|------|------|------|------|------|------|
| C315 | TE-2                               | 2.56 | 2.50 |      | 3.00 |      |   |      |      |      |      |      |      |      |      | 2.00 |
| C316 | Theory Of Machines Lab             | -    | 2.00 | -    | 3.00 | -    | - | -    | -    | -    | -    | -    | 2.00 | 3.00 | -    | 2.50 |
| C317 | Machine Tools Lab                  | 2.50 | 2.00 | 2.50 | -    | -    | - | -    | -    | -    | -    | -    | 2.00 | -    | 2.67 | 2.00 |
| C318 | Thermal Engineering Lab            | 2.00 | 2.00 | 1.00 | -    | -    | - | -    | -    | 1.00 | 1.00 | -    | 1.00 | 1.00 | 2.00 |      |
| C319 | IPR                                | 2.60 | 2.00 |      | 2.00 | 2.00 |   | 3.00 |      | 1.50 |      | 2.25 |      |      |      | 1.70 |
| C321 | METROLOGY                          | 2.00 | 2.50 |      | 3.00 |      |   |      | 3.00 | 1.80 | 1.80 | 2.60 |      |      |      | 2.50 |
| C322 | I&CS                               | 2.50 |      |      | 3.00 |      |   | 3.00 | 3.00 | 2.10 | 2.90 | 3.40 |      |      |      | 2.50 |
| C323 | R&AC                               | 2.50 |      |      | 3.00 |      |   |      |      |      | 2.25 | 2.25 |      |      |      | 2.00 |
| C324 | HT                                 | 2.60 |      |      | 3.00 |      |   |      |      |      |      | 2.25 |      |      |      | 2.25 |
| C325 | IR                                 | 2.00 | 2.00 |      | 2.89 | 2.00 |   | 2.00 |      | 3.00 |      | 2.25 |      |      |      | 1.70 |
| C326 | Heat Transfer Lab                  | 2.50 | 2.00 | 3.00 | -    | -    | - | -    | -    | -    | -    | 2.00 | 2.00 |      | 3.00 | 0.00 |
| C327 | Metrology & Instrumentation Lab    | 1.67 | -    | 2.00 | 3.00 | -    | - | -    | 1.00 | 1.00 | 1.00 | -    | -    | -    | 0.00 | 2.00 |
| C328 | Computational Fluid Dynamics Lab   | -    | 2.00 | -    | 3.00 | -    | - | -    | -    | -    | -    | -    | 2.00 | 3.00 | -    | 2.00 |
| C329 | Professional Ethics & Human Values | 2.50 | 2.00 | 2.50 | -    | -    | - | -    | -    | -    | -    | -    | 2.00 | -    | 2.67 | 2.25 |



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|------|------------------|------|------|------|------|------|------|------|------|------|---|------|------|------|------|------|
| C411 | MECHATRONICS     | 2.60 | 2.00 |      | 3.00 | 2.00 |      | 3.00 |      | 1.50 |   | 2.25 |      |      |      | 1.70 |
| C412 | CAD.CAM          | 2.60 | 1.50 |      | 3.00 | 2.00 |      |      |      | 1.20 |   |      |      |      |      | 1.70 |
| C413 | FEM              | 2.00 | 1.00 |      | 2.80 | 2.00 | 3.00 |      | 2.00 | 1.80 |   | 1.80 |      |      |      | 2.25 |
| C414 | PPE              | 2.50 | 1.50 |      | 3.00 | 2.00 | 3.00 |      |      | 2.00 |   | 2.00 |      |      |      | 2.00 |
| C415 | CFD              | 3.00 | 2.00 |      | 2.00 | 1.30 | 2.00 |      | 2.00 | 1.00 |   | 1.60 |      |      |      | 1.30 |
| C416 | DFM              | 2.10 | 1.50 |      | 3.00 | 1.30 | 3.00 |      | 2.00 | 1.20 |   | 2.30 |      |      |      | 1.60 |
| C417 | CAD/CAM LAB      | 2.50 | 2.00 | 2.50 | -    | -    | -    | -    | -    | -    | - | -    | 2.00 | -    | 2.67 | 2.25 |
| C418 | Mechatronics Lab | 2.50 | 2.00 | 3.00 | -    | -    | -    | -    | -    | -    | - | 2.00 | 2.00 |      | 3.00 | 2.00 |
| C421 | PPC              | 1.81 | 1.07 |      | 3.00 | 1.09 |      |      |      | 1.60 |   | 1.93 |      |      |      | 1.23 |
| C422 | UCMP             | 3.00 | 1.00 |      | 2.90 | 1.00 |      |      |      | 1.00 |   | 3.00 |      |      |      | 1.03 |
| C423 | AE               | 1.57 | 1.20 |      | 2.80 | 1.00 |      |      |      | 2.40 |   | 1.73 |      |      |      | 1.00 |
| C424 | NDE              | 1.45 | 1.30 |      | 2.98 | 1.00 |      |      |      | 2.80 |   | 1.63 |      |      |      | 1.00 |
| C425 | Seminar          | 2.50 | 2.00 | 2.50 | -    | -    | -    | -    | -    | -    | - | -    | 2.00 | -    | 2.67 | 2.25 |
| C426 | Project          | 3.00 | 2.00 | 2.00 | -    | -    | -    | 2.00 | -    | -    | - | -    | -    | 3.00 | -    | 2.00 |



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## Overall Attainment

|                      | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Direct Attainment    | 2.36 | 2.05 | 2.19 | 2.66 | 1.86 | 2.33 | 2.33 | 2.32 | 1.81 | 2.18 | 2.18 | 2.07 | 2.20 | 2.38 | 2.06 |
| In Direct Attainment | 2.4  | 2.5  | 2.62 | 2.74 | 2.88 | 2.1  | 2.3  | 2.4  | 2.1  | 2.6  | 2.4  | 2.6  | 2.7  | 2.6  | 2.4  |
| Final PO Attained    | 2.37 | 2.14 | 2.27 | 2.68 | 2.07 | 2.29 | 2.33 | 2.33 | 1.86 | 2.27 | 2.22 | 2.17 | 2.30 | 2.43 | 2.13 |

  
Head of the Department

HOD  
**MECHANICAL DEPARTMENT**  
AVANTHI INSTITUTE OF ENGG. & TECH  
Bhogapuram (M), Vizianagaram (Dist.)



  
Principal

PRINCIPAL  
AVANTHI INSTITUTE OF ENGG. & TECH  
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## Department of Electronics & Communication Engineering

### CO-PO Attainment for Academic Year 2020-2021

| Subject Code | Subject Name   | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C111         | English – I  | -    | 1.00 | 2.00 | 2.00 | -    | 3.00 | 2.00 | 2.67 | -    | 2.60 | -    | 2.67 | 2.67 | 2.67 |
| C112         | Mathematics - I  | 2.00 | 2.00 | 1.87 | 1.89 | -    | -    | -    | -    | -    | -    | -    | 1.88 | 1.80 | 2.00 |
| C113         | Mathematics – II<br>(Mathematical Methods)                     | 2.06 | 1.96 | 2.33 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.33 | 2.00 | 2.27 |
| C114         | Applied Physics  | 1.40 | 1.80 | 1.80 | -    | 1.48 | 1.80 | 1.80 | -    | -    | -    | 1.80 | 1.40 | 1.62 | 1.80 |
| C115         | Computer Programming   | 2.40 | 1.60 | 2.40 | 2.10 | 2.40 | -    | -    | 2.20 | 2.40 | -    | 2.40 | 2.40 | 2.40 | 1.80 |
| C116         | Engineering Drawing  | 3.00 | 3.00 | 2.75 | 1.50 | 2.50 | -    | -    | -    | 2.50 | -    | 2.50 | 2.00 | 2.67 | 2.67 |
| C117         | English Communications<br>Skills - Lab-1                       | 3.00 | 2.00 | -    | -    | -    | 1.67 | 1.50 | 2.00 | -    | 3.00 | -    | 3.00 | 2.40 | 2.00 |
| C118         | Applied / Engineering<br>Physics Lab                           | 3.00 | 2.50 | 3.00 | 2.33 | 2.00 | 2.67 | 2.50 | -    | 2.50 | -    | -    | 1.00 | 2.33 | 2.67 |
| C119         | Applied / Engineering<br>Physics Virtual Labs –<br>Assignments | 2.50 | -    | 2.75 | 2.50 | 2.00 | 2.00 | 2.00 | -    | -    | -    | -    | -    | 2.67 | 2.00 |
| C1110        | Engineering Workshop &<br>It Workshop                          | 2.50 | -    | 2.75 | 2.50 | 2.00 | 2.00 | 2.00 | -    | -    | -    | -    | -    | 2.67 | 2.00 |
| C121         | English-II   | 2.00 | 2.67 | -    | -    | -    | 2.67 | -    | 2.50 | -    | 2.40 | -    | 2.00 | 3.00 | 3.00 |



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|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C122 | Mathematics-III                             | 2.60 | 2.75 | 2.00 | 2.00 | -    | -    | -    | -    | -    | -    | -    | 2.75 | 2.00 | 3.00 |
| C123 | Applied Chemistry                           | 2.18 | 2.08 | 2.40 | 2.40 | 2.06 | -    | -    | -    | 2.40 | -    | -    | 2.40 | 2.13 | 2.40 |
| C124 | Electrical & Mechanical Technology          | 1.60 | 1.60 | -    | -    | -    | -    | -    | -    | -    | 1.60 | -    | 1.60 | 1.60 | 1.62 |
| C125 | Environmental Studies                       | 2.00 | -    | -    | -    | -    | 2.50 | 2.67 | 2.75 | -    | -    | -    | 2.00 | 2.00 | 3.00 |
| C126 | Data Structures                             | 2.40 | 2.13 | 2.40 | 2.40 | 2.13 | -    | -    | -    | -    | -    | 2.00 | 2.40 | 2.20 | 2.40 |
| C127 | Applied/Engineering Chemistry Lab           | 2.50 | 2.00 | 1.50 | -    | 2.67 | -    | 2.33 | -    | 2.33 | -    | -    | 2.67 | 2.00 | 3.00 |
| C128 | English - Communication Skills Lab - 2      | 3.00 | 2.00 | -    | -    | -    | 1.67 | 1.50 | 2.00 | -    | 3.00 | -    | 3.00 | 2.40 | 2.00 |
| C129 | Computer Programming Lab                    | 2.75 | 2.00 | 3.00 | -    | 2.50 | -    | -    | -    | 2.20 | -    | 2.00 | 2.00 | 2.50 | 3.00 |
| C211 | Electronic Devices And Circuits             | 2.27 | -    | 2.40 | 2.20 | -    | 2.20 | -    | -    | -    | -    | 2.27 | 2.27 | -    | 2.27 |
| C212 | Switching Theory And Logic Design           | 2.24 | 2.08 | 2.04 | 2.00 | -    | -    | -    | -    | -    | -    | -    | -    | 2.13 | 2.00 |
| C213 | Signals & Systems                           | 1.66 | 1.63 | 1.53 | 1.80 | 1.80 | -    | -    | -    | -    | 1.00 | -    | 1.64 | 1.64 | 1.80 |
| C214 | Network Analysis                            | 2.29 | 2.20 | 2.25 | -    | -    | -    | -    | -    | -    | -    | -    | -    | 2.18 | 2.08 |
| C215 | Random Variables & Stochastic Processes     | 1.68 | 1.69 | -    | 1.67 | -    | -    | -    | -    | -    | -    | -    | 1.53 | 1.62 | 1.80 |
| C216 | Managerial Economics And Financial Analysis | 2.50 | 2.67 | -    | 2.75 | -    | -    | 3.00 | -    | -    | 2.00 | 2.67 | -    | 3.00 | 1.67 |



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|------|--|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| C217 | Electronic Devices And Circuits Lab    | 3.00 | -    | 3.00 | -    | 3.00 | 2.00 | -    | -    | -    | -    | 2.00 | 3.00 | 2.00  | 3.00 |
| C218 | Networks & Electrical Technology Lab   | 2.50 | 2.00 | 3.00 | -    | -    | -    | -    | -    | -    | -    | 2.00 | 2.00 | -1.68 | 3.00 |
| C221 | Electronic Circuit Analysis            | 2.15 | 2.13 | 2.11 | 2.11 | -    | -    | -    | -    | -    | -    | -    | -    | 2.13  | 2.13 |
| C222 | Control Systems                        | 1.88 | 1.93 | -    | -    | -    | -    | -    | -    | -    | -    | 1.90 | -    | 1.90  | -    |
| C223 | Em Waves And Transmission Lines        | 1.93 | 1.93 | 1.91 | -    | -    | -    | -    | -    | -    | -    | -    | 1.91 | 1.92  | 1.93 |
| C224 | Analog Communications                  | 1.73 | 1.73 | -    | -    | 2.00 | -    | -    | -    | -    | -    | -    | 1.73 | 1.73  | 1.75 |
| C225 | Pulse And Digital Circuits             | 1.93 | 1.90 | 1.97 | -    | -    | -    | -    | -    | -    | -    | -    | 1.90 | 2.00  | 1.93 |
| C226 | Management Science                     | 2.50 | 2.67 | -    | 2.75 | -    | -    | 3.00 | -    | -    | 2.00 | 2.67 | -    | 3.00  | 1.67 |
| C227 | Electronic Circuit Analysis Lab        | 1.67 | -    | 2.00 | 3.00 | -    | -    | -    | 1.00 | 1.00 | 1.00 | -    | -    | -     | 1.50 |
| C228 | Analog Communications Lab              | -    | 2.00 | -    | 3.00 | -    | -    | -    | -    | -    | -    | -    | 2.00 | 3.00  | -    |
| C311 | Computer Architecture And Organization | 2.13 | 2.13 | 2.20 | -    | -    | 2.20 | 2.00 | -    | -    | -    | -    | 2.00 | 2.20  | 2.16 |
| C312 | Linear Ic Applications                 | 2.09 | 2.11 | 2.13 | 2.10 | -    | -    | -    | -    | -    | -    | -    | 2.13 | 2.13  | 2.10 |
| C313 | Digital Ic Applications                | 2.40 | 2.40 | 2.40 | 2.40 | -    | -    | -    | -    | -    | -    | -    | 2.40 | 2.40  | 2.40 |
| C314 | Digital Communications                 | 2.20 | 2.20 | 2.21 | -    | -    | -    | -    | -    | -    | -    | -    | 2.17 | 2.17  | 2.16 |



