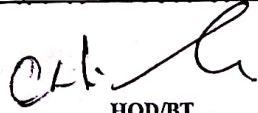


**PAAVAI ENGINEERING COLLEGE (AUTONOMOUS)**  
**DEPARTMENT OF BIOTECHNOLOGY**  
**REGULATION R2019-2023**

| SEMESTER | course code | Course Name                                             | Target | CO1 | CO2 | CO3 | CO4 | CO5 |
|----------|-------------|---------------------------------------------------------|--------|-----|-----|-----|-----|-----|
| I        | C101        | EN20101 English Communication Skills I                  | 50     | 50  | 48  | 46  | 47  | 48  |
|          | C102        | MA20101 Matrices and Calculus                           | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C103        | PH20101 Engineering Physics I                           | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C104        | CH20101 Engineering Chemistry                           | 50     | 48  | 50  | 50  | 48  | 50  |
|          | C105        | CS20101 Programming in Python                           | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C106        | EE20101 Basic Electrical Engineering                    | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C107        | PH20102 Physics Laboratory                              | 50     | 47  | 49  | 50  | 50  | NA  |
|          | C108        | CH20102 Chemistry Laboratory                            | 50     | 47  | 52  | 50  | 50  | NA  |
| II       | C109        | EN20201 English Communication Skills II                 | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C110        | MA20201 Complex Variables and Differential Equations    | 50     | 48  | 50  | 50  | 48  | 50  |
|          | C111        | PH20204 Physics of materials                            | 50     | 47  | 49  | 50  | 50  | 52  |
|          | C112        | ME20201 Engineering Graphics                            | 50     | 47  | 52  | 50  | 50  | 50  |
|          | C113        | BT20201 Introduction to Biotechnology                   | 50     | 46  | 45  | 48  | 49  | 54  |
|          | C114        | MC20201 Environmental Science and Engineering           | 50     | 46  | 45  | 48  | 49  | 55  |
|          | C115        | CS20103 Programming in Python Laboratory                | 50     | 48  | 50  | 50  | 48  | NA  |
|          | C116        | GE20101 Engineering Practices Laboratory                | 50     | 47  | 49  | 50  | 50  | NA  |
| III      | C117        | GE20301 தமிழரும் தொழில்நுட்பமும்/ Tamils and Technology | 50     | 50  | 48  | 46  | 47  | 48  |
|          | C118        | MA20301 Transforms and Boundary Value Problems          | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C201        | BT20301 Biochemistry                                    | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C202        | BT20302 Microbiology                                    | 50     | 48  | 50  | 50  | 48  | 50  |
|          | C203        | BT20303 Fluid Mechanics for Biotechnologist             | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C204        | BT20304 Stoichiometry                                   | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C205        | MC20301 Value Education                                 | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C206        | BT20305 Biochemistry laboratory                         | 50     | 47  | 49  | 50  | 50  | NA  |
| IV       | C207        | BT20306 Microbiology laboratory                         | 50     | 46  | 45  | 48  | 49  | NA  |
|          | C208        | EN20301 English Proficiency Course Laboratory           | 50     | 48  | 50  | 50  | 48  | 48  |
|          | C209        | MA20403 Probability and Statistics                      | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C210        | BT20401 Bioprocess Principles                           | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C211        | BT20402 Heat and Mass Transfer Operations               | 50     | 48  | 50  | 50  | 48  | 48  |
|          | C212        | BT20403 Basic Industrial Biotechnology                  | 50     | 47  | 49  | 50  | 50  | 50  |
|          | C213        | BT20404 Cell Biology                                    | 50     | 46  | 45  | 48  | 49  | 50  |
|          | C214        | CH20402 Instrumental Analysis Laboratory                | 50     | 48  | 50  | 50  | 48  | NA  |
|          | C215        | BT20405 Heat and Mass Transfer Laboratory               | 50     | 48  | 50  | 50  | 48  | NA  |

  
HOD/BT

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