

# UNIVERSITY OF DELHI

CNC-II/093/1(17)/2021-22/233

Dated: 18<sup>th</sup> November 2021

## NOTIFICATION

### Sub: Amendments to Ordinances

The following Amendment to Ordinances of the University has been approved by the Executive Council at its meeting held on 31.08.2021 are notified for information and necessary action, if any, to all the concerned:

#### **1. Amendment to Ordinance V (2) & VII. [E.C Res. 8-1-2(a) dated 31.08.2021]**

#### **INTRODUCTION OF PAPERS BASED ON LOCF FOR GENERAL ELECTIVE COURSE IN UG LEVEL UNDER DEPARTMENT OF ADULT CONTINUING EDUCATION & EXTENSION**

#### **COURSE 1: LIFELONG LEARNING FOR SOCIAL TRANSFORMATION**

Unit-Wise Course Description: Lifelong Learning for Social Transformation

| <b>Unit</b> | <b>Title of the Unit</b>                                    | <b>Details</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Teaching/<br/>Learning<br/>Mode</b>                                                          | <b>Weightage</b> |
|-------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------|
| I           | Lifelong Learning:<br>An Introduction                       | Understanding The relevance of Lifelong Learning in India and across the Globe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Lecture,<br>Discussion                                                                          | 10%              |
| II          | Key Concepts,<br>Approaches and<br>Analytical<br>Frameworks | II.1 Key Concepts: Lifelong Learning as an Interdisciplinary Concept, Lifelong Learning as an Integrated Policy, Linkages Between Adult Education, Adult Learning and Lifelong Learning, Recurrent Education, Permanent Education, Employability, Social Change, Social Transformation, Community Engagement And Extension, Inclusion, Sustainable Education, Blended Learning, Education as a public good, commodity and right, social partners, Stakeholders, Interest Groups, Corporate Social Responsibility, Community Engagement, Extension, Recognition of | Lecture,<br>Discussion/<br>Living<br>Interaction<br>(Dialogue),<br>Participant<br>Presentations | 30%              |

|     |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                   |     |
|-----|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----|
|     |                                                                                                        | Prior Learning.                                                                                                                                                                                                                                                                                                                                          |                                                                   |     |
|     |                                                                                                        | <p>II.2 Approaches: Sector-specific and Systems Approach in Education Top-down And Bottom-up Approach, Problem-based Approach Towards Learning, Teacher-centric and Learner-centric Models for Education.</p> <p>II.3 Analytical Frameworks: Formal, Non-formal and Informal Learning, Ehlers' Box Model, Stakeholder's Analysis, SWOT/SWOC Analysis</p> |                                                                   |     |
| III | Lifelong Learning: The Education Policy For Social Transformation                                      | <p>III.1 Education as a Public Good, a Right and a Commodity</p> <p>III.2 An Introduction to the Policy of Lifelong Learning</p> <p>III.3 Relationship between Lifelong Learning and Social Change</p> <p>III.4 Recognition of Prior Learning</p>                                                                                                        | Lecture, Discussion                                               | 10% |
| IV  | Practical Aspects of Designing A Lifelong Learning intervention                                        | <p>Project Planning, Management and Evaluation: Need Analysis, Resource Assessment, Project design, responsibility and accountability, ethics, legal and policy framework.</p>                                                                                                                                                                           | Lecture, Participant Presentations, Discussion                    | 10% |
| V   | Identifying the Needs, Resources and Possibilities for Social Transformation through Lifelong Learning | <p>Project Work: Lifelong Learning for Social Transformation as per the Project Guide for Lifelong Learning – I: Social Transformation through Lifelong Learning</p>                                                                                                                                                                                     | <p>Project field work, Supervision and Maintenance of Journal</p> | 10% |
| VI  | Planning A Lifelong Learning Intervention for Social Transformation                                    |                                                                                                                                                                                                                                                                                                                                                          |                                                                   | 10% |
| VII | Executing the Lifelong Learning Intervention for Social Transformation                                 |                                                                                                                                                                                                                                                                                                                                                          |                                                                   | 10% |

|      |                                                                    |  |  |     |
|------|--------------------------------------------------------------------|--|--|-----|
| VIII | Impact Assessment: Social Transformation through Lifelong Learning |  |  | 10% |
|------|--------------------------------------------------------------------|--|--|-----|