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|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C315  | Antenna And Wave Propagation             | 2.07 | 2.06 | 2.03 | -    | -    | -    | -    | -    | -    | -    | -    | 2.05 | 2.04 | 2.08 |
| C316  | Pulse & Digital Circuits Lab             | 2.50 | 2.00 | 2.50 | -    | -    | -    | -    | -    | -    | -    | -    | 2.00 | -    | 2.67 |
| C317  | L Ic Applications Lab                    | 2.00 | -    | 3.00 | 2.00 | -    | -    | -    | -    | -    | -    | 2.00 | 3.00 | 2.00 | 3.00 |
| C318  | Dica Laboratcry                          | 2.00 | -    | 3.00 | 2.00 | -    | -    | -    | -    | -    | -    | 2.00 | 3.00 | 2.00 | 3.00 |
| C319  | Professional Ethics & Human Values       | -    | -    | -    | -    | -    | 3.00 | 2.50 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 3.00 |
| C321  | Microprocessors And Microcontrollers     | 2.22 | 2.18 | 2.22 | 2.20 | 2.27 | -    | -    | -    | 2.20 | 2.20 | -    | 2.20 | 2.28 | 2.28 |
| C322  | Microwave Engineering                    | 1.87 | 1.87 | 1.89 | -    | -    | -    | -    | -    | -    | -    | -    | 1.91 | 1.88 | 1.96 |
| C323  | Vlsi Design                              | 2.53 | 2.56 | 2.47 | 2.52 | -    | -    | -    | -    | -    | -    | -    | -    | 2.53 | 2.56 |
| C324  | Digital Signal Processing                | 2.04 | 2.05 | 2.00 | -    | -    | -    | -    | -    | -    | -    | -    | 2.05 | 2.00 | 2.09 |
| C329  | Bio-Medical Engineering (Oe)             | 2.04 | 2.05 | -    | 2.08 | -    | -    | -    | -    | -    | -    | -    | 2.07 | 2.07 | 1.87 |
| C3211 | Microprocessors And Microcontrollers Lab | 2.00 | 2.00 | 1.00 | -    | -    | -    | -    | -    | 1.00 | 1.00 | -    | 1.00 | 1.00 | 2.00 |
| C3212 | Vlsi Laboratory                          | 2.50 | 1.67 | 2.00 | 2.00 | 2.00 | -    | -    | -    | -    | -    | -    | 1.00 | 2.17 | 2.33 |
| C3213 | Digital Communications Lab               | 2.00 | -    | 1.67 | 1.00 | 2.50 | -    | -    | -    | -    | -    | -    | -    | 1.00 | 1.50 |
| C3214 | Intellectual Property Rights And Patents | -    | -    | -    | -    | -    | 3.00 | 2.50 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 3.00 |



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|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C411 | Radar Systems                               | 2.84 | 2.84 | 2.80 | -    | -    | -    | -    | -    | -    | -    | -    | 2.85 | 2.80 | 2.87 |
| C412 | Digital Image Processing                    | 2.80 | 2.73 | 2.73 | -    | -    | -    | -    | -    | -    | -    | -    | 2.75 | 2.73 | 2.78 |
| C413 | Computer Networks                           | 2.76 | 2.89 | 2.60 | 3.00 | 2.76 | -    | -    | -    | 2.60 | -    | -    | 3.00 | 2.87 | 2.80 |
| C414 | Optical Communications                      | 2.80 | 2.80 | -    | -    | -    | -    | -    | -    | -    | -    | -    | 2.87 | 2.87 | 3.00 |
| C416 | Electronic Switching Systems (E- I)         | 3.00 | 2.50 | 2.00 | -    | -    | -    | -    | -    | -    | -    | -    | 2.00 | 2.50 | 3.00 |
| C418 | Embedded Systems (E- Ii)                    | 3.00 | -    | 3.00 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| C416 | Microwave Engineering & Optical Lab         | 3.00 | 2.00 | 2.00 | -    | -    | -    | 2.00 | -    | -    | -    | -    | -    | 3.00 | -    |
| C417 | Digital Signal Processing Laboratory        | 2.50 | 2.33 | 2.33 | 2.50 | 2.50 | -    | -    | 2.33 | 2.17 | 2.33 | -    | -    | 2.17 | 1.50 |
| C421 | Cellular And Mobile Communications          | 2.89 | 2.82 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 2.92 | 3.00 |
| C422 | Electronic Measurements And Instrumentation | 2.90 | 2.89 | 2.91 | 2.82 | -    | -    | -    | -    | -    | -    | -    | 2.82 | 2.90 | 2.73 |
| C423 | Satellite Communications                    | 2.89 | 2.82 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 2.88 | 2.93 |
| C424 | Wireless Sensors And Networks (E-III)       | 2.93 | 2.90 | 3.00 | -    | -    | -    | -    | -    | -    | -    | -    | -    | 2.91 | 3.00 |
| C425 | Seminar                                     | 3.00 | 2.00 | 2.00 | 2.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 2.00 |
| C426 | Project                                     | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 2.00 | 2.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |



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## Overall Attainment

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|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Direct Attainment    | 2.37 | 2.21 | 2.34 | 2.25 | 2.35 | 2.34 | 2.25 | 2.37 | 2.35 | 2.26 | 2.36 | 2.26 | 2.20 | 2.33 |
| In Direct Attainment | 2.8  | 2.6  | 2.4  | 2.3  | 2.56 | 2.7  | 2.1  | 2    | 2.1  | 2.6  | 2.1  | 2.78 | 2.5  | 2.68 |
| Final PO Attained    | 2.46 | 2.28 | 2.35 | 2.26 | 2.39 | 2.41 | 2.22 | 2.30 | 2.30 | 2.33 | 2.31 | 2.36 | 2.26 | 2.40 |

**Head of the Department**

Head of the Department

Electronics and Communication Engineering  
AVANTHI INSTITUTE OF ENGG & TECH,  
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Bhogapuram (M), Vizianagaram(D)-531162



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## Department of Computer Science Engineering

### CO-PO Attainment for Academic Year 2020-2021

| Subject Code | Subject Name   | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C111         | English – I  |      | 2.73 | 3.00 | 1.88 |      | 2.33 | 2.63 | 1.77 | -    | 3.22 | -    | 1.44 | 2.33 | 1.64 |
| C112         | Mathematics - I  | 2.50 | 2.50 | 3.00 | 2.33 |      |      |      |      |      |      |      | 2.50 | 3.00 | 2.50 |
| C113         | Mathematics – II<br>(Mathematical Methods)                       | 2.60 | 2.75 | 2.00 | 2.00 |      |      |      |      |      |      |      | 2.75 | 2.00 | 3.00 |
| C114         | Applied Physics  | 2.84 | 2.73 | 2.78 | -    | 3    | -    | -    | -    | -    | -    | -    | 2.2  | 2.82 | 2.81 |
| C115         | Computer Programming   | 2.4  | 2.4  | 1.6  | 2.4  | 2    | 2.4  |      | 2.00 | 1.50 |      | 3.00 | 3.00 | 2.25 | 2.15 |
| C116         | Engineering Drawing  | 1.33 | 3.00 | 2.75 | 1.50 | 2.50 |      |      |      |      |      | 2.50 | 2.33 | 2.67 | 2.67 |
| C117         | English -<br>Communication Skills<br>Lab - 1                     |      | 2.33 |      |      |      | 2.25 | 2.33 | 2.50 | 1.77 | 1.33 | 1.33 | 2.00 |      |      |
| C118         | Applied / Engineering<br>Physics Lab                             | 3.00 | 2.50 | 3.00 | 2.33 | 2.00 | 2.67 | 2.50 |      | 2.50 |      |      | 1.00 | 2.33 | 2.67 |
| C119         | Applied / Engineering<br>Physics – Virtual Labs –<br>Assignments | 2.33 |      | 2.66 | 2.40 | 2.00 | 2.11 | 2.33 |      |      |      |      |      | 2.11 | 1.88 |
| C1110        | Computer Programming<br>Lab                                      | 2.55 | 2.33 | 2.99 |      | 2.66 |      |      |      |      |      | 2.22 | 1.66 | 2.67 | 2.88 |



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|------|--|------|------|------|------|------|------|------|---|------|------|------|------|------|------|
| C121 | English – II                                 | 2.6  | 3    | 2.2  | 3    | 3    | 3    | -    | - | -    | -    | -    | 3.00 | 3.00 | 3.00 |
| C122 | Mathematics-III                              | 2.84 | 2.73 | 3.00 | -    | 2.73 | -    | -    | - | -    | -    | -    | 3.00 | 3.00 | 3.00 |
| C123 | Applied Chemistry                            |      |      |      |      |      |      |      |   |      |      |      |      |      |      |
| C124 | Object Oriented Programming through C++      | 4.45 | 4.27 | 4.58 | -    | 4.40 | -    | -    | - | -    | -    | -    | 4.40 | 4.62 | 4.55 |
| C125 | Environmental Studies                        | 3    | 3    | 3    | -    | 3    | -    | -    | - | -    | -    | -    | 3    | 3    | 3    |
| C126 | Engineering Mechanics                        | 2.4  | 2.4  | 1.6  | 2.4  | 2.4  | 2.4  | -    | - | -    | -    | -    | 2.40 | 2.40 | 2.40 |
| C127 | Applied / Engineering Chemistry Laboratory   | 1.99 | 1.88 |      |      | 2.65 |      |      |   | 1.99 |      | 1.88 | 2.44 | 2.66 | 2.77 |
| C128 | English - Communication Skills Lab – 2       | 2.66 | 1.55 |      |      |      | 1.00 | 1.00 |   |      | 1.22 |      | 0.99 | 0.87 | 0.66 |
| C129 | Object Oriented Programming Lab              | 2.22 | 1.99 | 2.16 | 1.12 | 1.22 |      | 1.32 |   |      |      | 1.12 | 2.77 | 2.55 | 1.11 |
| C211 | Statistics with R Programming                | 2.4  | 2.4  | 2.4  | -    | 2.4  | -    | -    | - | -    | -    | -    | 2.4  | 2.4  | 2.4  |
| C212 | Mathematical Foundations of Computer Science | 2.6  | 2.33 | 3    | -    | 2.33 | -    | -    | - | -    | -    | -    | 3    | 3    | 3    |
| C213 | Digital Logic Design                         | 1.8  | 1.8  | 1.8  | -    | 1.8  | -    | -    | - | -    | -    | -    | 1.8  | 1.8  | 1.8  |
| C214 | Python Programming                           | 2.4  | 2.4  | 2.4  | -    | 2.4  | -    | -    | - | -    | -    | -    | 2.4  | 2.4  | 2.4  |



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|      |                                      |      |         |         |      |         |      |   |   |      |   |      |      |         |         |
|------|--------------------------------------|------|---------|---------|------|---------|------|---|---|------|---|------|------|---------|---------|
| C215 | Data Structures through C++          | 2.84 | 2.73    | 3.00    |      | 2.73    |      |   |   |      |   |      | 3.00 | 3.00    | 3.00    |
| C216 | Computer Graphics                    | 2.4  | 2.4     | 2.4     | -    | 2.4     | -    | - | - | -    | - | -    | 2.4  | 2.4     | 2.4     |
| C217 | Data Structures through C++Lab       | 2.56 | 1.88    | 2.28    | 1.12 | 1.22    |      |   |   |      |   | 2.99 | 2.44 |         |         |
| C218 | Python Programming Lab               | 2.49 | 2.39    | 3.00    |      | 1.01    | 1.21 |   |   | 1.00 |   | 1.01 |      |         |         |
| C221 | Software Engineering                 | 2.6  | 2.33    | 3       | -    | 2.33    | -    | - | - | -    | - | -    | 3    | 3       | 3       |
| C222 | Java Programming                     | 1.56 | 1.53333 | 1.72727 | -    | 1.53333 | -    | - | - | -    | - | -    | 1.8  | 1.66667 | 1.73846 |
| C223 | Advanced Data Structures             | 2.71 | 2.47    | 2.78    | -    | 2.73    | -    | - | - | -    | - | -    | 2.60 | 2.82    | 2.82    |
| C224 | Computer Organization                | 2.24 | 2.13    | 2.40    | -    | 2.13    | -    | - | - | -    | - | -    | 2.40 | 2.40    | 2.40    |
| C225 | Formal Languages and Automata Theory | 2.05 | 1.87    | 2.18    | -    | 2.00    | -    | - | - | -    | - | -    | 2.00 | 2.22    | 2.15    |
| C226 | Principles of Programming Languages  | 2.71 | 2.47    | 2.78    | -    | 2.73    | -    | - | - | -    | - | -    | 2.60 | 2.82    | 2.82    |
| C227 | Advanced Data Structures Lab         | 2.65 | 2.45    | 2.99    | 1.12 | 1.22    |      |   |   | 1.22 |   | 1.90 |      | 2.66    | 2.77    |
| C228 | Java Programming Lab                 | 2.57 | 2.57    | 1.99    | 1.12 | 1.77    |      |   |   | 1.33 |   | 1.66 | 2.45 | 1.00    | 1.00    |
| C311 | Compiler Design                      | 2.4  | 2.4     | 2.4     | -    | 2.4     | -    | - | - | -    | - | -    | 2.4  | 2.4     | 2.4     |
| C312 | Unix Programming                     | 1.8  | 1.8     | 1.8     | -    | 1.8     | -    | - | - | -    | - | -    | 1.8  | 1.8     | 1.8     |



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|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C313 | Object Oriented Analysis and Design using UML | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C314 | Database Management Systems                   | 2.4  | 2.4  | 2.4  | -    | 2.4  | -    | -    | -    | -    | -    | -    | 2.4  | 2.4  | 2.4  |
| C315 | Operating Systems                             | 3    | -    | 3    | 3    | 3    | -    | -    | -    | 2.6  | -    | 2.8  | 3    | 3    | 3    |
| C316 | Unified Modeling Lab                          | 2.56 | 2.60 | 2.44 | 2.11 | 2.10 |      |      |      | 1.99 |      |      | 2.15 | 2.22 | 1.88 |
| C317 | Operating System & gla                        | 1.34 | 1.88 |      | 2.00 | 1.66 |      |      |      | 1.55 |      |      | 1.73 | 1.79 | 1.69 |
| C318 | Database Management System Lab                | 2.52 | 2.49 | 2.97 | 2.33 | 2.22 | 0.00 | 0.00 | 0.00 | 1.33 | 0.00 | 0.00 | 2.41 | 2.46 | 2.94 |
| C319 | Professional Ethics & Human Values            | 2.16 | 2.29 | 2.36 | 2.31 | 2.60 | 2.44 | 2.56 | 2.15 | 1.88 | 2.65 | 2.45 | 2.70 | 1.99 | 2.67 |
| C321 | Computer Networks                             | 2.24 | 2.13 | 2.40 | -    | 2.13 | -    | -    | -    | -    | -    | -    | 2.40 | 2.40 | 2.40 |
| C322 | Data Warehousing and Mining                   | 2.84 | 2.73 | 3.00 | -    | 2.73 | -    | -    | -    | -    | -    | -    | 3.00 | 3.00 | 3.00 |
| C323 | Design and Analysis of Algorithms             | 1.68 | 2.00 | 2.43 | 2.22 | 1.68 | 0.00 | 0.00 | 0.00 | 2.22 | 0.00 | 0.00 | 1.99 | 2.10 | 1.24 |
| C324 | Software Testing Methodologies                | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C325 | Cyber Security                                |      | 2.82 | 2.71 |      | 1.88 | 1.77 | 1.66 |      |      |      |      | 2.60 | 2.10 | 1.87 |
| C326 | Network Programming Lab                       | 2.90 | 2.86 | 2.71 | 0.00 |      |      |      |      | 1.90 | 2.10 |      |      | 0.00 |      |
| C327 | Software Testing Lab                          | 2.89 | 2.69 | 2.54 | 2.99 | 2.33 |      |      |      | 0.00 |      |      | 2.60 | 2.79 | 2.99 |



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|-------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| C328  | Data Warehousing and Mining Lab             | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C329  | IPR & Patents                               |      |      |      |      |      | 1.12 | 1.32 | 1.45 | 1.56 | 1.67 | 1.78 | 1.89 | 1.99 | 1.90 |
| C411  | Cryptography and Network Security           | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C412  | Software Architecture & Design Patterns     | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C413  | Web Technologies                            | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3.00 |
| C414  | Managerial Economics and Financial Analysis | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C415  | Big Data Analytics                          | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C416  | Information Retrieval Systems               | 2.50 | 2.57 | 2.44 | 2.33 | 1.33 |      |      |      |      | 1.99 |      | 2.28 | 2.99 | 2.89 |
| C417  | Cloud Computing                             | 2.56 | 2.30 | 2.99 | 1.77 | 1.54 |      |      |      | 2.99 |      | 1.67 | 2.32 | 2.45 | 2.89 |
| C418  | Software Project Management                 | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| C419  | Software Architecture & Design Patterns Lab | 2.89 | 2.69 | 2.54 | 2.99 | 2.33 |      |      |      | 0.00 |      |      | 2.66 | 2.79 | 2.99 |
| C4110 | Web Technologies Lab                        | 1.67 | 2.45 | 2.45 | 1.22 | 2.89 |      |      |      | 2.68 |      |      |      | 2.89 | 2.78 |
| C421  | Distributed Systems                         | 3    | 3    | 3    | -    | 3    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |



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|------|---------------------|------|------|------|------|---|------|------|------|------|---|---|------|------|------|
| C422 | Management Science  | 3    | 3    | 3    | -    | 3 | -    | -    | -    | -    | - | - | 3    | 3    | 3    |
| C423 | Machine Learning    | 3    | 3    | 3    | -    | 3 | -    | -    | -    | -    | - | - | 3    | 3    | 3    |
| C424 | Operations Research | 3    | 3    | 3    | -    | 3 | -    | -    | -    | -    | - | - | 3    | 3    | 3    |
| C425 | Seminar             | 2.37 | 2.88 |      | 2.67 |   | 2.89 | 2.12 | 2.36 |      |   |   | 2.54 | 2.98 | 2.45 |
| C426 | Project             | 1.88 | 2.12 | 2.32 | 2.45 |   | 2.10 | 2.70 | 2.32 | 2.12 |   |   |      | 2.58 | 2.32 |

## Overall Attainment

|                      | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Direct Attainment    | 2.53 | 2.52 | 2.63 | 2.00 | 2.38 | 1.89 | 1.73 | 1.62 | 1.71 | 1.69 | 1.79 | 2.56 | 2.54 | 2.54 |
| In Direct Attainment | 2.6  | 2.7  | 2.8  | 2.78 | 2.67 | 2.8  | 2.5  | 2.2  | 2.1  | 2.8  | 2.5  | 2.8  | 2.4  | 2.7  |
| Final PO Attained    | 2.54 | 2.55 | 2.67 | 2.16 | 2.44 | 2.07 | 1.89 | 1.73 | 1.79 | 1.91 | 1.93 | 2.61 | 2.51 | 2.58 |

**Head of the Department**

Head of the Department  
Computer Science and Engineering  
AVANTHI INSTITUTE OF ENGG. & TECH.  
Cherukupally (V), Chittivalasa (SAO),  
Bhogapuram (M), Vizianagaram (D)531162



**Principal**

PRINCIPAL  
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## Department of Management Studies

### CO-PO Attainment for Academic Year 2020-2021

| Subject Code | Subject Name  | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  |
|--------------|---|------|------|------|------|------|------|------|------|
| C-101        | Management and Organizational Behavior                | 2.37 | -    | 2.36 | 2.33 | 2.20 | -    | 2.31 | 2.30 |
| C-102        | Managerial Economics                                  | 1.20 | 1.00 | 1.00 | 1.00 | 1.40 | -    | 1.80 | 1.48 |
| C-103        | Accounting for Managers                               | 2.00 | 1.87 | 1.93 | -    | -    | -    | -    | 1.60 |
| C-104        | Quantitative Analysis for Business Decisions          | 1.27 | 1.08 | 1.10 | 1.00 | -    | -    | 1.40 | 1.13 |
| C-105        | Legal and Business Environment                        | 1.15 | -    | -    | 1.08 | 1.32 | 1.27 | 1.00 | -    |
| C-106        | Business Communication and Soft skills                | 1.96 | -    | 2.00 | 1.90 | 1.83 | -    | -    | 2.00 |
| C-107        | Cross Cultural Management                             | 2.00 | -    | 2.00 | -    | 2.00 | 1.85 | 2.00 | 1.89 |
| C-108        | Information Technology – Lab1 (Spreadsheet and Tally) | 3.00 | 1.50 | 2.67 | 1.00 | -    | -    | -    | -    |
| C-201        | Financial Management                                  | 2.07 | 2.25 | 2.22 | -    | 2.00 | -    | -    | 1.80 |
| C-202        | Human Resource Management                             | 1.73 | -    | 1.60 | 2.40 | 1.93 | 2.40 | 2.00 | 1.92 |
| C-203        | Marketing Management                                  | 2.40 | 2.40 | 2.20 | 2.40 | 2.40 | 2.40 | 2.00 | 1.92 |



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|--------|---|------|------|------|------|------|------|------|------|
| C-204  | Operations Management                               | 2.22 | 2.40 | 2.40 | 2.00 | 1.92 | 2.00 | -    | -    |
| C-205  | Business Research Methods                           | 1.93 | 2.40 | 2.16 | -    | 2.00 | -    | 2.20 | -    |
| C-206  | Project Management                                  | 1.25 | 2.50 | 2.00 | -    | 2.00 | -    | 3.00 | 2.33 |
| C-207  | IT Lab 2 (Programming R)                            | 2.00 | 2.00 | 3.00 | -    | -    | -    | -    | 2.50 |
| C-301  | Strategic Management                                | 2.69 | -    | 2.20 | -    | 3.00 | 2.20 | 2.76 | 2.60 |
| C-302  | Operations Research                                 | 2.76 | 2.90 | 2.68 | -    | -    | -    | -    | 2.47 |
| EH-301 | Leadership And Change Management                    | 2.00 | -    | 2.67 | 1.00 | 1.50 | 2.00 | 3.00 | 2.00 |
| EH-302 | Performance Evaluation And Compensatfion Management | 2.20 | 2.00 | 2.00 | 1.33 | 2.00 | 2.00 | -    | -    |
| EH-303 | Human Resource Metrics And Analytics                | 2.20 | 3.00 | 1.67 | 1.00 | 2.00 | 3.00 | -    | 2.00 |
| EH-304 | Human Capital Management                            | 1.25 | 2.00 | 2.00 | 2.00 | 2.00 | 2.67 | 2.00 | 2.50 |
| EF-301 | Investment Analysis And Portfolio Management        | 1.67 | 2.25 | 2.00 | 2.00 | 1.00 | 3.00 | 2.00 | -    |
| EF-302 | 302managing Banks And Financial Institutions        | 1.52 | 2.41 | 2.00 | 1.83 | 1.33 | 3.00 | 2.00 | -    |
| EF-303 | Financial Markets And Services                      | 2.25 | 1.33 | 2.00 | 2.00 | 2.33 | 1.50 | -    | -    |
| EF-305 | Taxation  | 2.20 | 2.00 | 1.50 | 1.67 | 2.20 | 2.00 | -    | -    |



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|--------|---|------|------|------|------|------|------|------|------|
| EM-301 | Consumer Behavior                       | 2.60 | 2.00 | 3.00 | 1.67 | 2.00 | 2.00 | 1.00 | -    |
| EM-302 | Retail Management                       | 2.00 | 2.00 | 3.00 | 2.00 | 1.00 | 2.00 | 2.50 | 3.00 |
| EM-305 | Digital And Social Media Marketing      | 2.67 | 3.00 | 2.50 | 2.33 | 2.50 | -    | -    | -    |
| C-401  | Supply Chain Management And Analytics   | 2.09 | 2.00 | 2.00 | 2.20 | 1.77 | 1.80 | -    | -    |
| C-402  | Innovation And Entrepreneurship         | 2.00 | 3.00 | 2.00 | 1.67 | 2.00 | 1.00 | 3.00 | 2.00 |
| EH-401 | Labor Welfare And Employment Laws       | 1.25 | 2.00 | 3.00 | 2.67 | 3.00 | -    | -    | 2.00 |
| EH-402 | International Human Resource Management | 3.00 | 1.00 | 2.00 | 2.33 | 3.00 | -    | -    | -    |
| EH-404 | Human Resources Development             | 1.80 | 2.00 | 2.00 | 2.50 | 2.00 | 1.00 | -    | -    |
| EH-405 | Strategic Human Resource Management     | 2.25 | 2.00 | 2.00 | 2.33 | 1.00 | 3.00 | -    | -    |
| EF-401 | Financial Derivatives                   | 2.80 | 2.25 | 2.00 | -    | 2.00 | 2.00 | -    | -    |
| EF-402 | Global Financial Management             | 2.60 | 1.50 | -    | 2.00 | 2.50 | 1.50 | -    | -    |
| EF-403 | Financial Risk Management               | 1.60 | 2.33 | -    | 2.00 | 2.00 | 2.00 | -    | -    |
| EF-404 | Strategic Financial Management          | 2.25 | 2.00 | -    | 2.00 | 1.67 | 1.50 | -    | -    |
| EM-401 | Services Marketing                      | 1.75 | -    | 2.40 | 2.50 | 2.00 | -    | 2.00 | 1.00 |



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NAAC "B++" Accredited Institute

Cherukupally (Village), Near Tagarapuvalasa Bridge, Bhogapuram (Mandal), Vizianagaram -531162.

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|        |                                       |      |      |      |      |      |      |   |      |
|--------|---------------------------------------|------|------|------|------|------|------|---|------|
| EM-402 | Promotional & Distribution Management | 2.33 | 2.00 | 3.00 | 2.50 | 1.50 | -    | - | 1.50 |
| EM-404 | Advertising And Brand Management      | 1.60 | 2.00 | 2.00 | 3.00 | 1.50 | 1.00 | - | -    |
| EM-405 | Global Marketing Management           | 1.83 | 2.33 | 3.00 | 2.00 | 2.00 | 1.00 | - | -    |

## Overall Attainment

|                      | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  |
|----------------------|------|------|------|------|------|------|------|------|
| Direct Attainment    | 2.04 | 2.08 | 2.19 | 1.93 | 1.94 | 1.96 | 2.11 | 2.00 |
| In Direct Attainment | 2.5  | 2.42 | 2.3  | 2.6  | 2.4  | 2.5  | 2.8  | 2.78 |
| Final PO Attained    | 2.13 | 2.15 | 2.21 | 2.06 | 2.03 | 2.07 | 2.25 | 2.15 |

*D. Sui Perambala*  
**Head of the Department**

Head of the Department  
Master of Business Administration  
AVANTHI INSTITUTE OF ENGG. & TECH.  
Cherukupally (V), Near Tagarapuvalasa Bridge  
Bhogapuram (M), Vizianagaram (D)-531162



*A. N.*  
**Principal**

PRINCIPAL  
AVANTHI INSTITUTE OF ENGG. & TECH.  
Cherukupally (V), Chittivalasa (SAO)  
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**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
 Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162  
 Dept of EEE Regulation:R16 Subject: HVDC TRANSMISSION Year&Sem:IV-II

| Calculation standards of attainment |            |               |             | Faculty: Mr.G.Giridhar Reddy, Assistant Professor, Dept. of EEE |            |             |           |       |            |             |           |       |            |                   |                    |                    |            |              |            |                                  |                                  |                                  |  |
|-------------------------------------|------------|---------------|-------------|---|------------|-------------|-----------|-------|------------|-------------|-----------|-------|------------|-------------------|--------------------|--------------------|------------|--------------|------------|----------------------------------|----------------------------------|----------------------------------|--|
|                                     | 1:Low(40%) | 2:Medium(60%) | 3:High(75%) |   |            |             |           |       |            |             |           |       |            |                   |                    |                    |            |              |            |                                  |                                  |                                  |  |
| Descriptive(5M)                     | 2          | 3             | 3.75        |   |            |             |           |       |            |             |           |       |            |                   |                    |                    |            |              |            |                                  |                                  |                                  |  |
| Assignment(5M)                      | 2          | 3             | 3.75        |   |            |             |           |       |            |             |           |       |            |                   |                    |                    |            |              |            |                                  |                                  |                                  |  |
| Quiz(10M)                           | 4          | 6             | 7.5         |   |            |             |           |       |            |             |           |       |            |                   |                    |                    |            |              |            |                                  |                                  |                                  |  |
| S.NO                                | REGD.NO    | Cycle#1       |             |   |            |             |           |       |            |             |           |       |            |                   |                    |                    |            |              |            |                                  |                                  |                                  |  |
|                                     |            | CO1(Max:5M)   |             |   |            | CO2(Max:5M) |           |       |            | CO3(Max:5M) |           |       |            | Total Marks (15M) | Q1 Marks (Max: 10) | Q1 Marks (Max: 10) | Att. Level | Assignments  |            | Avg(D/Q/A) Attainment Level(CO1) | Avg(D/Q/A) Attainment Level(CO2) | Avg(D/Q/A) Attainment Level(CO3) |  |
|                                     |            | Q1-A (5M)     | Q1-B (5M)   | Total   | Att. Level | Q2-A (5M)   | Q2-B (5M) | Total | Att. Level | Q3-A (5M)   | Q3-B (5M) | Total | Att. Level |                   |                    |                    |            | A (5M) (CO1) | Att. Level |                                  |                                  |                                  |  |
| 1                                   | 17Q71A0203 | 1             | 1           | 1   | 0          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 11                | 10                 | 10                 | 3          | 5            | 3          | 2                                | 3                                | 3                                |  |
| 2                                   | 17Q71A0204 | 1             | 1           | 1   | 0          | 2           | 2         | 2     | 1          | 2           | 2         | 2     | 1          | 5                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 2                                | 2                                |  |
| 3                                   | 17Q71A0205 | 1             | 1           | 1   | 0          | 2           | 2         | 2     | 1          | 2           | 2         | 2     | 1          | 5                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 2                                | 2                                |  |
| 4                                   | 17Q71A0206 | 2             | 2           | 2   | 1          | 2           | 2         | 2     | 1          | 3           | 3         | 3     | 2          | 7                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 2                                | 3                                |  |
| 5                                   | 17Q71A0207 | 2             | 2           | 2   | 1          | 5           | 5         | 5     | 3          | 3           | 3         | 3     | 2          | 10                | 10                 | 10                 | 3          | 5            | 3          | 2                                | 3                                | 3                                |  |
| 6                                   | 17Q71A0208 | 2             | 2           | 2   | 1          | 2           | 2         | 2     | 1          | 2           | 2         | 2     | 1          | 6                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 2                                | 2                                |  |
| 7                                   | 17Q71A0209 | 2             | 2           | 2   | 1          | 2           | 2         | 2     | 1          | 4           | 4         | 4     | 3          | 8                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 2                                | 3                                |  |
| 8                                   | 17Q71A0210 | 2             | 2           | 2   | 1          | 5           | 5         | 5     | 3          | 0           | 0         | 0     | 0          | 7                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 3                                | 2                                |  |
| 9                                   | 17Q71A0212 | 5             | 5           | 5   | 3          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 15                | 10                 | 10                 | 3          | 5            | 3          | 3                                | 3                                | 3                                |  |
| 10                                  | 17Q71A0213 | 3             | 3           | 3   | 2          | 1           | 1         | 1     | 0          | 1           | 1         | 1     | 0          | 5                 | 10                 | 10                 | 3          | 5            | 3          | 3                                | 2                                | 2                                |  |
| 11                                  | 17Q71A0214 | 5             | 5           | 5   | 3          | 2           | 2         | 2     | 1          | 3           | 3         | 3     | 2          | 10                | 10                 | 10                 | 3          | 5            | 3          | 3                                | 2                                | 3                                |  |
| 12                                  | 17Q71A0215 | 2             | 2           | 2   | 1          | 2           | 2         | 2     | 1          | 4           | 4         | 4     | 3          | 8                 | 10                 | 10                 | 3          | 5            | 3          | 2                                | 2                                | 3                                |  |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|---|---|---|---|---|---|
| 13 | 17Q71A0216 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 6  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 14 | 18Q75A0203 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4 | 4 | 4 | 3 | 8  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 3 |
| 15 | 18Q75A0204 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 16 | 18Q75A0205 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 15 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 17 | 18Q75A0206 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 9  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 3 |
| 18 | 18Q75A0207 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 9  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 3 |
| 19 | 18Q75A0208 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 9  | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 2 |
| 20 | 18Q75A0209 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 3 | 10 | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 3 |
| 21 | 18Q75A0210 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 5  | 8  | 8  | 3 | 5 | 3 | 2 | 2 | 2 |
| 22 | 18Q75A0212 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 23 | 18Q75A0213 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 4  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 24 | 18Q75A0214 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 |   | 1 | 1 | 0 | 7  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 25 | 18Q75A0216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0 | 5 | 3 | 1 | 1 | 1 |
| 26 | 18Q75A0217 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 6  | 6  | 2 | 5 | 3 | 2 | 2 | 2 |
| 27 | 18Q75A0218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0 | 5 | 3 | 1 | 1 | 1 |
| 28 | 18Q75A0220 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 29 | 18Q75A0221 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 7  | 9  | 9  | 3 | 5 | 3 | 2 | 3 | 2 |
| 30 | 18Q75A0223 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3 | 3 | 3 | 2 | 5  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 3 |
| 31 | 18Q75A0224 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 4  | 9  | 9  | 3 | 5 | 3 | 2 | 2 | 2 |
| 32 | 18Q75A0225 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 4  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 33 | 18Q75A0226 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 6  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 34 | 18Q75A0227 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 3 | 9  | 9  | 9  | 3 | 5 | 3 | 3 | 2 | 3 |
| 35 | 18Q75A0228 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 6  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 36 | 18Q75A0229 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 12 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 2 |
| 37 | 18Q75A0230 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 12 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 2 |
| 38 | 18Q75A0231 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 9  | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 39 | 18Q75A0232 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 1 | 6  | 5  | 5  | 1 | 5 | 3 | 2 | 2 | 2 |
| 40 | 18Q75A0233 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 10 | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 3 |
| 41 | 18Q75A0234 | 5 | 5 | 5 | 3 | 5 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 8  | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 2 |
| 42 | 18Q75A0235 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 5 | 5 | 5 | 3 | 7  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 3 |
| 43 | 18Q75A0237 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 1 | 1 | 1 | 1 | 0 | 11 | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 44 | 18Q75A0238 | 3 | 3 | 3 | 2 | 0 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 13 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 45 | 18Q75A0240 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 8  | 8  | 8  | 3 | 5 | 3 | 3 | 2 | 2 |
| 46 | 18Q75A0241 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 6  | 6  | 2 | 5 | 3 | 2 | 2 | 2 |

