

University of Madras – CBCS Regulations

B.Sc. (Bio-Chemistry) – Syllabus

SEMESTER-I

| | | | Ŋ | Max. Marks | | | | |
|--|------------|---------|------------|------------|-----------|-------|--|--|
| Course Component Name of the course | Inst. Hour | Credits | Exam Hours | Ext.mark | Int. mark | Total | | |
| PART-I Language paper I | 5 | 3 | 3 | 75 | 25 | 100 | | |
| PART-II English paper I | 5 | 3 | 3 | 75 | 25 | 100 | | |
| PART-III Paper I: Cell Biology | 5+3 | 4 | 3 | 75 | 25 | 100 | | |
| AS 1: Paper I: Chemistry | 6 | 5 | 3 | 75 | 25 | 100 | | |
| 1.(a) Those who have not studied Tamil up to XII Std. and taken a Non-Tamil Language under Part-I shall take Tamil comprising of two course (level will be at 6 th Standard). (b) Those who have studies Tamil up to XII Std. and taken a Non-Tamil Language under Part-I shall take Advanced Tamil comprising of two courses. | | | | | | | | |

| (c) Others who do not come under a + b can choose non-major elective comprising of two courses. | | | |
|---|--|--|--|
| Skill based subjects (Elective) – (Soft Skill) | | | |

SEMESTER II

| Course Component | Inst. Hour Credits | Exam Hours | Max. Marks | | | | |
|--|-----------------------|---------------|------------|----------|-----------|-------|--|
| Name of the course | of the course | | Ex Ho | Ext.mark | Int. mark | Total | |
| PART-I Language paper II | 5 | 3 | 3 | 75 | 25 | 100 | |
| PART-II English paper II | 5 | 3 | 3 | 75 | 25 | 100 | |
| PART-III Paper II: Chemistry of Biomolecules | 7 | 4 | 3 | 75 | 25 | 100 | |
| Paper -III Practical - I | 3 | 5 | 3 | 60 | 40 | 100 | |
| AS 1: Paper II: Practicals | 6 | 5 | 3 | 60 | 40 | 100 | |
| 1.(a) Those who have not studied Tamil up to XII Std. and taken a Non-Tamil Language under Part-I shall take Tamil comprising of two course (level will be at 6 th Standard). (b) Those who have studies Tamil up to XII Std. and taken a Non-Tamil Language under Part-I shall take Advanced Tamil comprising of two courses. (c) Others who do not come under a + b can choose nonmajor elective comprising of two courses. | | | | | | | |

SEMESTER III

| 6 | Nome of the | | ts | - . | Max. Marks | | | |
|---------------------|--|---------------|---------|---------------------|---------------|---------------|-------|--|
| Course component | Name of the course | Inst. Hrs. | Credits | Exam Hrs. | Ext. Marks | Int. Marks | Total | |
| Part I | Language paper III | 6 | 3 | 3 | 75 | 25 | 100 | |
| Part II | English paper III | 6 | 3 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper IV: Biochemical Techniques -I | 6 | 5 | ß | 75 | 25 | 100 | |
| Part III | C: Paper VI: Practical II | 3 | | Exam in IV semester | | | | |
| Part III | AS 2: Paper I: | 6 | 4 | 3 | 75 | 25 | 100 | |
| Part III | AS 2: Paper III: (Practical) | 3 | | Exam in IV semester | | | | |
| Part IV | Soft skills | | 3 | 3 | 60 | 40 | 100 | |
| | Environmental Studies | | | | Exam in | IV semester | r | |

SEMESTER IV

| Course | | Hrs. | its | Hrs. | Max. Marks | | | |
|-----------|--|-----------|---------|------|---------------|---------------|-------|--|
| component | Name of the course | Inst. Hrs | Credits | Exam | Ext. Marks | Int. Marks | Total | |
| Part I | Language Paper IV | 6 | 3 | 3 | 75 | 25 | 100 | |
| Part II | English Paper IV | 6 | 3 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper V: Biochemical Techniques- II | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper VI: Practical II | 3 | 4 | 6 | 60 | 40 | 100 | |
| Part III | AS 2: Paper II: | 6 | 4 | 3 | 75 | 25 | 100 | |
| Part III | AS 2: Paper III: (Practical) | 3 | 2 | 3 | 60 | 40 | 100 | |
| Part IV | Soft skills | | 3 | 3 | 60 | 40 | 100 | |
| | Environmental Studies | | 2 | 3 | 75 | 25 | 100 | |

SEMESTER V

| | | s. | s | Hrs. | Max. Marks | | | |
|---------------------|--|------------|---------------------|---------|---------------|---------------|-------|--|
| Course component | Name of the course | Inst. Hrs. | Credits | Exam Hi | Ext. Marks | Int. Marks | Total | |
| Part III | C: Paper VII: Enzymes | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper VIII: Intermediary metabolism | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper IX: Molecular Biology | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part III | Paper XII -Practical III | 6 | Exam in VI semester | | | | | |
| Part III | Elective- I Biotechnology | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part IV | Value Education | | 2 | | | | | |

SEMESTER VI

| | | | | s. | Max. Marks | | | |
|----------------------|---|------------|--------|-----------|---------------|---------------|-------|--|
| Course component | Name of the course | Inst. Hrs. | Credit | Exam Hrs. | Ext. Marks | Int. Marks | Total | |
| Part III | C: Paper X: Nutritional Biochemistry and Human Rights | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper XI: Clinical Biochemistry | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part III | C: Paper XII: Practical III | | 4 | 6 | 60 | 40 | 100 | |
| Part III | C: Paper XIII: Practical IV | 6 | 4 | 6 | 60 | 40 | 100 | |
| Project/ Elective | Elective-II Immunology | 6 | 5 | 3 | 75 | 25 | 100 | |
| | Elective- III Physiology | 6 | 5 | 3 | 75 | 25 | 100 | |
| Part V | Extension Activities | | 1 | | | | | |