**Assessment methods:**

|   | Mode                                                                        | Weightage  |
|---|-----------------------------------------------------------------------------|------------|
| 1 | Open-book test                                                              | 30 percent |
| 2 | Assessment of the Journal maintained during the Project Work                | 40 percent |
| 3 | Written Assignment about the Paper as per the topic selected by the learner | 30 percent |

**COURSE 2: LIFELONG LEARNING FOR SUSTAINABLE DEVELOPMENT**

**Unit-wise Course Description: Lifelong Learning for Sustainable Development**

| Unit | Title of the Unit                                                                       | Details                                                                                                                                                                                            | Teaching/ Learning Mode                                                               | Weightage |
|------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------|
| I    | The Fundamentals of Lifelong Learning                                                   | I.1 Key Concepts<br>I.2 A Typology for Lifelong Learning Systems and Policies around the globe<br>I.3. Legal-political framework for Lifelong Learning in India                                    | Lectures, Discussions                                                                 | 20%       |
| II   | Education for Sustainable Development: Key Concepts and Transnational Policy Frameworks | II.1 Key Concepts: Sustainability, Sustainable Economic Growth, Sustainable Development, Inclusion, Social Change.<br>II.2 Understanding the Transnational Policy Frameworks for Lifelong Learning | Lectures, Discussions                                                                 | 15%       |
| III  | Lifelong Learning Policies of Key International Organizations                           | 1. OECD's Lifelong Learning Policy<br>2. World Bank's Lifelong Learning Policy<br>3. UNESCO's Lifelong Learning Policy<br>4. ILO' Lifelong Learning                                                | Lecture, Discussion, Participant Presentations, Virtual/field Tours, interaction with | 15%       |

|      |                                             |                                                                                                                                                                                         |                                                            |     |
|------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----|
|      |                                             | Policy                                                                                                                                                                                  | social partners                                            |     |
| IV   | Project Planning, Management and Evaluation | Project:<br>Sustainable Development through Lifelong Learning in India as per the Project Guide for Lifelong Learning<br>II: Sustainable Development through Lifelong Learning in India | Project field work, supervision and Maintenance of Journal | 10% |
| V    | Need Analysis                               |                                                                                                                                                                                         |                                                            | 10% |
| VI   | Resource Assessment and Management          |                                                                                                                                                                                         |                                                            | 10% |
| VII  | Project Execution                           |                                                                                                                                                                                         |                                                            | 10% |
| VIII | Project Evaluation And Impact Assessment    |                                                                                                                                                                                         |                                                            | 10% |

**Assessment methods:**

|   | Mode                                                                        | Weightage  |
|---|-----------------------------------------------------------------------------|------------|
| 1 | Open-book test                                                              | 30 percent |
| 2 | Assessment of the Journal maintained during the Project Work                | 40 percent |
| 3 | Written Assignment about the Paper as per the topic selected by the learner | 30 percent |

**COURSE 3: LIFELONG LEARNING, EMPLOYABILITY AND SOCIAL ENTREPRENEURSHIP**

**Unit-wise Course Description: Lifelong Learning, Employability and Social Entrepreneurship**

| Unit | Title of the Unit                                               | Details                                                                                                                                                 | Teaching/ Learning Mode | Weightage |
|------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------|
| I    | Methodological Considerations: Key Concepts, Approaches, Policy | I.1 Key concepts: Skills, Competencies, Employability, Vocational Education and Training, Productivity, Learning Outcomes, Sustainable Economic Growth, | Lecture, Discussion     | 10%       |