| Attainment Level Summary      | CO1 | CO2   | CO3  |
|-------------------------------|-----|-------|------|
| Maximum Attainment Level      | 3   | 3     | 3    |
| Cut-off Attainment Level(50%) | 1.5 | 1.5   | 1.5  |
| No.of Student >=Cut-off       | 44  | 44    | 42   |
| % of students >=cut-off       | 96  | 96    | 58   |
| Level Attained                | 3   | 3     | 1    |
| <b>Level of Attained</b>      |     |       |      |
| <b>% of students</b>          | <60 | 60-79 | >=80 |
| <b>Level</b>                  | 1   | 2     | 3    |

*G. Krishna*

Faculty

*A. J. S.*  
HOD

**Head of The Department**  
 Department of Electrical and Electronics Engineering  
 Avanthi Institute of Engg. & Tech.  
 Cherukupally (V), Chittivalasa (SAO)  
 Bhogapuram (M), Vizianagaram(Dist)-531163



**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
 Cherukupally( Village), Near Thagarapavalasa Bridge, Vizianagaram (Dist)-531162  
 Dept of EEE Regulation:R16 Subject: HVDC TRANSMISSION Year&Sem:IV-II

| Calculation standards of attainment |            |               |             | Faculty: Mr.G.Giridhar Reddy, Assistant Professor, Dept. of EEE |            |             |           |       |            |             |           |       |            |                   |                   |                   |            |              |            |                                  |                                  |                                  |  |
|-------------------------------------|------------|---------------|-------------|---|------------|-------------|-----------|-------|------------|-------------|-----------|-------|------------|-------------------|-------------------|-------------------|------------|--------------|------------|----------------------------------|----------------------------------|----------------------------------|--|
|                                     | 1:Low(40%) | 2:Medium(60%) | 3:High(75%) |   |            |             |           |       |            |             |           |       |            |                   |                   |                   |            |              |            |                                  |                                  |                                  |  |
| Descriptive(5M)                     | 2          | 3             | 3.75        |   |            |             |           |       |            |             |           |       |            |                   |                   |                   |            |              |            |                                  |                                  |                                  |  |
| Assignment(5M)                      | 2          | 3             | 3.75        |   |            |             |           |       |            |             |           |       |            |                   |                   |                   |            |              |            |                                  |                                  |                                  |  |
| Quiz(10M)                           | 4          | 6             | 7.5         |   |            |             |           |       |            |             |           |       |            |                   |                   |                   |            |              |            |                                  |                                  |                                  |  |
| S.NO                                | REGD.NO    | Cycle#2       |             |   |            |             |           |       |            |             |           |       |            |                   |                   |                   |            |              |            |                                  |                                  |                                  |  |
|                                     |            | CO4(Max:5M)   |             |   |            | CO5(Max:5M) |           |       |            | CO6(Max:5M) |           |       |            | Total Marks (15M) | Q2 Marks (Max:10) | Q2 Marks (Max:10) | Att. Level | Assignments  |            | Avg(D/Q/A) Attainment Level(CO4) | Avg(D/Q/A) Attainment Level(CO5) | Avg(D/Q/A) Attainment Level(CO6) |  |
|                                     |            | Q1-A (5M)     | Q1-B (5M)   | Total   | Att. Level | Q2-A (5M)   | Q2-B (5M) | Total | Att. Level | Q3-A (5M)   | Q3-B (5M) | Total | Att. Level |                   |                   |                   |            | A (5M) (CO1) | Att. Level |                                  |                                  |                                  |  |
| 1                                   | 17Q71A0203 | 3             | 3           | 3   | 2          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 13                | 10                | 10                | 3          | 5            | 3          | 3                                | 3                                | 3                                |  |
| 2                                   | 17Q71A0204 | 5             | 5           | 5   | 3          | 2           | 2         | 2     | 1          | 3           | 3         | 3     | 2          | 10                | 10                | 10                | 3          | 5            | 3          | 3                                | 2                                | 3                                |  |
| 3                                   | 17Q71A0205 | 1             | 1           | 1   | 0          | 4           | 4         | 4     | 3          | 5           | 5         | 5     | 3          | 10                | 10                | 10                | 3          | 5            | 3          | 2                                | 3                                | 3                                |  |
| 4                                   | 17Q71A0206 | 2             | 2           | 2   | 1          | 1           | 1         | 1     | 0          | 2           | 2         | 2     | 1          | 5                 | 10                | 10                | 3          | 5            | 3          | 2                                | 2                                | 2                                |  |
| 5                                   | 17Q71A0207 | 1             | 1           | 1   | 0          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 11                | 10                | 10                | 3          | 5            | 3          | 2                                | 3                                | 3                                |  |
| 6                                   | 17Q71A0208 | 1             | 1           | 1   | 0          | 1           | 1         | 1     | 0          | 2           | 2         | 2     | 1          | 4                 | 9                 | 9                 | 3          | 5            | 3          | 2                                | 2                                | 2                                |  |
| 7                                   | 17Q71A0209 | 0             | 0           | 0   | 0          | 2           | 2         | 2     | 1          | 3           | 3         | 3     | 2          | 5                 | 10                | 10                | 3          | 5            | 3          | 2                                | 2                                | 3                                |  |
| 8                                   | 17Q71A0210 | 3             | 3           | 3   | 2          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 13                | 10                | 10                | 3          | 5            | 3          | 3                                | 3                                | 3                                |  |
| 9                                   | 17Q71A0212 | 5             | 5           | 5   | 3          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 15                | 10                | 10                | 3          | 5            | 3          | 3                                | 3                                | 3                                |  |
| 10                                  | 17Q71A0213 | 3             | 3           | 3   | 2          | 1           | 1         | 1     | 0          | 0           | 0         | 0     | 0          | 4                 | 10                | 10                | 3          | 5            | 3          | 3                                | 2                                | 2                                |  |
| 11                                  | 17Q71A0214 | 5             | 5           | 5   | 3          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 15                | 10                | 10                | 3          | 5            | 3          | 3                                | 3                                | 3                                |  |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|---|---|---|---|---|---|
| 12 | 17Q71A0215 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 13 | 17Q71A0216 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 5  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 14 | 18Q75A0203 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 5  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 15 | 18Q75A0204 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 5  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 16 | 18Q75A0205 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 15 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 17 | 18Q75A0206 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 10 | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 3 |
| 18 | 18Q75A0207 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 9  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 3 |
| 19 | 18Q75A0208 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 20 | 18Q75A0209 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 7  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 21 | 18Q75A0210 | 1 | 1 | 1 | 0 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 7  | 7  | 7  | 2 | 5 | 3 | 2 | 3 | 2 |
| 22 | 18Q75A0212 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4  | 9  | 9  | 3 | 5 | 3 | 2 | 2 | 2 |
| 23 | 18Q75A0213 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 24 | 18Q75A0214 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 10 | 10 | 5 | 0 | 0 | 2 | 2 | 2 |
| 25 | 18Q75A0216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0 | 5 | 3 | 0 | 1 | 1 |
| 26 | 18Q75A0217 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 6  | 6  | 2 | 5 | 3 | 2 | 2 | 2 |
| 27 | 18Q75A0218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0 | 0 | 5 | 2 | 2 | 2 |
| 28 | 18Q75A0220 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 4  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 29 | 18Q75A0221 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 4  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 30 | 18Q75A0223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 31 | 18Q75A0224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 32 | 18Q75A0225 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 33 | 18Q75A0226 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 7  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |
| 34 | 18Q75A0227 | 5 | 5 | 1 | 0 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 7  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 35 | 18Q75A0228 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 2 | 1 | 1 | 0 | 8  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 36 | 18Q75A0229 | 1 | 1 | 1 | 0 | 5 | 1 | 3 | 2 | 1 | 1 | 1 | 0 | 5  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 37 | 18Q75A0230 | 1 | 1 | 1 | 0 | 1 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 7  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 38 | 18Q75A0231 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 5 | 5 | 5 | 3 | 7  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 3 |
| 39 | 18Q75A0232 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 2 | 2 | 1 | 6  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 40 | 18Q75A0233 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 14 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 41 | 18Q75A0234 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 4 | 4 | 4 | 3 | 10 | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 3 |
| 42 | 18Q75A0235 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 9  | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 2 |
| 43 | 18Q75A0237 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 8  | 10 | 10 | 3 | 5 | 3 | 2 | 3 | 2 |
| 44 | 18Q75A0238 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 8  | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 2 |
| 45 | 18Q75A0240 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 2 | 2 | 1 | 6  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 46 | 18Q75A0241 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 7  | 10 | 10 | 3 | 5 | 3 | 3 | 2 | 2 |

| Attainment Level Summary      | CO4 | CO5   | CO6       |
|-------------------------------|-----|-------|-----------|
| Maximum Attainment Level      | 3   | 3     | 3         |
| Cut-off Attainment Level(50%) | 1.5 | 1.5   | 1.5       |
| No.of Student $\geq$ Cut-off  | 45  | 45    | 43        |
| % of students $\geq$ cut-off  | 98  | 98    | 57        |
| Level Attained                | 3   | 3     | 1         |
| <b>Level of Attained</b>      |     |       |           |
| <b>% of students</b>          | <60 | 60-79 | $\geq$ 80 |
| <b>Level</b>                  | 1   | 2     | 3         |

*A. Andler*

Faculty

*A. J. S.*  
HOD

Head of The Department  
Department of Electrical and Electronics Engineering  
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Bhogapuram (M), Vizianagaram(Dist)-531163



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY  
Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162  
Dept of EEE Regulation:R16 Subject: HVDC TRANSMISSION Year&Sem:IV-II

Faculty: Mr.G.Giridhar Reddy, Assistant Professor, Dept. of EEE

Calculation standards of attainment

|                        | <i>1:Low(40%)</i> | <i>2:Medium(60%)</i> | <i>3: High(75%)</i> |
|------------------------|-------------------|----------------------|---------------------|
| <b>Descriptive(5M)</b> | 2                 | 3                    | 3.75                |
| <b>Assignment(5M)</b>  | 2                 | 3                    | 3.75                |
| <b>Quiz(10M)</b>       | 4                 | 6                    | 7.5                 |

*G. Giridhar*

Faculty

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Dept of EEE Regulation:R16 Subject: HVDC TRANSMISSION Year&Sem:IV-II

Faculty: Mr.G.Giridhar Reddy, Assistant Professor, Dept. of EEE

| S.NO | REGD.NO    | Grade | GRADE WEIGHTAGE | 60% of External | Att. Level |
|------|------------|-------|-----------------|-----------------|------------|
| 1    | 17Q71A0203 | A     | 8.00            | 4.80            | 3          |
| 2    | 17Q71A0204 | C     | 6.00            | 3.60            | 2          |
| 3    | 17Q71A0205 | C     | 6.00            | 3.60            | 2          |
| 4    | 17Q71A0206 | C     | 6.00            | 3.60            | 2          |
| 5    | 17Q71A0207 | B     | 7.00            | 4.20            | 2          |
| 6    | 17Q71A0208 | C     | 6.00            | 3.60            | 2          |
| 7    | 17Q71A0209 | MP    | 0.00            | 0.00            | 0          |
| 8    | 17Q71A0210 | A     | 8.00            | 4.80            | 3          |
| 9    | 17Q71A0212 | A     | 8.00            | 4.80            | 3          |
| 10   | 17Q71A0213 | D     | 5.00            | 3.00            | 1          |
| 11   | 17Q71A0214 | B     | 7.00            | 4.20            | 2          |
| 12   | 17Q71A0215 | B     | 7.00            | 4.20            | 2          |
| 13   | 17Q71A0216 | C     | 5.00            | 3.00            | 1          |
| 14   | 18Q75A0203 | C     | 5.00            | 3.00            | 1          |
| 15   | 18Q75A0204 | B     | 7.00            | 4.20            | 2          |
| 16   | 18Q75A0205 | B     | 7.00            | 4.20            | 2          |
| 17   | 18Q75A0206 | C     | 6.00            | 3.60            | 2          |
| 18   | 18Q75A0207 | B     | 7.00            | 4.20            | 2          |
| 19   | 18Q75A0208 | B     | 7.00            | 4.20            | 2          |
| 20   | 18Q75A0209 | B     | 7.00            | 4.20            | 2          |
| 21   | 18Q75A0210 | C     | 6.00            | 3.60            | 2          |
| 22   | 18Q75A0212 | D     | 5.00            | 3.00            | 1          |
| 23   | 18Q75A0213 | D     | 5.00            | 3.00            | 1          |
| 24   | 18Q75A0214 | B     | 7.00            | 4.20            | 2          |
| 25   | 18Q75A0216 | F     | 0.00            | 0.00            | 0          |
| 26   | 18Q75A0217 | C     | 5.00            | 3.00            | 1          |
| 27   | 18Q75A0218 | F     | 0.00            | 0.00            | 0          |
| 28   | 18Q75A0220 | C     | 6.00            | 3.60            | 2          |
| 29   | 18Q75A0221 | C     | 6.00            | 3.60            | 2          |
| 30   | 18Q75A0223 | D     | 5.00            | 3.00            | 1          |
| 31   | 18Q75A0224 | C     | 6.00            | 3.60            | 2          |
| 32   | 18Q75A0225 | C     | 6.00            | 3.60            | 2          |
| 33   | 18Q75A0226 | D     | 5.00            | 3.00            | 1          |
| 34   | 18Q75A0227 | C     | 6.00            | 3.60            | 2          |
| 35   | 18Q75A0228 | C     | 6.00            | 3.60            | 2          |
| 36   | 18Q75A0229 | C     | 6.00            | 3.60            | 2          |
| 37   | 18Q75A0230 | C     | 6.00            | 3.60            | 2          |
| 38   | 18Q75A0231 | D     | 5.00            | 3.00            | 1          |
| 39   | 18Q75A0232 | D     | 5.00            | 3.00            | 1          |
| 40   | 18Q75A0233 | A     | 8.00            | 4.80            | 3          |
| 41   | 18Q75A0234 | C     | 6.00            | 3.60            | 2          |

|    |            |   |      |      |   |
|----|------------|---|------|------|---|
| 42 | 18Q75A0235 | C | 6.00 | 3.60 | 2 |
| 43 | 18Q75A0237 | C | 6.00 | 3.60 | 2 |
| 44 | 18Q75A0238 | C | 6.00 | 3.60 | 2 |
| 45 | 18Q75A0240 | D | 5.00 | 3.00 | 1 |
| 46 | 18Q75A0241 | D | 5.00 | 3.00 | 1 |

| Attainment Level Summary           | CO1 to CO6 |       |      |
|------------------------------------|------------|-------|------|
| Maximum Attainment Level           | 3          |       |      |
| Cut-off Attainment Level(1-Passed) | 2          |       |      |
| No.of Student >=Cut-off            | 43         |       |      |
| % of students >=cut-off            | 93         |       |      |
| Level Attained                     | 3          |       |      |
| <b>Level of Attained</b>           |            |       |      |
| <b>% of students</b>               | <50        | 50-79 | >=80 |
| <b>Level</b>                       | 1          | 2     | 3    |

