



RAMA DEVI WOMEN'S UNIVERSITY, VIDYA VIHAR  
BHUBANESWAR-22

Proceeding of the meeting of the Board of Studies Life Sciences  
held on 21.4.23 at 10:30 A.M / P.M. in the University Office,  
Bhoi Nagar, Bhubaneswar-22.



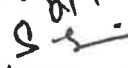

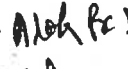

Members Present :

1. Prof. Chandni Charan Behera, Dept of Life Sc., RDWU
2. Prof. A. C. Mohanty, Retd., Dept of Botany, Utkal Univ.
3. Dr. Shikha Singh, Asso. Prof, Dept of Life Sc., RDWU
4. Dr. Sakshi Kanta Behera, HOD, Dept of Life Sc, RDWU
5. Dr. Navneet Kaur, Asst. Prof, Dept of Life Sc, RDWU
6. Dr. Mukta Mayee Kumbhan, " " " "
7. Dr. Alok Prasad Das, " " " "
- 8.

✓ Prof. Dr. Chandni Charan Behera is selected as Chairman of the Board for the Academic year 2023-24

The recommendations of the Board in respect of the Regulations, Detailed Syllabus, Text Books and other items are appended the prescribed form.

Signature of the Members:-

1.  21/4/23
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- 8.

  
CHAIRMAN 21/4/2023

## Recommendations

1. Recommended the names and contact No. of board of conducting member, Moderation board and paper setters for PG life sc and Ph.D. course work for 23-24 examination
2. Recommended the list of examiners (external and internal) for PG and Ph.D course work life sc. 2023-24 examinations.
3. PG life sc: syllabus was examined and following modifications were incorporated.
  - (i) paper HC-102 Microbiology.  
Added "COVID" in unit-V
  - (ii) paper HC-204-practical.
    - a. "CO<sub>2</sub> contents" from No. 4 - deleted.
    - b. "Dissolved CO<sub>2</sub> estimation" - added at No. 20
    - c. "Extraction of essential oil" - added at No. 21.
  - (iii) paper OE-801A Human Health and Hygiene.
    - UNIT I - "and life style disorders" - deleted.
    - UNIT II - "cardiovascular disorders" changed to "lifestyle disorders"
    - Myocardial infarction "cause, treatment and prevention" - deleted.
4. PG syllabus has been framed as per the new structure and PG regulation 2022-23. (Annexed)
5. Non credit skill based certificate course has been introduced and approved in 2022-23 BOS.
6. Suggestions as per NEP-2020 will be introduced in the curriculum, time to time as per directions.
7. chairperson is authorised to make changes if required.

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Alakh B. Das  
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21/4/2023  
S. S. J.  
21/4/23

Proceeding of the meeting of the Board of Studies of PG Life Sciences held on 13.05.2022 at 11:30 am in the CoE Exam Board Room, RDWU, Bhubaneswar

A meeting of the Board of Studies of PG Life Sciences held on 13.05.2022, at 11:30 am in the CoE Exam Board Room, RDWU, Bhubaneswar. Dr. Shikha Singh as a head of the department chaired the meeting as *the chairperson. Dr. Singh was elected as chair person by the committee.*

**Members Present**

Prof. R.C. Mohanty, Retd. Prof. Dept. of Botany Utkal University	External member
Prof. Animesh Mohapatra, Dept. of Life Science, R.I.E., BBSR	External member
Dr. Sakti Kanta Rath, Assoc. Prof., Life Sciences	Internal Member
Dr. Navneet Kaur, Asst. Prof., Life Sciences	Internal Member
Dr. Mukta Mayee Kumbhar, Asst. Prof., Life Sciences	Internal Member
Dr. Alok Prasad Das, Asst. Prof., Life Sciences	Internal Member
Dr. Shikha Singh, Assoc. Prof., Head, Life Sciences	Chairman

**Matter discussed**

**Agenda 1:** To recommend the name with Contact No and specialization for Board of Conducting Examiners, Moderation Board & Paper Setters for the PG and Ph.D (Course Work) Examination 2022-23 in the prescribed format.