|      |                                                                            |                                                                                                                                                                                                                                                                       |                                                                                                        |     |
|------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----|
|      | Frameworks for Lifelong Learning                                           | Social Entrepreneurship, Business Ecosystem<br>I.2 Approaches<br>I.3 Policy Frameworks                                                                                                                                                                                |                                                                                                        |     |
| II   | Ensuring Employability Through Lifelong Learning                           | II.1 From Employment to Employability: Understanding the shift in approach towards Labour-market engagement.<br>II.2 Enhancing Employability through Lifelong Learning<br>III. 3 Employability as a Global Norm for Sustainable Education and Development             | Lecture, Discussion, Participant Presentations , Virtual/field Tours, interaction with social partners | 10% |
| III  | Lifelong Learning: The Core for Social Entrepreneurship                    | III.1 Identifying a Social Problem<br>III.2 Developing a Business Plan<br>III.3. Resource Mobilization and Management<br>III.4 Business Management<br>III.5 Quality Control<br>III.6 Ethics for Social Entrepreneurship<br>III.7 Marketing<br>III.8 Impact Assessment | Lecture, Discussion, Participant Presentations , Virtual/field Tours, interaction with social partners | 20% |
| IV   | Planning and Managing Internship with a Social Entrepreneurship Initiative | Project: Employability and Social Entrepreneurship as per the Internship Guide for Enhancing Employability through Lifelong Learning/ Lifelong Learner's Social Entrepreneurship Guide.                                                                               | Internship, Supervision, Journal Maintenance                                                           | 10% |
| V    | Internship                                                                 |                                                                                                                                                                                                                                                                       |                                                                                                        | 40% |
| VI   |                                                                            |                                                                                                                                                                                                                                                                       |                                                                                                        |     |
| VII  |                                                                            |                                                                                                                                                                                                                                                                       |                                                                                                        |     |
| VIII | Impact Assessment                                                          |                                                                                                                                                                                                                                                                       |                                                                                                        | 10% |

**Assessment methods:**

|   | <b>Mode</b>                                                  | <b>Weightage</b> |
|---|--------------------------------------------------------------|------------------|
| 1 | Open-book test                                               | 30 percent       |
| 2 | Assessment of the Journal maintained during the Project Work | 40 percent       |

|   |                                                                             |            |
|---|-----------------------------------------------------------------------------|------------|
| 3 | Written Assignment about the Paper as per the topic selected by the learner | 30 percent |
|---|-----------------------------------------------------------------------------|------------|

## 2. Amendment to Ordinance V (2) & VII. [E.C Res. 8-1-2(b) dated 31.08.2021]

Introduction of M.A. Japanese under the Department of East Asian Studies

### M.A. JAPANESE

#### Course Credit Scheme

| Semester                              | Core Course   |                |               | Elective Course                           |                |               | Open Elective Course                           |                |               | Total credits |    |
|---------------------------------------|---------------|----------------|---------------|-------------------------------------------|----------------|---------------|------------------------------------------------|----------------|---------------|---------------|----|
|                                       | No. of Papers | Credits (L+T)* | Total Credits | No. of Papers                             | Credits (L+T)* | Total Credits | No. of Papers                                  | Credits (L+T)* | Total Credits |               |    |
| I                                     | 4             | 4+1=5          | 20            | -                                         | -              | -             |                                                |                |               | 20            |    |
| II                                    | 3             | 4+1=5          | 15            | -                                         | -              | -             | 1                                              | 4              | 04            | 24            |    |
| III                                   | 3             | 4+1=5          | 15            | -                                         | -              | -             |                                                |                |               | 20            |    |
| IV                                    | 4             | 4+1=5          | 20            | -                                         | -              | -             | 1                                              | 4              | 04            | 24            |    |
| <b>Total credits for Core courses</b> |               |                | 70            | <b>Total credits for Elective courses</b> |                |               | <b>Total credits for Open Elective courses</b> |                |               | 08            | 78 |

\* Lecture + Tutorial

#### List of Papers

**Semester-I (20 credits)** [4 (core courses) x 5 (credit) = 20 credits]

|               |        |                                     |
|---------------|--------|-------------------------------------|
| Paper I (C)   | JL-101 | Introduction to General Linguistics |
| Paper II (C)  | JL-102 | Advanced Japanese Language          |
| Paper III (C) | JL-103 | Theory and Practice of Translation  |
| Paper IV (C)  | JL-104 | Cultural History of Japan           |

**Semester-II (19 credits)** [3 (core courses) x 5 credit = 15 credits;  
1 (open elective course) x 4 credit = 4 credits]

|                    |        |                                      |
|--------------------|--------|--------------------------------------|
| Paper V (C)        | JL-201 | Contemporary Japan                   |
| Paper VI (C)       | JL-202 | Guided Speaking and Interpretation-I |
| Paper VII (C)      | JL-203 | Survey of Japanese Literature        |
| Paper VIII (OE/EL) | JL-204 | Popular and Folk Cultures of Japan   |

**Semester-III (19 credits)** [3 (core courses) x 5 credit = 15 credits;  
1 (open elective course) x 4 credit = 4 credits]

|                  |        |                                                            |
|------------------|--------|------------------------------------------------------------|
| Paper XI (OE/EL) | JL-301 | India-Japan Cultural Relations                             |
| Paper XII (C)    | JL-302 | Literary Criticism                                         |
| Paper XIII (C)   | JL-303 | Introduction to Classical Japanese language                |
| Paper XIV (C)    | JL-304 | Study of Representative Works: monogatari, nikki, zuihitsu |