*A. Aindler*

Faculty

*A. A. B.*  
HOD

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Dept of EEE Regulation:R16 Subject: HVDC TRANSMISSION Year&Sem:IV-II

| Faculty: Mr.G.Giridhar Reddy, Assistant Professor, Dept. of EEE |                    |     |     |     |     |     |
|---|--------------------|-----|-----|-----|-----|-----|
| Particulars   | Overall Attainment |     |     |     |     |     |
|   | CO1                | CO2 | CO3 | CO4 | CO5 | CO6 |
| Internal Attainment Level (INT)                                 | 3                  | 3   | 1   | 3   | 3   | 1   |
| External Attainment Level (EXT)                                 | 3                  | 3   | 3   | 3   | 3   | 3   |
| TOTAL = INT * 0.4 + EXT * 0.6                                   | 3                  | 3   | 2.2 | 3   | 3   | 2.2 |

*G. Giridhar*

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Faculty: Mr.G.Giridhar Reddy, Assistant Professor, Dept. of EEE

| The Mapping of CO and PO on 3 point scale{high-3,Medium-2,Low-1} is: |      |      |      |      |      |      |      |      |      |       |       |       |       |       |  |
|--|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|--|
| CO Attainment  | PO-1 | PO-2 | PO-3 | PO-4 | PO-5 | PO-6 | PO-7 | PO-8 | PO-9 | PO-10 | PO-11 | PO-12 | PSO-1 | PSO-2 |  |
| CO-1   | 3    | 2    | 2    | 3    |      |      |      |      |      |       |       |       | 2     | 2     |  |
| CO-2   | 3    |      | 2    | 2    |      | 3    |      |      |      |       |       |       | 2     | 1     |  |
| CO-3   | 2.2  | 2    |      | 3    | 2    |      |      |      |      |       |       |       | 2     | 2     |  |
| CO-4   | 3    |      | 3    |      | 2    | 2    |      |      |      |       |       |       | 3     | 2     |  |
| CO-5   | 3    | 2    |      | 2    | 3    |      |      |      |      |       |       |       | 2     | 3     |  |
| CO-6   | 2.2  |      | 2    | 2    |      | 3    |      |      |      |       |       |       | 2     | 2     |  |
| PO/PSO Weightage   | 6    | 9    | 12   | 7    | 8    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 13    | 12    |  |
| PO/PSO Co-relation weightage all Cos (1-6)                           | 16.4 | 25.4 | 32   | 19.4 | 21.6 | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 35.8  | 32.8  |  |
| PO/PSO Attainment Level  | 2.7  | 2.82 | 2.67 | 2.77 | 2.70 | -    | -    | -    | -    | -     | -     | -     | 2.75  | 2.73  |  |

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Bhogapuram (M), Vizianagaram(Dist)-531163

**CGPA CALCULATION:**

| Marks Range Theory  | Marks Range Lab     | Letter Grade | Level        | Grade Point |
|---------------------|---------------------|--------------|--------------|-------------|
| $\geq 90$           | $\geq 90$           | O            | Outstanding  | 10          |
| $\geq 80$ to $< 90$ | $\geq 80$ to $< 90$ | S            | Excellent    | 9           |
| $\geq 70$ to $< 80$ | $\geq 70$ to $< 80$ | A            | Very Good    | 8           |
| $\geq 60$ to $< 70$ | $\geq 60$ to $< 70$ | B            | Good         | 7           |
| $\geq 50$ to $< 60$ | $\geq 50$ to $< 60$ | C            | Fair         | 6           |
| $\geq 40$ to $< 50$ | $\geq 40$ to $< 50$ | D            | Satisfactory | 5           |
| $< 40$              | $< 40$              | F            | Fail         | 0           |
|                     |                     |              | Absent       | 0           |



  
Principal

**PRINCIPAL**  
**AVANTHI INSTITUTE OF ENGG. & TECH**  
Cherukupally (V), Chittivalasa (SAO)  
Bhogapuram (M),  
Vizianagaram (Dist.)-531162



|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|---|---|---|---|---|---|
| 13 | 17Q71A0414 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 5  | 5  | 1 | 5 | 3 | 1 | 1 | 1 |
| 14 | 17Q71A0415 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 14 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 15 | 17Q71A0416 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 14 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 16 | 17Q71A0417 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 13 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 17 | 17Q71A0419 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 2 | 7  | 9  | 9  | 3 | 5 | 3 | 2 | 2 | 3 |
| 18 | 17Q71A0420 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 9  | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 19 | 17Q71A0422 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3  | 3  | 0 | 5 | 3 | 1 | 1 | 1 |
| 20 | 17Q71A0423 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 13 | 7  | 7  | 2 | 5 | 3 | 3 | 3 | 3 |
| 21 | 17Q71A0424 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 15 | 8  | 8  | 3 | 5 | 3 | 3 | 3 | 3 |
| 22 | 17Q71A0425 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 14 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 23 | 17Q71A0426 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0 | 5 | 3 | 1 | 1 | 1 |
| 24 | 17Q71A0427 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 10 | 8  | 8  | 3 | 5 | 3 | 3 | 3 | 2 |
| 25 | 17Q71A0428 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 10 | 5  | 5  | 1 | 5 | 3 | 2 | 2 | 2 |
| 26 | 17Q71A0429 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2  | 10 | 10 | 3 | 5 | 3 | 2 | 2 | 2 |
| 27 | 17Q71A0430 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 7  | 7  | 2 | 5 | 3 | 2 | 2 | 2 |
| 28 | 17Q71A0431 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 13 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 29 | 17Q71A0432 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 11 | 7  | 7  | 2 | 5 | 3 | 2 | 2 | 3 |
| 30 | 17Q71A0433 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 7  | 7  | 2 | 5 | 3 | 2 | 2 | 2 |
| 31 | 17Q71A0434 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 2  | 2  | 0 | 5 | 3 | 1 | 1 | 1 |
| 32 | 17Q71A0435 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 10 | 7  | 7  | 2 | 5 | 3 | 3 | 3 | 2 |
| 33 | 17Q71A0436 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 10 | 3  | 3  | 0 | 5 | 3 | 2 | 2 | 1 |
| 34 | 17Q71A0437 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 12 | 9  | 9  | 3 | 5 | 3 | 2 | 3 | 3 |
| 35 | 17Q71A0438 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 11 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 36 | 17Q71A0439 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 14 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 37 | 17Q71A0440 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 12 | 10 | 10 | 3 | 5 | 3 | 3 | 3 | 3 |
| 38 | 17Q71A0441 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 6  | 6  | 6  | 2 | 5 | 3 | 2 | 2 | 2 |
| 39 | 17Q71A0442 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3  | 4  | 4  | 1 | 5 | 3 | 1 | 1 | 1 |
| 40 | 17Q71A0443 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3  | 3  | 0 | 5 | 3 | 1 | 1 | 1 |
| 41 | 17Q71A0445 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 1  | 0 | 5 | 3 | 1 | 1 | 1 |
| 42 | 17Q71A0446 | 4 | 4 | 4 | 2 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 14 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 43 | 17Q71A0447 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 4  | 4  | 1 | 5 | 3 | 2 | 1 | 1 |
| 44 | 17Q71A0449 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 5  | 5  | 1 | 5 | 3 | 1 | 1 | 1 |
| 45 | 17Q71A0450 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 1 | 11 | 8  | 8  | 3 | 5 | 3 | 3 | 3 | 2 |
| 46 | 17Q71A0451 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 13 | 9  | 9  | 3 | 5 | 3 | 3 | 3 | 3 |
| 47 | 17Q71A0452 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 6  | 6  | 2 | 5 | 3 | 2 | 2 | 2 |
| 48 | 17Q71A0453 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 4 | 4 | 4 | 3 | 10 | 8  | 8  | 3 | 5 | 3 | 3 | 2 | 3 |





AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162

Dept of ECE, Regulation:R16 , Subject:VLSI DESIGN Year & Sem: III-II

| Calculation standards of attainment |            |               |             | Faculty: Mrs.K.Syamala, Assistant Professor, Dept. of ECE |            |             |           |       |            |             |           |       |            |                   |                   |                         |            |              |            |                                  |                                  |                                  |
|-------------------------------------|------------|---------------|-------------|---|------------|-------------|-----------|-------|------------|-------------|-----------|-------|------------|-------------------|-------------------|-------------------------|------------|--------------|------------|----------------------------------|----------------------------------|----------------------------------|
|                                     | I:Low(40%) | 2:Medium(60%) | 3:High(75%) |   |            |             |           |       |            |             |           |       |            |                   |                   |                         |            |              |            |                                  |                                  |                                  |
| Descriptive (5M)                    | 2          | 3             | 3.75        |   |            |             |           |       |            |             |           |       |            |                   |                   |                         |            |              |            |                                  |                                  |                                  |
| Assignment (5M)                     | 2          | 3             | 3.75        |   |            |             |           |       |            |             |           |       |            |                   |                   |                         |            |              |            |                                  |                                  |                                  |
| Quiz (10M)                          | 4          | 6             | 7.5         |   |            |             |           |       |            |             |           |       |            |                   |                   |                         |            |              |            |                                  |                                  |                                  |
| S NO                                | REGD.NO    | Cycle#1       |             |   |            |             |           |       |            |             |           |       |            |                   |                   |                         |            |              |            |                                  |                                  |                                  |
|                                     |            | CO4(Max:5M)   |             |   |            | CO5(Max:5M) |           |       |            | CO6(Max:5M) |           |       |            | Total Marks (15M) | Q1 Marks (Max:10) | Q1 (Avg:10) CO1/CO2/CO3 | Att. Level | Assignments  |            | Avg(D/Q/A) Attainment Level(CO1) | Avg(D/Q/A) Attainment Level(CO2) | Avg(D/Q/A) Attainment Level(CO3) |
|                                     |            | Q1-A (5M)     | Q1-B (5M)   | Total   | Att. Level | Q2-A (5M)   | Q2-B (5M) | Total | Att. Level | Q3-A (5M)   | Q3-B (5M) | Total | Att. Level |                   |                   |                         |            | A (5M) (CO1) | Att. Level |                                  |                                  |                                  |
| 1                                   | 15Q71A0479 | 2             | 2           | 2   | 1          | 2           | 2         | 2     | 1          | 2           | 2         | 2     | 1          | 6                 | 4                 | 4                       | 1          | 5            | 3          | 2                                | 2                                | 2                                |
| 2                                   | 16Q71A0432 | 0             | 0           | 0   | 0          | 0           | 0         | 0     | 0          | 0           | 0         | 0     | 0          | 0                 | 0                 | 0                       | 0          | 5            | 3          | 1                                | 1                                | 1                                |
| 3                                   | 17Q71A0402 | 3             | 3           | 3   | 2          | 3           | 3         | 3     | 2          | 4           | 4         | 4     | 3          | 10                | 4                 | 4                       | 1          | 5            | 3          | 2                                | 2                                | 2                                |
| 4                                   | 17Q71A0403 | 4             | 4           | 4   | 3          | 4           | 4         | 4     | 3          | 2           | 2         | 2     | 1          | 10                | 3                 | 3                       | 0          | 5            | 3          | 2                                | 2                                | 1                                |
| 5                                   | 17Q71A0404 | 0             | 0           | 0   | 0          | 0           | 0         | 0     | 0          | 0           | 0         | 0     | 0          | 0                 | 0                 | 0                       | 0          | 5            | 3          | 1                                | 1                                | 1                                |
| 6                                   | 17Q71A0405 | 5             | 5           | 5   | 3          | 4           | 4         | 4     | 3          | 1           | 1         | 1     | 0          | 10                | 3                 | 3                       | 0          | 5            | 3          | 2                                | 2                                | 1                                |
| 7                                   | 17Q71A0408 | 2             | 2           | 2   | 1          | 2           | 2         | 2     | 1          | 3           | 3         | 3     | 2          | 7                 | 4                 | 4                       | 1          | 5            | 3          | 2                                | 2                                | 2                                |
| 8                                   | 17Q71A0409 | 5             | 5           | 5   | 3          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 15                | 6                 | 6                       | 2          | 5            | 3          | 3                                | 3                                | 3                                |
| 9                                   | 17Q71A0410 | 4             | 4           | 4   | 3          | 2           | 2         | 2     | 1          | 2           | 2         | 2     | 1          | 8                 | 2                 | 2                       | 0          | 5            | 3          | 2                                | 1                                | 1                                |
| 10                                  | 17Q71A0411 | 5             | 5           | 5   | 3          | 5           | 5         | 5     | 3          | 5           | 5         | 5     | 3          | 15                | 3                 | 3                       | 0          | 5            | 3          | 2                                | 2                                | 2                                |
| 11                                  | 17Q71A0412 | 2             | 2           | 2   | 2          | 2           | 2         | 2     | 1          | 2           | 2         | 2     | 1          | 6                 | 2                 | 2                       | 0          | 5            | 3          | 2                                | 1                                | 1                                |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 12 | 17Q71A0413 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 0 | 9  | 6 | 6 | 2 | 5 | 3 | 3 | 3 | 2 |
| 13 | 17Q71A0414 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 9  | 3 | 3 | 0 | 5 | 3 | 2 | 1 | 1 |
| 14 | 17Q71A0415 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 15 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 15 | 17Q71A0416 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 16 | 17Q71A0417 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 12 | 6 | 6 | 2 | 5 | 3 | 3 | 3 | 3 |
| 17 | 17Q71A0419 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 4  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 18 | 17Q71A0420 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 11 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 19 | 17Q71A0422 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 10 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 20 | 17Q71A0423 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 13 | 8 | 8 | 3 | 5 | 3 | 3 | 3 | 3 |
| 21 | 17Q71A0424 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 15 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 22 | 17Q71A0425 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 12 | 6 | 6 | 2 | 5 | 3 | 3 | 3 | 2 |
| 23 | 17Q71A0426 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 5 | 3 | 1 | 1 | 1 |
| 24 | 17Q71A0427 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 13 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 25 | 17Q71A0428 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 11 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 26 | 17Q71A0429 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 13 | 1 | 1 | 0 | 5 | 3 | 2 | 2 | 2 |
| 27 | 17Q71A0430 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 8  | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 28 | 17Q71A0431 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 12 | 2 | 2 | 0 | 5 | 3 | 2 | 2 | 2 |
| 29 | 17Q71A0432 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 13 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 30 | 17Q71A0433 | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 6  | 1 | 1 | 0 | 5 | 3 | 2 | 1 | 1 |
| 31 | 17Q71A0434 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 5 | 3 | 1 | 1 | 1 |
| 32 | 17Q71A0435 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 11 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 33 | 17Q71A0436 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 12 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 34 | 17Q71A0437 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 5 | 5 | 5 | 3 | 8  | 5 | 5 | 1 | 5 | 3 | 2 | 1 | 2 |
| 35 | 17Q71A0438 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 11 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 36 | 17Q71A0439 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 11 | 3 | 3 | 0 | 5 | 3 | 2 | 1 | 2 |
| 37 | 17Q71A0440 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 14 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 38 | 17Q71A0441 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 10 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 39 | 17Q71A0442 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 2 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 40 | 17Q71A0443 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 13 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 41 | 17Q71A0445 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 7  | 3 | 3 | 0 | 5 | 3 | 2 | 1 | 1 |
| 42 | 17Q71A0446 | 4 | 4 | 4 | 2 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 14 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |
| 43 | 17Q71A0447 | 2 | 2 | 2 | 1 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 10 | 2 | 2 | 0 | 5 | 3 | 1 | 2 | 2 |
| 44 | 17Q71A0449 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 45 | 17Q71A0450 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 14 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 46 | 17Q71A0451 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 14 | 2 | 2 | 0 | 5 | 3 | 2 | 2 | 2 |
| 47 | 17Q71A0452 | 2 | 2 | 2 | 1 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 2 | 10 | 3 | 3 | 0 | 5 | 3 | 1 | 2 | 2 |
| 48 | 17Q71A0453 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 13 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 49 | 17Q71A0454 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 10 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 50 | 17Q71A0455 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 14 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 51 | 17Q71A0457 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 52 | 17Q71A0459 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 53 | 17Q71A0460 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 5 | 5 | 5 | 3 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 54 | 17Q71A0461 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 12 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |
| 55 | 17Q71A0462 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 11 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 56 | 17Q71A0463 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 13 | 5 | 5 | 1 | 5 | 3 | 2 | 2 | 2 |
| 57 | 17Q71A0465 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 58 | 17Q71A0466 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 12 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |
| 59 | 17Q71A0468 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 13 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |
| 60 | 17Q71A0469 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 13 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |
| 61 | 18Q75A0401 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 14 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 62 | 18Q75A0403 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 5 | 5 | 5 | 3 | 11 | 4 | 4 | 1 | 5 | 3 | 2 | 1 | 2 |
| 63 | 18Q75A0404 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 1 | 1 | 1 | 0 | 11 | 2 | 2 | 0 | 5 | 3 | 2 | 2 | 1 |
| 64 | 18Q75A0405 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 12 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 1 |
| 65 | 18Q75A0406 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 13 | 3 | 3 | 0 | 5 | 3 | 2 | 2 | 2 |
| 66 | 18Q75A0407 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 13 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 67 | 18Q75A0408 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 13 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 68 | 18Q75A0409 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 5 | 5 | 5 | 3 | 13 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |

| Attainment Level Summary      | CO4 | CO5   | CO6  |
|-------------------------------|-----|-------|------|
| Maximum Attainment Level      | 3   | 3     | 3    |
| Cut-off Attainment Level(50%) | 1.5 | 1.5   | 1.5  |
| No.of Student >=Cut-off       | 56  | 47    | 45   |
| % of students >=cut-off       | 82  | 69    | 54   |
| Level Attained                | 3   | 2     | 1    |
| Level of Attained             |     |       |      |
| % of students                 | <60 | 60-79 | >=80 |
| Level                         | 1   | 2     | 3    |

*K. Sanale*

Faculty

*1985*

HOD  
 Head of the Department  
 Electronics & Communication Engineering  
 AVANTHI INSTITUTE OF ENGG. & TECH  
 Cherukupally (Vill), Bhogapuram (M)  
 VIZIANAGARA



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY  
Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162

Dept of ECE, Regulation:R16 , Subject:VLSI DESIGN Year & Sem: III-II

| Faculty: Mrs.K.Syamala,Assistant Professor, Dept. of ECE |                   |                      |                     |
|--|-------------------|----------------------|---------------------|
| Calculation standards of attainment                      |                   |                      |                     |
|  | <i>1:Low(40%)</i> | <i>2:Medium(60%)</i> | <i>3: High(75%)</i> |
| Descriptive(5M)  | 2                 | 3                    | 3.75                |
| Assignment(5M)   | 2                 | 3                    | 3.75                |
| Quiz(10M)  | 4                 | 6                    | 7.5                 |

*K. Sanala*

Faculty

*[Signature]*

HOD

Head of the Department  
Electronics & Communication Engineering  
AVANTHI INSTITUTE OF ENGG. & TECH  
Cherukupally (Vill), Bhogapuram (M)  
VIZIANAGARAM (DIST)



**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
Cherukupally( Village), Near Thagarapavalasa Bridge, Vizianagaram (Dist)-531162

Dept of ECE, Regulation:R16 , Subject:VLSI DESIGN Year & Sem: III-II

Faculty: Mrs.K.Syamala, Assistant Professor, Dept. of ECE

| SL.NO | REGD.NO    | Grade  | GRADE WEIGHTAGE | 60% of External Attainment | Att. Level |
|-------|------------|--------|-----------------|----------------------------|------------|
| 1     | 15Q71A0479 | D      | 5.00            | 3.00                       | 1          |
| 2     | 16Q71A0432 | F      | 0.00            | 0.00                       | 0          |
| 3     | 17Q71A0402 | F      | 0.00            | 0.00                       | 0          |
| 4     | 17Q71A0403 | D      | 5.00            | 3.00                       | 1          |
| 5     | 17Q71A0404 | ABSENT | 0.00            | 0.00                       | 0          |
| 6     | 17Q71A0405 | D      | 5.00            | 3.00                       | 1          |
| 7     | 17Q71A0408 | F      | 0.00            | 0.00                       | 0          |
| 8     | 17Q71A0409 | C      | 6.00            | 3.60                       | 2          |
| 9     | 17Q71A0410 | D      | 5.00            | 3.00                       | 1          |
| 10    | 17Q71A0411 | B      | 7.00            | 4.20                       | 2          |
| 11    | 17Q71A0412 | C      | 6.00            | 3.60                       | 2          |
| 12    | 17Q71A0413 | C      | 6.00            | 3.60                       | 2          |
| 13    | 17Q71A0414 | C      | 6.00            | 3.60                       | 2          |
| 14    | 17Q71A0415 | S      | 9.00            | 5.40                       | 3          |
| 15    | 17Q71A0416 | A      | 8.00            | 4.80                       | 3          |
| 16    | 17Q71A0417 | C      | 6.00            | 3.60                       | 2          |
| 17    | 17Q71A0419 | C      | 6.00            | 3.60                       | 2          |
| 18    | 17Q71A0420 | C      | 6.00            | 3.60                       | 2          |
| 19    | 17Q71A0422 | F      | 0.00            | 0.00                       | 0          |
| 20    | 17Q71A0423 | C      | 6.00            | 3.60                       | 2          |
| 21    | 17Q71A0424 | A      | 8.00            | 4.80                       | 3          |
| 22    | 17Q71A0425 | B      | 7.00            | 4.20                       | 2          |
| 23    | 17Q71A0426 | F      | 0.00            | 0.00                       | 0          |
| 24    | 17Q71A0427 | C      | 6.00            | 3.60                       | 2          |
| 25    | 17Q71A0428 | C      | 6.00            | 3.60                       | 2          |
| 26    | 17Q71A0429 | D      | 5.00            | 3.00                       | 1          |
| 27    | 17Q71A0430 | F      | 0.00            | 0.00                       | 0          |
| 28    | 17Q71A0431 | B      | 7.00            | 4.20                       | 2          |
| 29    | 17Q71A0432 | D      | 5.00            | 3.00                       | 1          |
| 30    | 17Q71A0433 | F      | 0.00            | 0.00                       | 0          |
| 31    | 17Q71A0434 | F      | 0.00            | 0.00                       | 0          |
| 32    | 17Q71A0435 | C      | 6.00            | 3.60                       | 2          |
| 33    | 17Q71A0436 | C      | 6.00            | 3.60                       | 2          |
| 34    | 17Q71A0437 | D      | 5.00            | 3.00                       | 1          |
| 35    | 17Q71A0438 | C      | 6.00            | 3.60                       | 2          |
| 36    | 17Q71A0439 | B      | 7.00            | 4.20                       | 2          |
| 37    | 17Q71A0440 | C      | 6.00            | 3.60                       | 2          |
| 38    | 17Q71A0441 | D      | 5.00            | 3.00                       | 1          |

|    |            |   |      |      |   |
|----|------------|---|------|------|---|
| 39 | 17Q71A0442 | D | 5.00 | 3.00 | 1 |
| 40 | 17Q71A0443 | F | 0.00 | 0.00 | 0 |
| 41 | 17Q71A0445 | D | 5.00 | 3.00 | 1 |
| 42 | 17Q71A0446 | B | 7.00 | 4.20 | 2 |
| 43 | 17Q71A0447 | D | 5.00 | 3.00 | 1 |
| 44 | 17Q71A0449 | F | 0.00 | 0.00 | 0 |
| 45 | 17Q71A0450 | B | 7.00 | 4.20 | 2 |
| 46 | 17Q71A0451 | B | 7.00 | 4.20 | 2 |
| 47 | 17Q71A0452 | C | 6.00 | 3.60 | 2 |
| 48 | 17Q71A0453 | B | 7.00 | 4.20 | 2 |
| 49 | 17Q71A0454 | B | 7.00 | 4.20 | 2 |
| 50 | 17Q71A0455 | C | 6.00 | 3.60 | 2 |
| 51 | 17Q71A0457 | C | 6.00 | 3.60 | 2 |
| 52 | 17Q71A0459 | C | 6.00 | 3.60 | 2 |
| 53 | 17Q71A0460 | D | 5.00 | 3.00 | 1 |
| 54 | 17Q71A0461 | D | 5.00 | 3.00 | 1 |
| 55 | 17Q71A0462 | D | 5.00 | 3.00 | 1 |
| 56 | 17Q71A0463 | B | 7.00 | 4.20 | 2 |
| 57 | 17Q71A0465 | B | 7.00 | 4.20 | 2 |
| 58 | 17Q71A0466 | C | 6.00 | 3.60 | 2 |
| 59 | 17Q71A0468 | D | 5.00 | 3.00 | 1 |
| 60 | 17Q71A0469 | C | 6.00 | 3.60 | 2 |
| 61 | 18Q75A0401 | C | 6.00 | 3.60 | 2 |
| 62 | 18Q75A0403 | A | 8.00 | 4.80 | 3 |
| 63 | 18Q75A0404 | F | 0.00 | 0.00 | 0 |
| 64 | 18Q75A0405 | B | 7.00 | 4.20 | 2 |
| 65 | 18Q75A0406 | A | 8.00 | 4.80 | 3 |
| 66 | 18Q75A0407 | B | 7.00 | 4.20 | 2 |
| 67 | 18Q75A0408 | C | 6.00 | 3.60 | 2 |
| 68 | 18Q75A0409 | D | 5.00 | 3.00 | 1 |

|                                    |            |       |      |
|------------------------------------|------------|-------|------|
| Attainment Level Summary           | CO1 to CO6 |       |      |
| Maximum Attainment Level           | 3          |       |      |
| Cut-off Attainment Level(1-Passed) | 2          |       |      |
| No.of Student >=Cut-off            | 56         |       |      |
| % of students >=cut-off            | 82         |       |      |
| Level Attained                     | 3          |       |      |
| Level of Attained                  |            |       |      |
| % of students                      | <50        | 50-79 | >=80 |
| Level                              | 1          | 2     | 3    |

*K. Sankar*  
Faculty

*[Signature]*  
HOD

Head of the Department  
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AVANTHI INSTITUTE OF ENGG. & TECH  
Cherukupally (VIII), Bhogapuram (M)  
VIZIANAGARAM (DIST)



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY  
Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162

Dept of ECE, Regulation:R16 , Subject:VLSI DESIGN Year & Sem: III-II

Faculty: Mrs.K.Syamala, Assistant Professor, Dept. of ECE

| Particulars                     | Overall Attainment |     |     |     |     |     |
|---------------------------------|--------------------|-----|-----|-----|-----|-----|
|                                 | CO1                | CO2 | CO3 | CO4 | CO5 | CO6 |
| Internal Attainment Level (INT) | 2                  | 2   | 1   | 3   | 2   | 1   |
| External Attainment Level (EXT) | 3                  | 3   | 3   | 3   | 3   | 3   |
| TOTAL = INT * 0.4 + EXT * 0.6   | 2.6                | 2.6 | 2.2 | 3   | 2.6 | 2.2 |

*K. Sanala*

Faculty

HOD

Head of the Department  
Electronics & Communication Engineering  
AVANTHI INSTITUTE OF ENGG. & TECH  
Cherukupally (Vill), Bhogapuram (M)  
VIZIANAGARAM (DIST)



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162

Dept of ECE, Regulation:R16 , Subject:VLSI DESIGN Year & Sem: III-II

| Faculty: Mrs.K.Syamala, Assistant Professor, Dept. of ECE            |                     |        |        |        |      |      |      |      |      |      |       |       |       |       |        |
|--|---------------------|--------|--------|--------|------|------|------|------|------|------|-------|-------|-------|-------|--------|
| The Mapping of CO and PO on 3 point scale{high-3,Medium-2,Low-1} is: |                     |        |        |        |      |      |      |      |      |      |       |       |       |       |        |
|  | CO Attainment Level | PO-1   | PO-2   | PO-3   | PO-4 | PO-5 | PO-6 | PO-7 | PO-8 | PO-9 | PO-10 | PO-11 | PO-12 | PSO-1 | PSO-2  |
| CO-1   | 2.6                 | 2      | 2      |        |      |      |      |      |      |      |       |       |       | 1     | 1      |
| CO-2   | 2.6                 | 2      | 2      | 2      | 1    |      |      |      |      |      |       |       |       | 2     | 2      |
| CO-3   | 2.2                 | 2      | 2      | 2      | 1    |      |      |      |      |      |       |       |       | 2     | 1      |
| CO-4   | 3                   | 2      | 2      | 1      | 1    |      |      |      |      |      |       |       |       | 2     | 2      |
| CO-5   | 2.6                 | 2      | 2      | 2      | 1    |      |      |      |      |      |       |       |       | 2     | 1      |
| CO-6   | 2.2                 | 2      | 1      | 2      | 1    |      |      |      |      |      |       |       |       | 2     | 2      |
| PO/PSO Weightage   |                     | 12     | 11     | 9      | 5    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 11    | 9      |
| PO/PSO Co-relation weightage all Cos(1-6)                            |                     | 30.4   | 28.2   | 22.2   | 12.6 | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 27.8  | 23     |
| PO/PSO Attainment Level  |                     | 2.5333 | 2.5636 | 2.4667 | 2.52 | -    | -    | -    | -    | -    | -     | -     | -     | 2.527 | 2.5556 |