**Agenda 2:** To recommend the list of Examiners (External & Internal) for PG and Ph.D (Course Work) 2022-23.

**Agenda 3:** To examine the structure of PG syllabus in detail

**Agenda 4:** To frame the PG syllabus as per the new structure

**Agenda 5:** Introduction of non-credit skill-based certificate course

**Agenda 6:** To recommend the Syllabus of the PG and Ph.D (course work) Examination 2022

**Agenda 7:** Other Matters

At the outset, the Chairman appraised the committee about the agenda of the meeting. Based on the deliberation, the following was resolved:

**Resolution 1**

The committee discussed and recommended the name of the experts for Board of Conducting Examiners, Moderation Board & Paper Setters for the PG in Life Sciences (all semesters) and Ph.D. (Course Work) Examination 2022-23 in the newly modified structure of the courses of PG Life Sciences and PhD Course work.

M.Sc. LIFE SCIENCES  
2 YEARS SEMESTER COURSE (2022-23)



**COURSES OF STUDY**  
**CHOICE BASED CREDIT SYSTEM**

**P.G. DEPARTMENT OF LIFE SCIENCES**  
**RAMA DEVI WOMEN'S UNIVERSITY**  
**BHUBANESWAR, ODISHA**

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*Ranjit*  
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### **Resolution 2**

The committee discussed and recommended the list of Examiners (External & Internal) along with their contact details for Ph. D (Course Work) and the newly modified structure courses of PG Life Sciences of the year 2022-23.

### **Resolution 3**

The committee deliberated the structure of PG syllabus in Life Sciences. The objectives and learning outcomes of each unit of each paper was discussed and finalized to include in the newly structured syllabus.

### **Resolution 4**

The committee discussed the structure of PG syllabus in Life Sciences and unanimously modified the structure by adding following new modified papers into the syllabus:

- **Semester 1:** Cell biology, Microbiology, Bioinstrumentation, practical and computer application course by e-learning.
- **Semester 2:** Biochemistry, Molecular Biology, Ecology, Taxonomy & Evolution, Practical, Plant Diversity/Animal Diversity (as Choice based) and Human Health & Hygiene or MOOCs (SWAYAM, NPTEL) (as Choice based).
- **Semester 3:** Immunology, Genetics, Practical, Plant Physiology and Developmental Biology or Animal Physiology and Developmental Biology (as Choice based), Research Methodology or Waste management ((as Choice based) and Field Internship.
- **Semester 4:** Subject overview, Seminar, Dissertation, Dissertation Evaluation and Women and Society
- The total credit of the PG Structure in Life Sciences is enhanced to 103. The committee discussed, finalized and passed the newly modified syllabus in PG Life Sciences for the year 2022-23.

### **Resolution 5**

The committee members are requested to finalize the skill-based subjects for PG students. Finally, it was resolved that following non-credit skill-based certificate course will be introduced for the PG Life Sciences students:

- **Scientific manuscript writing from paper to publication**
- **Integrated pest management**
- **Biofertilizer**

### **Resolution 6**

The committee members passed the PhD courses and newly structured PG Life Sciences Courses.

### Resolution 7

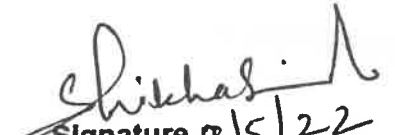
- It was resolved that Chairman of the BOS and Controller of Examinations will be authorized to make any change in the list of examiners, paper setters, Moderators and Board of conducting examiners.
- It was Unanimously resolved by the committee that last unit of all Hard Core and Core elective papers of each semester will be introduced as guided self-study (blended learning) for the students. Those units will be taught as a blended learning i.e., there will be introductory class then students will learn by themselves. There will be two doubt clearing classes for those units and students will be provided with the study materials for the same.


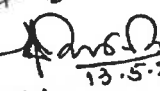
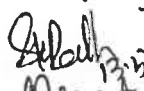
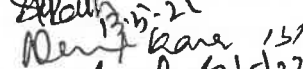
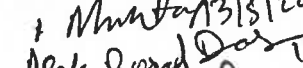
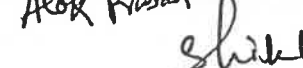
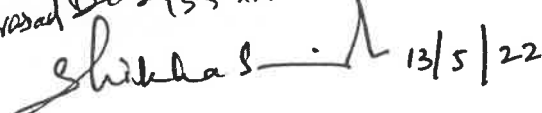
The meeting ended with the vote of thanks to the chair.