**Semester-IV (20credits) [4 (core courses) x 5 credit = 20 credits**

|               |        |                                                                                         |
|---------------|--------|-----------------------------------------------------------------------------------------|
| Paper XII (C) | JL-401 | Study of Representative Works:shi, geki, shousetsu                                      |
| Paper XIV (C) | JL-402 | Guided Speaking and Interpretation-II                                                   |
| Paper XV (C)  | JL-403 | Methodology of Foreign Language Teaching with Special Reference to Teaching of Japanese |
| Paper XVI (C) | JL-404 | Dissertation                                                                            |

Core Course-(C) / OE- Open Elective Course

**3. Amendment to Ordinance V (2) & VII. [E.C Res. 8-1-2(d) dated 31.08.2021]**

Introduction of One Year PG Diploma in International Trade (Africa) under the Department of African Studies

**One Year PG Diploma in International Trade (Africa)**

**One Year Course (Two Semesters)**

**Papers**

| <b>Semester-I</b> | <b>Semester-II</b>                                                                                    |
|-------------------|-------------------------------------------------------------------------------------------------------|
| Core- 4 Papers    | 1. Optional- 2 Papers out of three.<br>2. Internship (Compulsory)<br>3. Project/Workshop (Compulsory) |

Course Details:

**Semester I**

1. Introduction to International Trade
2. Trade Negotiations and IFIs
3. Understanding Africa
4. Business Law and Public Finance in Africa

**Semester II (Four Papers Only)**

1. Regional Trade Architecture in Africa
2. Entrepreneurship and Business Opportunities in Africa
3. Climate Change and African Trade
4. Internship (Compulsory)
5. Project/ Workshop (Compulsory)