*K. Sanala*  
Faculty

*[Signature]*  
HOD

Head of the Department  
Electronics & Communication Engineering  
AVANTHI INSTITUTE OF ENGG. & TECH  
Cherukupally (Vill), Bhogapuram (M)  
VIZIANAGARAM

**CGPA CALCULATION:**

| Marks Range Theory  | Marks Range Lab     | Letter Grade | Level        | Grade Point |
|---------------------|---------------------|--------------|--------------|-------------|
| $\geq 90$           | $\geq 90$           | O            | Outstanding  | 10          |
| $\geq 80$ to $< 90$ | $\geq 80$ to $< 90$ | S            | Excellent    | 9           |
| $\geq 70$ to $< 80$ | $\geq 70$ to $< 80$ | A            | Very Good    | 8           |
| $\geq 60$ to $< 70$ | $\geq 60$ to $< 70$ | B            | Good         | 7           |
| $\geq 50$ to $< 60$ | $\geq 50$ to $< 60$ | C            | Fair         | 6           |
| $\geq 40$ to $< 50$ | $\geq 40$ to $< 50$ | D            | Satisfactory | 5           |
| $< 40$              | $< 40$              | F            | Fail         | 0           |
|                     |                     |              | Absent       | 0           |



  
Principal

**PRINCIPAL**  
**AVANTHI INSTITUTE OF ENGG. & TECH**  
**Cherukupally (V), Chittivalasa (SAO)**  
**Bhogapuram (M),**  
**Vizianagaram (Dist.)-531162**



|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 12 | 19Q71E0012 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 13 | 19Q71E0013 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 14 | 19Q71E0014 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 15 | 19Q71E0015 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 16 | 19Q71E0016 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 17 | 19Q71E0017 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 18 | 19Q71E0018 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 8  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 19 | 19Q71E0019 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 20 | 19Q71E0020 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 21 | 19Q71E0021 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 10 | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 2 |
| 22 | 19Q71E0022 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 23 | 19Q71E0023 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 24 | 19Q71E0024 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | 19Q71E0025 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 26 | 19Q71E0026 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 5  | 4 | 4 | 1 | 5 | 3 | 1 | 2 | 2 |
| 27 | 19Q71E0027 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 5 | 0 | 5 | 3 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 28 | 19Q71E0028 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 5  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 29 | 19Q71E0029 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 6  | 4 | 4 | 1 | 5 | 3 | 1 | 2 | 2 |
| 30 | 19Q71E0030 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 31 | 19Q71E0031 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 32 | 19Q71E0032 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 33 | 19Q71E0033 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34 | 19Q71E0034 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 35 | 19Q71E0035 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 2 |
| 36 | 19Q71E0036 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 37 | 19Q71E0037 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 38 | 19Q71E0038 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 39 | 19Q71E0039 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 40 | 19Q71E0040 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 41 | 19Q71E0041 | 3 | 0 | 3 | 2 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 42 | 19Q71E0042 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 43 | 19Q71E0043 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 44 | 19Q71E0044 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 45 | 19Q71E0045 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 46 | 19Q71E0046 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 47 | 19Q71E0047 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 48 | 19Q71E0048 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 49 | 19Q71E0049 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 50 | 19Q71E0050 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 51 | 19Q71E0051 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 52 | 19Q71E0052 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 53 | 19Q71E0053 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 2 |
| 54 | 19Q71E0054 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55 | 19Q71E0055 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 56 | 19Q71E0056 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 2 | 5 | 0 | 5 | 3 | 13 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 57 | 19Q71E0057 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 58 | 19Q71E0058 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 59 | 19Q71E0059 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 60 | 19Q71E0060 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 61 | 19Q71E0061 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 62 | 19Q71E0062 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 63 | 19Q71E0063 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 64 | 19Q71E0064 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 5 | 0 | 5 | 3 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 65 | 19Q71E0065 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 66 | 19Q71E0066 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 67 | 19Q71E0067 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 4  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 2 |
| 68 | 19Q71E0068 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 69 | 19Q71E0069 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 70 | 19Q71E0070 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 4  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 2 |
| 71 | 19Q71E0071 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 72 | 19Q71E0072 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 73 | 19Q71E0073 | 3 | 0 | 3 | 2 | 1 | 0 | 1 | 0 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 1 | 2 |
| 74 | 19Q71E0074 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 75 | 19Q71E0075 | 4 | 0 | 4 | 3 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 76 | 19Q71E0076 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 77 | 19Q71E0077 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 78 | 19Q71E0078 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 79 | 19Q71E0079 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |

|     |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|-----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 80  | 19Q71E0080 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 81  | 19Q71E0081 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 82  | 19Q71E0082 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 83  | 19Q71E0083 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 84  | 19Q71E0084 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 85  | 19Q71E0085 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 86  | 19Q71E0086 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 87  | 19Q71E0087 | 2 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4  | 4 | 4 | 1 | 4 | 3 | 2 | 1 | 1 |
| 88  | 19Q71E0088 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 89  | 19Q71E0089 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 4  | 4 | 4 | 1 | 4 | 3 | 1 | 2 | 1 |
| 90  | 19Q71E0090 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 91  | 19Q71E0091 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 6  | 4 | 4 | 1 | 4 | 3 | 1 | 2 | 2 |
| 92  | 19Q71E0092 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 93  | 19Q71E0093 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 94  | 19Q71E0094 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95  | 19Q71E0095 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 96  | 19Q71E0096 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 97  | 19Q71E0097 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 4  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 2 |
| 98  | 19Q71E0098 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 99  | 19Q71E0099 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 100 | 19Q71E00A0 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 101 | 19Q71E00A1 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 102 | 19Q71E00A2 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 103 | 19Q71E00A3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 104 | 19Q71E00A4 | 1 | 0 | 1 | 0 | 5 | 0 | 5 | 3 | 5 | 0 | 5 | 3 | 11 | 4 | 4 | 1 | 4 | 3 | 1 | 2 | 2 |
| 105 | 19Q71E00A5 | 3 | 0 | 3 | 2 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 106 | 19Q71E00A6 | 4 | 0 | 4 | 3 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 107 | 19Q71E00A7 | 5 | 0 | 5 | 3 | 5 | 0 | 5 | 3 | 1 | 0 | 1 | 0 | 11 | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 1 |
| 108 | 19Q71E00A8 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 10 | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 2 |
| 109 | 19Q71E00A9 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 110 | 19Q71E00B0 | 2 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4  | 4 | 4 | 1 | 4 | 3 | 2 | 1 | 1 |
| 111 | 19Q71E00B1 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 5 | 0 | 5 | 3 | 11 | 3 | 3 | 0 | 4 | 3 | 2 | 2 | 2 |
| 112 | 19Q71E00B2 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 113 | 19Q71E00B3 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |

|     |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|-----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 114 | 19Q71E00B4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 19Q71E00B5 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 4 | 0 | 4 | 3 | 8  | 4 | 4 | 1 | 3 | 3 | 2 | 2 | 2 |
| 116 | 19Q71E00B6 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 2 |
| 117 | 19Q71E00B7 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 118 | 19Q71E00B8 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 4  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 2 |
| 119 | 19Q71E00B9 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 120 | 19Q71E00C0 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 2 |
| 121 | 19Q71E00C1 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 2 | 5 | 0 | 5 | 3 | 10 | 4 | 4 | 1 | 0 | 0 | 1 | 1 | 1 |

|                                 |     |       |      |            |            |            |
|---------------------------------|-----|-------|------|------------|------------|------------|
| <b>Attainment Level Summary</b> |     |       |      | <b>CO1</b> | <b>CO2</b> | <b>CO3</b> |
| Maximum Attainment Level        | 3   | 3     | 3    |            |            |            |
| Cut-off Attainment Level(50%)   | 1.5 | 1.5   | 1.5  |            |            |            |
| No.of Student >=Cut-off         | 84  | 87    | 80   |            |            |            |
| % of students >=cut-off         | 69  | 72    | 66   |            |            |            |
| Level Attained                  | 2   | 2     | 1    |            |            |            |
| <b>Level of Attained</b>        |     |       |      |            |            |            |
| % of students                   | <60 | 60-79 | >=80 |            |            |            |
| Level                           | 1   | 2     | 3    |            |            |            |

*J. Subudely*  
Faculty

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HOD  
Head of the Department  
Master of Business Administration  
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|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 4  | 19Q71E0004 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 5  | 19Q71E0005 | 2 | 0 | 2 | 0 | 3 | 0 | 3 | 1 | 5 | 0 | 5 | 0 | 10 | 4 | 4 | 1 | 4 | 3 | 1 | 2 | 1 |
| 6  | 19Q71E0006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 7  | 19Q71E0007 | 4 | 0 | 4 | 3 | 5 | 0 | 5 | 3 | 5 | 0 | 5 | 0 | 14 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 8  | 19Q71E0008 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 9  | 19Q71E0009 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 2 | 2 | 0 | 2 | 0 | 7  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 10 | 19Q71E0010 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 11 | 19Q71E0011 | 4 | 0 | 4 | 3 | 2 | 0 | 2 | 3 | 2 | 0 | 2 | 0 | 8  | 4 | 4 | 1 | 3 | 3 | 2 | 2 | 1 |
| 12 | 19Q71E0012 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 13 | 19Q71E0013 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 1 | 2 | 1 |
| 14 | 19Q71E0014 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 15 | 19Q71E0015 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 16 | 19Q71E0016 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 17 | 19Q71E0017 | 5 | 0 | 5 | 3 | 2 | 0 | 2 | 3 | 2 | 0 | 2 | 0 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 18 | 19Q71E0018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 19 | 19Q71E0019 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 20 | 19Q71E0020 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 21 | 19Q71E0021 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 22 | 19Q71E0022 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 23 | 19Q71E0023 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 24 | 19Q71E0024 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | 19Q71E0025 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 26 | 19Q71E0026 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 27 | 19Q71E0027 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 28 | 19Q71E0028 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 29 | 19Q71E0029 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 5 | 0 | 5 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 30 | 19Q71E0030 | 4 | 0 | 4 | 3 | 2 | 0 | 2 | 3 | 2 | 0 | 2 | 0 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 31 | 19Q71E0031 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 6  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 32 | 19Q71E0032 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 5 | 0 | 5 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 33 | 19Q71E0033 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 34 | 19Q71E0034 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 35 | 19Q71E0035 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 13 | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 1 |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 36 | 19Q71E0036 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37 | 19Q71E0037 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 5 | 5 | 1 | 4 | 3 | 1 | 1 | 1 |
| 38 | 19Q71E0038 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 39 | 19Q71E0039 | 3 | 0 | 3 | 2 | 2 | 0 | 2 | 2 | 5 | 0 | 5 | 0 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 40 | 19Q71E0040 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 41 | 19Q71E0041 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 42 | 19Q71E0042 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 43 | 19Q71E0043 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 7  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 44 | 19Q71E0044 | 4 | 0 | 4 | 3 | 2 | 0 | 2 | 3 | 2 | 0 | 2 | 0 | 8  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 45 | 19Q71E0045 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 46 | 19Q71E0046 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 5 | 5 | 1 | 4 | 3 | 2 | 2 | 1 |
| 47 | 19Q71E0047 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 48 | 19Q71E0048 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 49 | 19Q71E0049 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 50 | 19Q71E0050 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 5 | 0 | 5 | 0 | 13 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 51 | 19Q71E0051 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 3 | 0 | 4 | 3 | 1 | 1 | 1 |
| 52 | 19Q71E0052 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 53 | 19Q71E0053 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 54 | 19Q71E0054 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55 | 19Q71E0055 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 56 | 19Q71E0056 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 4  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 57 | 19Q71E0057 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 58 | 19Q71E0058 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 59 | 19Q71E0059 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 5 | 0 | 5 | 0 | 13 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 60 | 19Q71E0060 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 5 | 0 | 5 | 0 | 13 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 61 | 19Q71E0061 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 62 | 19Q71E0062 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 63 | 19Q71E0063 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 64 | 19Q71E0064 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 65 | 19Q71E0065 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 66 | 19Q71E0066 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 67 | 19Q71E0067 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |

|    |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 68 | 19Q71E0068 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 69 | 19Q71E0069 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 6  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 70 | 19Q71E0070 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 71 | 19Q71E0071 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 72 | 19Q71E0072 | 3 | 0 | 3 | 2 | 5 | 0 | 5 | 2 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 73 | 19Q71E0073 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 74 | 19Q71E0074 | 4 | 0 | 4 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 75 | 19Q71E0075 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 76 | 19Q71E0076 | 3 | 0 | 3 | 2 | 4 | 0 | 4 | 2 | 4 | 0 | 4 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 77 | 19Q71E0077 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 78 | 19Q71E0078 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 79 | 19Q71E0079 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 80 | 19Q71E0080 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 81 | 19Q71E0081 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 82 | 19Q71E0082 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 83 | 19Q71E0083 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 84 | 19Q71E0084 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 85 | 19Q71E0085 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 86 | 19Q71E0086 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 87 | 19Q71E0087 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 88 | 19Q71E0088 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 89 | 19Q71E0089 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 90 | 19Q71E0090 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 0 | 12 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 91 | 19Q71E0091 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 92 | 19Q71E0092 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 93 | 19Q71E0093 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 94 | 19Q71E0094 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 19Q71E0095 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 4 | 3 | 1 | 1 | 1 |
| 96 | 19Q71E0096 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 97 | 19Q71E0097 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 98 | 19Q71E0098 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 99 | 19Q71E0099 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |

|     |            |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |
|-----|------------|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|
| 100 | 19Q71E00A0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 101 | 19Q71E00A1 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 102 | 19Q71E00A2 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 4  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 103 | 19Q71E00A3 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 104 | 19Q71E00A4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 105 | 19Q71E00A5 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 106 | 19Q71E00A6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 107 | 19Q71E00A7 | 4 | 0 | 4 | 3 | 4 | 0 | 4 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 108 | 19Q71E00A8 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 109 | 19Q71E00A9 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 110 | 19Q71E00B0 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 6  | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 111 | 19Q71E00B1 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 112 | 19Q71E00B2 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 3 | 0 | 3 | 0 | 11 | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 113 | 19Q71E00B3 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 5 | 3 | 2 | 2 | 1 |
| 114 | 19Q71E00B4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 19Q71E00B5 | 5 | 0 | 5 | 3 | 3 | 0 | 3 | 3 | 2 | 0 | 2 | 0 | 10 | 4 | 4 | 1 | 5 | 5 | 3 | 3 | 2 |
| 116 | 19Q71E00B6 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 2 | 0 | 6  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |
| 117 | 19Q71E00B7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 118 | 19Q71E00B8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 119 | 19Q71E00B9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 3 | 3 | 1 | 1 | 1 |
| 120 | 19Q71E00C0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 4 | 4 | 1 | 5 | 3 | 1 | 1 | 1 |
| 121 | 19Q71E00C1 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 3 | 0 | 9  | 4 | 4 | 1 | 4 | 3 | 2 | 2 | 1 |

|                                 |            |            |            |
|---------------------------------|------------|------------|------------|
| <b>Attainment Level Summary</b> | <b>CO4</b> | <b>CO5</b> | <b>CO6</b> |
| Maximum Attainment Level        | 3          | 3          | 3          |
| Cut-off Attainment Level(50%)   | 1.5        | 1.5        | 1.5        |
| No.of Student >=Cut-off         | 71         | 72         | 1          |
| % of students >=cut-off         | 59         | 60         | 1          |
| Level Attained                  | 1          | 1          | 1          |
| <b>Level of Attained</b>        |            |            |            |
| % of students                   | <60        | 60-79      | >=80       |
| Level                           | 1          | 2          | 3          |