### Members

Prof. R.C. Mohanty  
Prof. Animesh Mohapatra  
Dr. Sakti Kanta Rath  
Dr. Navneet Kaur  
Dr. Mukta Mayee Kumbhar  
Dr. Alok Prasad Das  
Dr. Shikha Singh

External member  
External member  
Internal Member  
Internal Member  
Internal Member  
Internal Member  
Chairman

  
Signature 13/5/22

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**M.Sc. LIFE SCIENCES  
2 YEARS SEMESTER COURSE (2021-22)**

**COURSES OF STUDY  
CHOICE BASED CREDIT SYSTEM**



**P.G. DEPARTMENT OF LIFE SCIENCES  
RAMA DEVI WOMEN'S UNIVERSITY  
BHUBANESWAR, ODISHA**

*[Handwritten signatures and dates]*  
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N. K. Behera

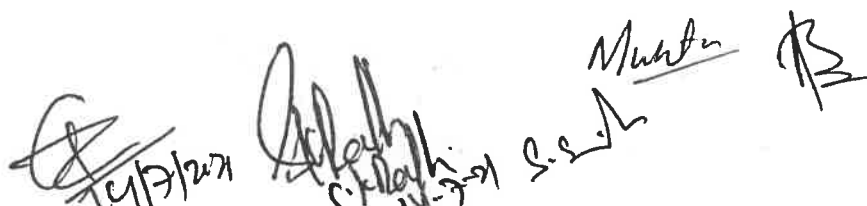


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## Paper and Credit Distribution in P.G. Department

Duration	2 (Two) Years			
No. of Semesters	4			
Total Papers	Semester-I	4 Papers	Total Papers- 18	
	Semester-II	4 Papers		
	Semester-III	5 Papers		
	Semester-IV	5 Papers		
Total Marks	Semester-I	400	Total Papers- 1700 Each Open Elective Paper = 50 Marks	
	Semester-II	400		
	Semester-III	450		
	Semester-IV	450		
	Total Credits- 102			
Total Credits	Semester-I	24	All papers except Open Elective 6 credits Open Elective 3 credits	
	Semester-II	24		
	Semester-III	27		
	Semester-IV	27		
	Total Credits- 102			
Papers	Hard Core	9 Papers		
	Core Elective	4 Papers		
	Allied Elective ( Student has to choose at least one elective from an allied discipline) 3 Papers			
	Open Elective (Open to students of all P.G. Departments) 2 Papers			
Scheme of Examinations	Total Marks	100	Mid Semester	20
			End Semester	80
	Total Marks	50	Mid Semester	10
			End Semester	40
Pattern of questions for End Semester Examination	5 long questions will be set in the end semester examination each carrying 16 marks or 02 short notes each carrying 08 marks from each unit			
Duration of Examination	Mid Semester 1 Hour for 20 marks, 45 minutes for 10 marks			
	End Semester 3 Hours for 80 marks, 2 Hours for 40 marks			



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PHD COURSEWORK SYLLABUS OF LIFE SCIENCES, RAMA DEVI  
WOMEN'S UNIVERSITY, 2021

satisfactory

OUTLINE OF THE SYLLABUS

Sl No.	Paper	Course Title	Credit	Total Marks	Minimum Pass mark
1.	Paper-I (LS-01)	Research Methodology (75 marks) and Computer Application (25 marks)	04	100	55%
2.	Paper-II (LS-02)	Elective Courses	04	100	55%
3.	Paper-III (LS-03)	Literature Review (Evaluation through a write up and seminar presentation)	04	100	55%
4.	Paper- IV (LS-04)	Research and Publication ethics	04	100	55%
		Total	16	400	55%

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14-7-21

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14/7/21

# Ph. D. COURSE WORK SYLLABUS

(2021)