4. Amendment to Ordinance V (2) & VII. [E.C Res. 8-1-3 dated 31.08.2021]

M.Sc. Biochemistry

| Existing                      |                                                                                                                        |                |           | Amended                       |                                                                                                                        |                 |           |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------|-----------|
| <b>Part I : Semester I</b>    |                                                                                                                        |                |           | <b>Part I : Semester I</b>    |                                                                                                                        |                 |           |
| Paper Code                    | Paper title                                                                                                            | Type of Course | Credit    | Paper Code                    | Paper title                                                                                                            | Type of Course  | Credit    |
| BCCC101                       | Proteins – Structure, Folding and Engineering                                                                          | Core           | 4         | BCCC101                       | Proteins – Structure, Folding and Engineering                                                                          | Core            | 4         |
| BCEC101                       | Infectious Diseases: Molecular basis, Control and Prevention<br>OR<br>Intermediary Metabolism and Clinical Correlation | Elective       | 4         | BCEC101                       | Infectious Diseases: Molecular basis, Control and Prevention<br>OR<br>Intermediary Metabolism and Clinical Correlation | Elective        | 4         |
| BCEC102                       |                                                                                                                        |                |           | BCEC102                       |                                                                                                                        |                 |           |
| BCEC103                       | Life Style Disorders: Cancer and Cardiovascular Diseases<br>OR<br>Advanced Techniques in Biochemistry                  | Elective       | 4         | BCEC103                       | Life Style Disorders: Cancer and Cardiovascular Diseases<br>OR<br>Advanced Techniques in Biochemistry                  | Elective        | 4         |
| BCEC104                       |                                                                                                                        |                |           | BCEC104                       |                                                                                                                        |                 |           |
| BCCC102                       | Seminar on current topics                                                                                              | Core           | 4         | BCCC102                       | Seminar on current topics                                                                                              | Core            | 4         |
| BCCC103                       | Practicals                                                                                                             | Core           | 8         | BCCC103                       | Practicals                                                                                                             | Core            | 8         |
| <b>Total Credits</b>          |                                                                                                                        |                | <b>24</b> | <b>Total Credits</b>          |                                                                                                                        |                 | <b>24</b> |
| <b>Part I : Semester II</b>   |                                                                                                                        |                |           | <b>Part I : Semester II</b>   |                                                                                                                        |                 |           |
| Paper Code                    | Paper title                                                                                                            | Type of Course | Credit    | Paper Code                    | Paper title                                                                                                            | Type of Course  | Credit    |
| BCCC201                       | Cell Biology                                                                                                           | Core           | 4         | <b>BCEC201</b>                | <b>Basics of Open Biochemistry</b>                                                                                     | <b>Elective</b> | <b>4</b>  |
| BCCC202                       | Immunology and Immunotechniques                                                                                        | Core           | 4         | BCCC202                       | Immunology and Immunotechniques                                                                                        | Core            | 4         |
| BCCC203                       | Enzymes and their Biotechnological Applications                                                                        | Core           | 4         | BCCC203                       | Enzymes and their Biotechnological Applications                                                                        | Core            | 4         |
| BCCC204                       | Molecular Biology                                                                                                      | Core           | 4         | BCCC204                       | Molecular Biology                                                                                                      | Core            | 4         |
| BCCC205                       | Practicals                                                                                                             | Core           | 8         | BCCC205                       | Practicals                                                                                                             | Core            | 8         |
| <b>Total Credits</b>          |                                                                                                                        |                | <b>24</b> | <b>Total Credits</b>          |                                                                                                                        |                 | <b>24</b> |
| <b>Part II : Semester III</b> |                                                                                                                        |                |           | <b>Part II : Semester III</b> |                                                                                                                        |                 |           |
| Paper Code                    | Paper title                                                                                                            | Type of Course | Credit    | Paper Code                    | Paper title                                                                                                            | Type of Course  | Credit    |
| BCCC301                       | Recombinant DNA Technology and Applications in Biotechnology                                                           | Core           | 4         | BCCC301                       | Recombinant DNA Technology and Applications in Biotechnology                                                           | Core            | 4         |
| BCCC302                       | Developmental Biology                                                                                                  | Core           | 4         | BCCC302                       | Developmental Biology                                                                                                  | Core            | 4         |
| BCCC303                       | Proteomics and Metabolomics                                                                                            | Core           | 4         | <b>BCCC303</b>                | <b>Cell Biology</b>                                                                                                    | <b>Core</b>     | <b>4</b>  |
| BCCC304                       | Presentation : Concepts in Research                                                                                    | Core           | 4         | BCCC304                       | Presentation : Concepts in Research                                                                                    | Core            | 4         |
| BCCC305                       | Practical Skills in Research                                                                                           | Core           | 8         | BCCC305                       | Practical Skills in Research                                                                                           | Core            | 8         |
| <b>Total Credits</b>          |                                                                                                                        |                | <b>24</b> | <b>Total Credits</b>          |                                                                                                                        |                 | <b>24</b> |



| <b>Part II : Semester IV</b> |                                                   |                |           | <b>Part II : Semester IV</b> |                                                   |                |           |
|------------------------------|---------------------------------------------------|----------------|-----------|------------------------------|---------------------------------------------------|----------------|-----------|
| Paper Code                   | Paper title                                       | Type of Course | Credit    | Paper Code                   | Paper title                                       | Type of Course | Credit    |
| BCCC401                      | Advanced Techniques in Genomics for Biotechnology | Core           | 4         | BCCC401                      | Advanced Techniques in Genomics for Biotechnology | Core           | 4         |
| BCOE401                      | Basics of Biochemistry                            | Open Elective  | 4         | BCCC402                      | Dissertation by Research                          | Core           | 16        |
| BCCC402                      | Dissertation by Research                          | Core           | 16        | <b>BCCC403</b>               | <b>Proteomics and Metabolomics</b>                | <b>Core</b>    | <b>4</b>  |
| <b>Total Credits</b>         |                                                   |                | <b>24</b> | <b>Total Credits</b>         |                                                   |                | <b>24</b> |