*J. Encheeddy*  
Faculty

*D. Sai Prasad*  
HOD

Head of the Department  
Master of Business Administration  
VANTHI INSTITUTE OF ENGG. & TECH.  
Charitatively (A) Non-Profit



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162

Dept of Management Studies, Regulation:R19,Subject:Management and organization Behaviour Year & Sem:I-I

|   |                   |                      |                     |
|---|-------------------|----------------------|---------------------|
| <b>Faculty: Mr.Y.Endreddy, Assistant Professor, Dept. of Management Studies</b> |                   |                      |                     |
| <b>Calculation standards of attainment</b>                                      |                   |                      |                     |
|   | <i>1:Low(40%)</i> | <i>2:Medium(60%)</i> | <i>3: High(75%)</i> |
| <b>Descriptive(5M)</b>  | 2                 | 3                    | 3.75                |
| <b>Assignment(5M)</b>   | 2                 | 3                    | 3.75                |
| <b>PPT(5M)</b>  | 2                 | 3                    | 3.75                |

*Y. Endreddy*  
Faculty

*V. Saiprasanna*  
HOD  
Head of the Department  
Master of Business Administration  
AVANTHI INSTITUTE OF ENGG. & TECH.  
Cherukupally (V), Near Thagarapuvalasa Bridge  
Vizianagaram (M), Vizianagaram (D)-531162

**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Cherukupally( Village), Near Thagarapuvalasa Bridge, Vizianagaram (Dist)-531162

Dept of Management Studies, Regulation: R19, Subject: Management and organization Behaviour Year &amp; Sem: I-I

Faculty: Mr. Y. Endreddy, Assistant Professor, Dept. of Management Studies

| SL.NO | REGD.NO    | Grade  | GRADE WEIGHTAGE | 60% of External Attainment | Att. Level |
|-------|------------|--------|-----------------|----------------------------|------------|
| 1     | 19Q71E0001 | C      | 6.00            | 3.60                       | 2          |
| 2     | 19Q71E0002 | A      | 8.00            | 4.80                       | 3          |
| 3     | 19Q71E0003 | B      | 7.00            | 4.20                       | 2          |
| 4     | 19Q71E0004 | B      | 7.00            | 4.20                       | 2          |
| 5     | 19Q71E0005 | B      | 7.00            | 4.20                       | 2          |
| 6     | 19Q71E0006 | D      | 5.00            | 3.00                       | 1          |
| 7     | 19Q71E0007 | B      | 7.00            | 4.20                       | 2          |
| 8     | 19Q71E0008 | B      | 7.00            | 4.20                       | 2          |
| 9     | 19Q71E0009 | A      | 8.00            | 4.80                       | 3          |
| 10    | 19Q71E0010 | C      | 6.00            | 3.60                       | 2          |
| 11    | 19Q71E0011 | B      | 7.00            | 4.20                       | 2          |
| 12    | 19Q71E0012 | B      | 7.00            | 4.20                       | 2          |
| 13    | 19Q71E0013 | C      | 6.00            | 3.60                       | 2          |
| 14    | 19Q71E0014 | ABSENT | 0.00            | 0.00                       | 0          |
| 15    | 19Q71E0015 | A      | 8.00            | 4.80                       | 3          |
| 16    | 19Q71E0016 | D      | 5.00            | 3.00                       | 1          |
| 17    | 19Q71E0017 | B      | 7.00            | 4.20                       | 2          |
| 18    | 19Q71E0018 | B      | 7.00            | 4.20                       | 2          |
| 19    | 19Q71E0019 | B      | 7.00            | 4.20                       | 2          |
| 20    | 19Q71E0020 | D      | 5.00            | 3.00                       | 1          |
| 21    | 19Q71E0021 | A      | 8.00            | 4.80                       | 3          |
| 22    | 19Q71E0022 | B      | 7.00            | 4.20                       | 2          |
| 23    | 19Q71E0023 | S      | 9.00            | 5.40                       | 3          |
| 24    | 19Q71E0026 | D      | 5.00            | 3.00                       | 1          |
| 25    | 19Q71E0027 | C      | 6.00            | 3.60                       | 2          |
| 26    | 19Q71E0028 | C      | 6.00            | 3.60                       | 2          |
| 27    | 19Q71E0029 | B      | 7.00            | 4.20                       | 2          |
| 28    | 19Q71E0030 | B      | 7.00            | 4.20                       | 2          |
| 29    | 19Q71E0031 | B      | 7.00            | 4.20                       | 2          |
| 30    | 19Q71E0032 | B      | 7.00            | 4.20                       | 2          |
| 31    | 19Q71E0034 | C      | 6.00            | 3.60                       | 2          |
| 32    | 19Q71E0035 | C      | 6.00            | 3.60                       | 2          |
| 33    | 19Q71E0036 | B      | 7.00            | 4.20                       | 2          |
| 34    | 19Q71E0037 | B      | 7.00            | 4.20                       | 2          |
| 35    | 19Q71E0038 | A      | 8.00            | 4.80                       | 3          |
| 36    | 19Q71E0039 | B      | 7.00            | 4.20                       | 2          |
| 37    | 19Q71E0040 | C      | 6.00            | 3.60                       | 2          |
| 38    | 19Q71E0041 | B      | 7.00            | 4.20                       | 2          |
| 39    | 19Q71E0042 | B      | 7.00            | 4.20                       | 2          |

|    |            |   |      |      |   |
|----|------------|---|------|------|---|
| 40 | 19Q71E0043 | B | 7.00 | 4.20 | 2 |
| 41 | 19Q71E0044 | B | 7.00 | 4.20 | 2 |
| 42 | 19Q71E0045 | B | 7.00 | 4.20 | 2 |
| 43 | 19Q71E0046 | B | 7.00 | 4.20 | 2 |
| 44 | 19Q71E0047 | C | 6.00 | 3.60 | 2 |
| 45 | 19Q71E0048 | D | 5.00 | 3.00 | 1 |
| 46 | 19Q71E0049 | B | 7.00 | 4.20 | 2 |
| 47 | 19Q71E0050 | A | 8.00 | 4.80 | 3 |
| 48 | 19Q71E0051 | C | 6.00 | 3.60 | 2 |
| 49 | 19Q71E0052 | A | 8.00 | 4.80 | 3 |
| 50 | 19Q71E0053 | C | 6.00 | 3.60 | 2 |
| 51 | 19Q71E0055 | A | 8.00 | 4.80 | 3 |
| 52 | 19Q71E0056 | B | 7.00 | 4.20 | 2 |
| 53 | 19Q71E0057 | D | 5.00 | 3.00 | 1 |
| 54 | 19Q71E0058 | B | 7.00 | 4.20 | 2 |
| 55 | 19Q71E0059 | A | 8.00 | 4.80 | 3 |
| 56 | 19Q71E0060 | D | 5.00 | 3.00 | 1 |
| 57 | 19Q71E0061 | B | 7.00 | 4.20 | 2 |
| 58 | 19Q71E0062 | B | 7.00 | 4.20 | 2 |
| 59 | 19Q71E0063 | A | 8.00 | 4.80 | 3 |
| 60 | 19Q71E0064 | C | 6.00 | 3.60 | 2 |
| 61 | 19Q71E0065 | C | 6.00 | 3.60 | 2 |
| 62 | 19Q71E0066 | D | 5.00 | 3.00 | 1 |
| 63 | 19Q71E0067 | A | 8.00 | 4.80 | 3 |
| 64 | 19Q71E0068 | D | 5.00 | 3.00 | 1 |
| 65 | 19Q71E0069 | D | 5.00 | 3.00 | 1 |
| 66 | 19Q71E0070 | C | 6.00 | 3.60 | 2 |
| 67 | 19Q71E0071 | A | 8.00 | 4.80 | 3 |
| 68 | 19Q71E0072 | C | 6.00 | 3.60 | 2 |
| 69 | 19Q71E0073 | D | 5.00 | 3.00 | 1 |
| 70 | 19Q71E0074 | C | 6.00 | 3.60 | 2 |
| 71 | 19Q71E0075 | C | 6.00 | 3.60 | 2 |
| 72 | 19Q71E0076 | C | 6.00 | 3.60 | 2 |
| 73 | 19Q71E0077 | B | 7.00 | 4.20 | 2 |
| 74 | 19Q71E0078 | C | 6.00 | 3.60 | 2 |
| 75 | 19Q71E0079 | C | 6.00 | 3.60 | 2 |
| 76 | 19Q71E0080 | B | 7.00 | 4.20 | 2 |
| 77 | 19Q71E0081 | C | 6.00 | 3.60 | 2 |
| 78 | 19Q71E0082 | F | 0.00 | 0.00 | 0 |
| 79 | 19Q71E0083 | A | 8.00 | 4.80 | 3 |
| 80 | 19Q71E0084 | C | 6.00 | 3.60 | 2 |
| 81 | 19Q71E0085 | C | 6.00 | 3.60 | 2 |
| 82 | 19Q71E0086 | A | 8.00 | 4.80 | 3 |
| 83 | 19Q71E0087 | B | 7.00 | 4.20 | 2 |
| 84 | 19Q71E0088 | C | 6.00 | 3.60 | 2 |
| 85 | 19Q71E0089 | D | 5.00 | 3.00 | 1 |
| 86 | 19Q71E0090 | B | 7.00 | 4.20 | 2 |
| 87 | 19Q71E0091 | B | 7.00 | 4.20 | 2 |
| 88 | 19Q71E0093 | C | 6.00 | 3.60 | 2 |
| 89 | 19Q71E0095 | C | 6.00 | 3.60 | 2 |
| 90 | 19Q71E0096 | F | 0.00 | 0.00 | 0 |

|     |            |   |      |      |   |
|-----|------------|---|------|------|---|
| 91  | 19Q71E0097 | B | 7.00 | 4.20 | 2 |
| 92  | 19Q71E0098 | B | 7.00 | 4.20 | 2 |
| 93  | 19Q71E0099 | C | 6.00 | 3.60 | 2 |
| 94  | 19Q71E00A0 | B | 7.00 | 4.20 | 2 |
| 95  | 19Q71E00A1 | C | 6.00 | 3.60 | 2 |
| 96  | 19Q71E00A2 | D | 5.00 | 3.00 | 1 |
| 97  | 19Q71E00A3 | B | 7.00 | 4.20 | 2 |
| 98  | 19Q71E00A4 | C | 6.00 | 3.60 | 2 |
| 99  | 19Q71E00A5 | C | 6.00 | 3.60 | 2 |
| 100 | 19Q71E00A6 | D | 5.00 | 3.00 | 2 |
| 101 | 19Q71E00A7 | B | 6.90 | 4.14 | 2 |
| 102 | 19Q71E00A8 | C | 6.00 | 3.60 | 2 |
| 103 | 19Q71E00A9 | C | 6.00 | 3.60 | 2 |
| 104 | 19Q71E00B0 | D | 5.00 | 3.00 | 3 |
| 105 | 19Q71E00B1 | B | 7.70 | 4.62 | 2 |
| 106 | 19Q71E00B2 | C | 6.00 | 3.60 | 2 |
| 107 | 19Q71E00B3 | C | 6.00 | 3.60 | 2 |
| 108 | 19Q71E00B5 | D | 5.00 | 3.00 | 4 |
| 109 | 19Q71E00B6 | B | 8.50 | 5.10 | 3 |
| 110 | 19Q71E00B7 | C | 6.00 | 3.60 | 2 |
| 111 | 19Q71E00B8 | C | 6.00 | 3.60 | 2 |
| 112 | 19Q71E00B9 | D | 5.00 | 3.00 | 5 |
| 113 | 19Q71E00C0 | B | 9.30 | 5.58 | 3 |
| 114 | 19Q71E00C1 | C | 6.00 | 3.60 | 2 |

|                                    |                   |
|------------------------------------|-------------------|
| <b>Attainment Level Summary</b>    | <b>CO1 to CO6</b> |
| Maximum Attainment Level           | 3                 |
| Cut-off Attainment Level(1-Passed) | 2                 |
| No.of Student >=Cut-off            | 111               |
| % of students >=cut-off            | 97                |
| Level Attained                     | 3                 |

|                          |     |       |      |
|--------------------------|-----|-------|------|
| <b>Level of Attained</b> |     |       |      |
| <b>% of students</b>     | <50 | 60-79 | >=80 |
| <b>Level</b>             | 1   | 2     | 3    |

*y. Sreelakshmi*  
Faculty

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Dept of Management Studies, Regulation: R19, Subject: Management and organization Behaviour Year & Sem: I-I

Faculty: Mr.Y.Endreddy, Assistant Professor, Dept. of Management Studies

| Particulars                     | Overall Attainment |     |     |     |     |
|---------------------------------|--------------------|-----|-----|-----|-----|
|                                 | CO1                | CO2 | CO3 | CO4 | CO5 |
| Internal Attainment Level (INT) | 2                  | 2   | 1   | 1   | 1   |
| External Attainment Level (EXT) | 3                  | 3   | 3   | 3   | 3   |
| TOTAL = INT * 0.4 + EXT * 0.6   | 2.6                | 2.6 | 2.2 | 2.2 | 2.2 |

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Dept of Management Studies, Regulation:R19 , Subject:MOB Year & Sem: I-I

| Faculty: Mr.Y.Endreddy, Assistant Professor, Dept. of Management Studies |     |         |      |      |         |      |      |         |      |
|--|-----|---------|------|------|---------|------|------|---------|------|
| The Mapping of CO and PO on 3 point scale{high-3,Medium-2,Low-1} is:     |     |         |      |      |         |      |      |         |      |
| CO Attainment Level  |     | PO-1    | PO-2 | PO-3 | PO-4    | PO-5 | PO-6 | PO-7    | PO-8 |
| CO-1   | 2.6 | 3       |      |      |         |      |      | 2       | 1    |
| CO-2   | 2.6 | 3       |      | 2    | 1       |      |      |         |      |
| CO-3   | 2.2 | 2       |      | 3    |         | 1    |      |         |      |
| CO-4   | 2.2 | 3       |      |      | 2       |      |      | 3       | 1    |
| CO-5   | 2.2 | 3       |      |      |         |      |      | 2       | 2    |
| PO/PSO Weightage   |     | 14      | 0    | 5    | 3       | 1    | 0    | 7       | 4    |
| PO/PSO Co-relation weightage all Cos(1-6)                                |     | 33.2    | 0    | 11.8 | 7       | 2.2  | 0    | 16.2    | 9.2  |
| PO/PSO Attainment Level  |     | 2.37143 | -    | 2.36 | 2.33333 | 2.2  | -    | 2.31429 | 2.3  |

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**CGPA CALCULATION:**

| Marks Range Theory  | Marks Range Lab     | Letter Grade | Level        | Grade Point |
|---------------------|---------------------|--------------|--------------|-------------|
| $\geq 90$           | $\geq 90$           | O            | Outstanding  | 10          |
| $\geq 80$ to $< 90$ | $\geq 80$ to $< 90$ | S            | Excellent    | 9           |
| $\geq 70$ to $< 80$ | $\geq 70$ to $< 80$ | A            | Very Good    | 8           |
| $\geq 60$ to $< 70$ | $\geq 60$ to $< 70$ | B            | Good         | 7           |
| $\geq 50$ to $< 60$ | $\geq 50$ to $< 60$ | C            | Fair         | 6           |
| $\geq 40$ to $< 50$ | $\geq 40$ to $< 50$ | D            | Satisfactory | 5           |
| $< 40$              | $< 40$              | F            | Fail         | 0           |
|                     |                     |              | Absent       | 0           |



  
Principal

**PRINCIPAL**  
**AVANTHI INSTITUTE OF ENGG & TECH**  
Cherukupally (V), Chittivalasa (SAO)  
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