P. G. DEPARTMENT OF LIFE SCIENCES  
RAMA DEVI WOMEN'S UNIVERSITY,  
VIDYA VIHAR, BHUBANESWAR-751022

*S. S. Das*  
14/7/21

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14/7/21

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14.7.2021

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14-7-2021



RAMA DEVI WOMEN'S UNIVERSITY, VIDYA VIHAR  
BHUBANESWAR-22

Proceeding of the meeting of the Board of Studies Life Sciences  
held on 14.07.21 at 11:00 am A.M / P.M. in the University Office,  
Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. Prof. R.C. Mohanty, Retd. P.G. Dept. of Botany, Utkal University, BBSR
2. Prof. Pravatī Mohapatra, P.G. Dept. of Zoology, Utkal University, BBSR
3. Prof. Animesh Mohapatra, Dept. of Life Science, R.I.E, BBSR
4. Prof. C.C. Rath, Dept. of Life Sciences
5. Dr. S. Singh, Dept. of Life Sciences
6. Dr. S.K. Rath, Dept. of Life Sciences
7. Dr. M. Kumbhar, Dept. of Life Sciences
8. Dr. N. Kaur, Dept. of Life Sciences
9. Dr. A.P. Das, Dept. of Life Science
10. Dr. P. C. Paricha, Dept. of Zoology.

Prof./ Dr. Prof. C. C. Rath is selected as Chairman of the  
Board for the Academic year 2021-22

The recommendations of the Board in respect of the Regulations, Detailed Syllabus, Text Books and other items are appended the prescribed form. The board authorised the Chairman to take any decisions at the time of requirement. The syllabus is in model of an applicable in session 2021-2022. Ph.D. and work Syllabi  
Signature of the Members:- approved

CHAIRMAN

14/7/2021

9. Nawar Ban.

1. Chadi Choroa Rath
2. Phelapat
3. ~~Smolby~~
4. ~~M. Anand~~
5. S. Singh Shikha
6. ~~Pratik S. Rath~~
7. Pratik S. Rath
8. Manu Manoj Kumbhar



RAMA DEVI WOMEN'S UNIVERSITY, VIDYA VIHAR  
BHUBANESWAR-22

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Proceeding of the meeting of the Board of Studies ... Life Sciences .....

held on .. 25.08.2020 ..... at .. 11.00 ..... A.M / P.M. in the University Office,  
Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. Prof. C. C. Rath
2. Dr. S. K. Singh
3. Dr. M. Kumbar.
4. Dr. N. Kaur
5. Dr. A. P. Das
6. Prof. Pravatī Mohapatra
7. Prof. R. C. Mohanty
8. Prakash Ch. Paralle

Prof./ Dr. .... C. C. Rath ..... is selected as Chairman of the  
Board for the Academic year 20.-21

The recommendations of the Board in respect of the Regulations, Detailed Syllabus, Text  
Books and other items are appended the prescribed form. 1. Unit - V is considered for  
Blended Studies. 2. The Board of Studies authorizes CoG to  
Signature of the Members :- take alternative measures in  
consultation with chairman. CHAIRMAN 25/8/2020

- 1.
2. S. S. Singh
3. M. M. Kumbar
4. Navreet Kaur
5. Alok Prasad Das
6. Pravatī Mohapatra
7. R. C. Mohanty
8. Prakash Ch. Paralle



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RAMA DEVI WOMEN'S UNIVERSITY,  
VIDYA VIHAR, BHUBANESWAR-22

Proceeding of the meeting of the Board of Studies ... Life Sciences (Pb and MPhu)

held on 28.8.19 at 11 am A.M / P.M. in the University Office,  
Bhoi Nagar, Bhubaneswar-22.

Members Present :



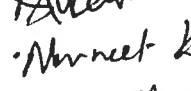



1. Dr. Chandni Charan Rath, Professor, RDWU
2. Dr. Srikha Singh, Associate Prof. RDWU
3. Dr. Sakti Kanta Rath, Associate Prof, RDWU
4. Dr. Navneeta Kaur, Asst. Prof., RDWU
5. Dr. Muktamayee Kumbhar, Asst. Prof, RDWU
6. Dr. P. C. Parida, Asst. Prof, ZOO. RDWU
- 7.
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Prof./ Dr. Chandni Charan Rath is selected as Chairman of the  
Board for the Academic year 2019..

The recommendations of the Board in respect of the Regulations, Detailed Syllabus, Text  
Books and other items are appended the prescribed form.