## 5. Amendment to Ordinance V (2) & VII. [E.C Res. 8-1-4 dated 31.08.2021]

### M.Sc. Biophysics

| <b>Existing</b>             |                                                                                                                                                                  |                |           | <b>Amended</b>              |                                                                                                                                                                  |                |           |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|
| <b>Part I : Semester I</b>  |                                                                                                                                                                  |                |           | <b>Part I : Semester I</b>  |                                                                                                                                                                  |                |           |
| Paper Code                  | Paper title                                                                                                                                                      | Type of Course | Credit    | Paper Code                  | Paper title                                                                                                                                                      | Type of Course | Credit    |
| BPCC101<br>OR<br>BPCC102    | Introductory Biology (for students with Physical Science background)<br>OR<br>Introductory Physics & Chemistry (for students with Biological Science background) | Core           | 4         | BPCC101:<br>OR<br>BPCC102   | Introductory Biology (for students with Physical Science background)<br>OR<br>Introductory Physics & Chemistry (for students with Biological Science background) | Core           | 4         |
| BPCC103                     | Mathematics and Statistics for Life Sciences                                                                                                                     | Core           | 4         | BPCC103                     | Mathematics and Statistics for Life Sciences                                                                                                                     | Core           | 4         |
| BPCC104                     | Concepts of Biochemistry                                                                                                                                         | Core           | 4         | BPCC104                     | Concepts of Biochemistry                                                                                                                                         | Core           | 4         |
| MBCC301                     | Molecular Biology (from Department of Microbiology, University of Delhi South Campus)                                                                            | Core           | 4         | <b>BPCC105</b>              | <b>Computer Applications in Biology</b>                                                                                                                          | <b>Core</b>    | <b>4</b>  |
| BPCC105                     | PRACTICALS (Based on BPCC104 & MBCC301)                                                                                                                          | Core           | 8         | <b>BPCC106</b>              | <b>Practicals-I (Based on BPCC104 and BPCC105)</b>                                                                                                               | <b>Core</b>    | <b>8</b>  |
| <b>Total Credits</b>        |                                                                                                                                                                  |                | <b>24</b> | <b>Total Credits</b>        |                                                                                                                                                                  |                | <b>24</b> |
| <b>Part I : Semester II</b> |                                                                                                                                                                  |                |           | <b>Part I : Semester II</b> |                                                                                                                                                                  |                |           |
| Paper Code                  | Paper title                                                                                                                                                      | Type of Course | Credit    | Paper Code                  | Paper title                                                                                                                                                      | Type of Course | Credit    |
| BPCC021                     | Molecular Biophysics                                                                                                                                             | Core           | 4         | BPCC201                     | Molecular Biophysics                                                                                                                                             | Core           | 4         |
| BPCC022                     | Physical Methods in Biology                                                                                                                                      | Core           | 4         | BPCC202                     | Physical Methods in Biology                                                                                                                                      | Core           | 4         |
| GENC C204                   | <b>RECOMBINANT DNA TECHNOLOGY</b> (from Department of Genetics,                                                                                                  | Core           | 4         | GENC C204                   | <b>RECOMBINANT DNA TECHNOLOGY</b> (from Department of Genetics, University of Delhi South Campus)                                                                | Core           | 4         |

|                      |                                                                                          |          |           |
|----------------------|------------------------------------------------------------------------------------------|----------|-----------|
|                      | University of Delhi South Campus)                                                        |          |           |
| BPCC203              | PRACTICALS (Based on Papers BPCC201, BPCC202, GENCC204)                                  | Core     | 8         |
| BPEC201 OR BPEC202   | Photo-Biophysics, Radiation & Environmental Biophysics OR Programming and Data Analytics | Elective | 4         |
| <b>Total Credits</b> |                                                                                          |          | <b>24</b> |

**Part II : Semester III**

| Paper Code           | Paper title                                                                                                                     | Type of Course | Credit    |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|
| BPCC301              | Cellular Biophysics & Bioenergetics                                                                                             | Core           | 4         |
| BPCC302              | Computer Applications in Biology                                                                                                | Core           | 4         |
| BPCC303              | Physiological Biophysics                                                                                                        | Core           | 4         |
| BPCC304              | PRACTICALS-III (Based on Papers BPCC301, BPCC302, BPCC303)                                                                      | Core           | 8         |
| BPEC301 OR BCCC302   | Methods in High-throughput Biology OR Developmental Biology (from Department of Biochemistry, University of Delhi South Campus) | Elective       | 4         |
| <b>Total Credits</b> |                                                                                                                                 |                | <b>24</b> |

**Part II : Semester IV**

| Paper Code           | Paper title                              | Type of Course | Credit    |
|----------------------|------------------------------------------|----------------|-----------|
| BPCC401              | Membrane Biophysics and Neuro-Biophysics | Core           | 4         |
| BPCC402              | DISSERTATION/PROJECT                     | Core           | 16        |
| BPOE401              | Theoretical & Mathematical Biology       | Open Elective  | 4         |
| <b>Total Credits</b> |                                          |                | <b>24</b> |

|                      |                                                                                          |          |           |
|----------------------|------------------------------------------------------------------------------------------|----------|-----------|
| BPCC203              | Practicals-II (Based on Papers BPCC201, BPCC202, GENCC204)                               | Core     | 8         |
| BPEC201 OR BPEC202   | Photo-Biophysics, Radiation & Environmental Biophysics OR Programming and Data Analytics | Elective | 4         |
| <b>Total Credits</b> |                                                                                          |          | <b>24</b> |