Signature of the Members :-

  
CHAIRMAN

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RAMA DEVI WOMEN'S UNIVERSITY  
BHUBANESWAR-751022

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No. *L.S./Ph.D.* 1L-105 /2019,

date: 15.4.2019

From

The HoD & Ex-Officio Chairman  
Subject Research Committee,  
P.G. Dept. of *Life Science.*  
R.D.W. University.

To

The Controller of the Examinations  
Rama Devi Women's University,  
Vidya Vihar, Bhubaneswar-22

Sub. : Submission of Proceedings etc. of the SRC Meeting.


Ref. : Your letter No. CoE/ Exam./Ph.D.- 52/223 /2019, dated 02.03.2019

Sir,

With reference to your letter on the subject cited above I enclose herewith the proceedings and the following recommendations duly recommended by the Subject Research Committee in *Life Science* in its meeting held on 20.3.2019 in respect to select the candidates for recognition of Ph.D. Research Supervisor/Guide along with the application forms of the candidates for necessary action at your end.

1. Proceeding of the Subject Research Committee - 01
2. SRC Recommendation Format duly filled in SRC Members - 06
3. Bio-Data format duly filled in by SRC Members - 02 Ce
4. Application(s) of the candidate concerned - 06

Yours faithfully

  
H.O.D. 20/3/2019

& Chairman, SRC

Proceeding of the meeting of the Board of Studies Life Science (PG & M-Ph)  
held on 4.8.2018 at 11:30 A.M / P.M. in the University Office,  
Bhoinagar, Bhubaneswar-22.

Members Present :

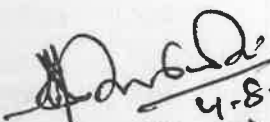

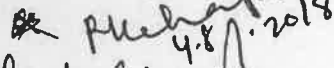


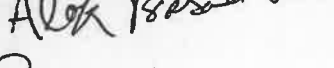
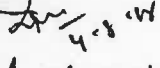
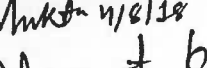

1. Dr. Chandni Charan Rath, Professor.
2. Dr. Shikha Singh, Associate Professor
3. Dr. Shaktikanta Rath, Associate Professor
4. Dr. Navneet kaur, Assistant Professor
5. Dr. Mukta mayee kumbhar, Asst. Professor
6. Dr. Alok Prasad Das, Asst. Professor
7. Dr. P. C. Parichha, Asst. Professor.
8. Prof. R. C. Mohanty, Retd. Dept. of Botany, utkal university.
9. Prof. Prarati Mohapatra, P.G. Dept. of Zoology, utkal university.
10. Dr. Animesh Mohapatra, Professor, Dept. of Life Science, RIE, BBSR.

Prof./ Dr. Chandni Charan Rath is selected Chairman of the Board for the Academic year 2018.- 19

The recommendations of the Board in respect of the Regulations, Detailed Syllabus, Text Books and other items are appended the prescribed form.

Signature of the Members :-

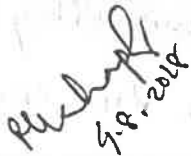
  
CHAIRMAN

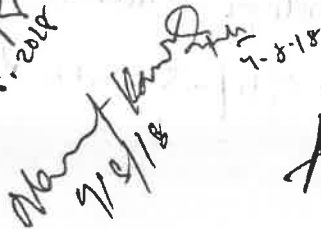
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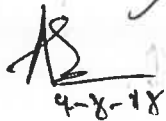


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1. The Board of Studies approved the current Syllabus for P.G. Life Science for 2018-2020
2. The Board of Studies also approved the modified Syllabus for P.G. Life Sciences for the Academic Session 2019-2021
3. All the members of the Board of Studies unanimously authorised the chairman Board of Studies, Life Sciences to take any decision on behalf of the Board of the Studies for the Academic Session 2018-2019 in case of exigencies.

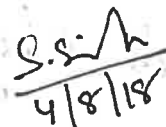
  
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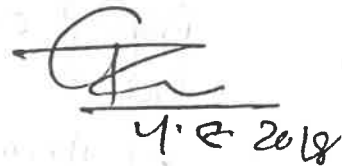
  
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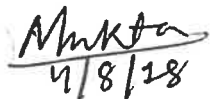
  
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**OUTLINE COURSE STRUCTURE P.G. DEPARTMENT OF LIFE SCIENCES**  
**RAMA DEVI WOMEN'S UNIVERSITY, BHUBANESWAR**

PAPER	COURSE CODE	COURSE TITLE	Units	Credits	Mid-sem	End-sem	Total
<b>SEMESTER-I</b>							
Hard Core	HC-101	Cell biology	5	5	30	70	100
Hard Core	HC-102	Microbiology	5	5	30	70	100
Hard Core	HC-103	Bioinstrumentation	5	5	30	70	100
Hard Core	HC- 104	Practical related to paper HC-101, HC-102, HC-103		5	30	70	100
Allied Core	AC-101	Computer application course by e-learning centre	3	3	Mid sem 10 + Practical 10= 20 marks	30	50
<b>TOTAL</b>				<b>23</b>	<b>140</b>	<b>310</b>	<b>450</b>
<b>SEMESTER-II</b>							
Hard Core	HC-201	Biochemistry	5	5	30	70	100
Hard Core	HC-202	Molecular Biology and Genetic Engineering	5	5	30	70	100
Hard Core	HC-203	Ecology, Evolution and Taxonomy	5	5	30	70	100
Hard Core	HC- 204	Practical related to paper HC-201, HC-202, HC-203 and CE-201 A/B		5	30	70	100
Core Elective	CE-201 A/B	A: Plant Diversity B: Animal Diversity	5	5	30	70	100
Open Elective	OE-201 A/B	A: Human health & Hygiene B: MOOCs (From SWAYAM/ NPTEL etc.)		4		50	50
<b>TOTAL</b>				<b>29</b>	<b>150</b>	<b>400</b>	<b>550</b>
<b>SEMESTER-III</b>							
Hard Core	HC-301	Immunology	5	5	30	70	100
Hard Core	HC-302	Genetics	5	5	30	70	100
Hard Core	HC-303	Practical related to paper HC-301, HC- 302 and CE-301 A/B, CE-302 A/B	-	5	30	70	100
Core Elective	CE-301 A/B	A: Plant Physiology Developmental Biology B: Animal Developmental	5	5	30	70	100

		Biology, Physiology & Endocrinology					
Core Elective	CE-302 A/B	A: Research Methodology B: Waste Management	5	5	30	70	100
Field Internship	FI- 301	Field Internship		3		50	50
<b>TOTAL</b>				<b>28</b>	<b>150</b>	<b>400</b>	<b>550</b>
<b>SEMESTER-IV</b>							
Hard Core	HC-401	Review Literature	-	5	-	100	100
Hard Core	HC-402	Seminar	-	5	-	100	100
Hard Core	HC-403	Dissertation	-	5	-	100	100
Core Elective	CE-401	Final Presentation	-	5	-	100	100
Allied Core	AC-401	Theory : 'Women and Society' (For All PG Subjects/Programs)	03	03	15	35	50
<b>TOTAL</b>				<b>23</b>	<b>15</b>	<b>435</b>	<b>450</b>

### Summary

HC-HardCore	14 x100	1400
CE-CoreElective	4 x100	400
OE-OpenElective	1x50	50
AC-AlliedCore	2x50	100
FI-FieldInternship	1x50	50
<b>TotalMarks:</b>		<b>2000</b>

### Summary

	Credits	TotalMarks
Sem-I	23	450
Sem-II	29	550
Sem-III	28	550
Sem-IV	23	450
<b>TOTAL</b>	<b>103</b>	<b>2000</b>

# Life Science

## SEMESTER-I

Sl No.	Paper code	Paper	Name of Paper	Mark	Credit
1	1.1	Paper-1	<u>Research Methodology and Laboratory Technique</u>	100	6
2	1.2	Paper-2	Advances in Biochemistry, Molecular Biology and Ecology	100	6
3	1.3	Paper-3	Microbiology and Immunology	100	4
				300	16

## SEMESTER-II

Sl. No	Paper code	Paper	Marks	Credit
1	2.1	Review of literature Writing(50)+ ppt. Presentation(50)	100	4
2	2.2	Preparation and presentation of seminar Synopsis presentation (50)+ Pre-thesis submission seminar(50)	100	4
3	2.3	<b>Dissertation</b>	100	6
4	Total		300	14

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21.7.17