**Part II : Semester III**

| Paper Code           | Paper title                                                                                                                     | Type of Course | Credit    |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|
| BPCC301              | Cellular Biophysics & Bioenergetics                                                                                             | Core           | 4         |
| BPCC302              | Physiological Biophysics                                                                                                        | Core           | 4         |
| <b>MBCC301</b>       | <b>Molecular Biology (from Department of Microbiology, University of Delhi South Campus)</b>                                    | <b>Core</b>    | <b>4</b>  |
| <b>BPCC303</b>       | <b>Practicals-III (Based on BPCC301, BPCC302, MBCC303)</b>                                                                      | <b>Core</b>    | <b>8</b>  |
| BPEC301 OR BCCC302   | Methods in High-throughput Biology OR Developmental Biology (from Department of Biochemistry, University of Delhi South Campus) | Elective       | 4         |
| <b>Total Credits</b> |                                                                                                                                 |                | <b>24</b> |

**Part II : Semester IV**

| Paper Code           | Paper title                              | Type of Course | Credit    |
|----------------------|------------------------------------------|----------------|-----------|
| BPCC401              | Membrane Biophysics and Neuro-Biophysics | Core           | 4         |
| BPCC402              | Dissertation/ Project                    | Core           | 16        |
| BPOE401              | Theoretical & Mathematical Biology       | Open Elective  | 4         |
| <b>Total Credits</b> |                                          |                | <b>24</b> |

6. Amendment to Ordinance XXVIII. [E.C Res. 8-4 dated 31.08.2021]

| EXISING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AMENDED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <p data-bbox="250 394 799 449"><b>SNEH RANA SCHOLARSHIP and P.S. RANA SCHOLARSHIP</b></p> <p data-bbox="250 457 305 483">132.</p> <ol data-bbox="302 516 799 1247" style="list-style-type: none"> <li>1. There shall be two scholarships for the female students of M.A./M.Sc. Mathematics (one for previous &amp; one for final year students) in Delhi University in the name of “<b>Sneh Rana Scholarship</b>” and two scholarships for the male students of M.A./M.Sc. Mathematics (one for previous &amp; one for final year students) in the name of “<b>P.S. Rana Scholarship</b>” on the basis of merit cum financial needs of the value of <b>₹15000/- p.a. each</b> out of the annual income accrued from the endowment fund of <b>₹20,00,000/-</b> (Twenty Lacs) donated by Mr. P.S. Rana, BA – 6 A, Ashok Vihar – I, Delhi – 110052.</li> <li>2. The Scholarships shall be awarded to four students (two for previous and two for final year) pursuing M.A./M.Sc. (Mathematics).</li> <li>3. to 9. – No Change –</li> </ol> | <p data-bbox="824 394 1370 449"><b>SNEH RANA SCHOLARSHIP and P.S. RANA SCHOLARSHIP</b></p> <p data-bbox="824 457 880 483">132.</p> <ol data-bbox="876 516 1373 1272" style="list-style-type: none"> <li>1. There shall be <b>three</b> scholarships for the female students of M.A./M.Sc. Mathematics (one for previous &amp; <b>two</b> for final year students) in Delhi University in the name of “<b>Sneh Rana Scholarship</b>” and <b>three</b> scholarships for the male students of M.A./M.Sc. Mathematics (one for previous &amp; <b>two</b> for final year students) in the name of “<b>P.S. Rana Scholarship</b>” on the basis of merit cum financial needs of the value of <b>₹14000/-</b> p.a. each out of the annual income accrued from the endowment fund of <b>₹26,00,000/-</b> (Twenty <b>Six</b> Lacs) donated by Mr. P.S. Rana, BA – 6 A, Ashok Vihar – I, Delhi – 110052.</li> <li>2. The Scholarships shall be awarded to <b>six</b> students (two for previous and <b>four</b> for final year) pursuing M.A./M.Sc. (Mathematics).</li> <li>3. to 9. – No Change –</li> </ol> |

*M. S. Chaturvedi*  
18/11/24  
REGISTRAR