



751
4.10.23

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

Proceeding of the meeting of the Board of Studies in Chemistry
held on 24.4.23 at 11:30 A.M./P.M. in the Dept. of Chem.
University Office,
Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. Dr. Mamala Mohanly
2. Prof. (Dr) Santosini Patra
3. Prof. Sushanta Kumar Badamali
4. Dr. Dhavitri Rath
5. Dr. Swapna Soukare Nayak
6. Dr Mrs Krishna Kalpana Patnaik
- 7.
- 8.

Prof. Dr. Mamala Mohanly, HOD, Chemistry 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:-

CHAIRMAN

1. Mohanly (M. Mohanly)
2. Patra (S. Patra)
3. Badamali (S.K. Badmali)
4. Patnaik (S.S. Patnaik)
5. Patnaik (K.K. Patnaik)
- 6.
7. Rath (D. Rath)
- 8.

Mohanly
24.4.23

Proceedings of the BOS meeting in Chemistry held on 24.04.2023

A meeting of the Board of Studies in Chemistry for the academic session 2023-2024 was held on 24.04.2023 at 11.30 am in the Department of Chemistry of Rama Devi Women's University, Bhubaneswar and following resolutions were made unanimously.

1. Head of the Department of chemistry, R. D. Women's University was the Chairman of the Board of Studies of Chemistry for the academic year 2023-2024.

UG PROGRAMME:

2. Model syllabus for +3 degree science Chemistry (HONS/PASS) under CBCS system was revised and approved.
3. One paper i.e. "Inorganic materials of Industrial Importance" is included as an alternative to project in DSE-4, in addition to the paper "Analytical methods in chemistry" from the academic session 2023-24.
4. The names for the Board of Conducting Examiners, Moderation Board & Paper Setters for different semesters of UG programme were recommended
5. It was recommended that second unit (i.e. 25% of total four units) of each subject and paper is hereby earmarked for student self study (vide DHE Letter no -20119 dt 19.06.2020) to ensure that self study is taken by the students. Mid- semester examination in all subjects/papers shall preferably be based on self-study portion of the syllabus.

PG PROGRAMME:

6. Syllabus for M.Sc. Chemistry from the academic session 2023-2024 was prepared as per the course structure of the Rama Devi Women's University and approved.
7. The names for the Board of Conducting Examiners, Moderation Board & Paper Setters and Examiners for 1st and 2nd semesters of P. G. programme were recommended.
8. Question pattern for PG programme as per RDWU, regulation was approved by the members of the Board of Studies.
9. Syllabus for skill based course /Value added courses were recommended.
10. Members authorized Chairman, Board of Studies to take decision for any other matters related to Examination in future.
11. In case of any unavoidable circumstances the decision of the Controller of Examination will be final.

* Portions Revised. GE A-I/I/B-I
 GE A-II/II/B-II (copy attached)

Signature of the members:

- | | |
|-----------------------------|---|
| 1. Manuata Mohanty | <i>Manuata Mohanty</i> 24.4.23 |
| 2. Sushanta K Badamali | <i>Sushanta K Badamali</i> 24.4.23 |
| 3. Dhavitri Rath | <i>Dhavitri Rath</i> 24/04/2023 |
| 4. Krishna Lalporna Patraik | <i>Krishna Lalporna Patraik</i> 24/04/2023 |
| 5. Srama Sanjay Nayal | <i>Srama Sanjay Nayal</i> 24/04/2023 |
| 6. Santosini Patra | <i>Santosini Patra</i> 24/04/23 |

SYLLABUS FOR UNDER GRADUATE COURSE IN
CHEMISTRY
(Bachelor of Science Examination)



Revised and
Approved by BOS
2023-24.
Mishra
24.4.23

Syllabus of
GE I & II
are
revised

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

UNDER CHOICE BASED CREDIT SYSTEM

44
4/01/23

24/04/2023

24.04.2023

24/04/23

24.4.23

590

**SYLLABUS FOR POST GRADUATE PROGRAMME
TWO YEAR COURSE EXAMINATIONS UNDER
CHOICE BASED CREDIT SYSTEM (CBCS)
w.e.f. The Academic Session 2023-24**

M.Sc. CHEMISTRY



Approved by BOS on 24/02/2023

Sekhar
24/4/23

Jali
24/04/23

Dab
24/04/2023

Pratik
24/04/2023

RAMA DEVI WOMEN'S UNIVERSITY,
Vidya Vihar, Bhubaneswar-751022, Odisha, India
www.rdwuniversity.nic.in

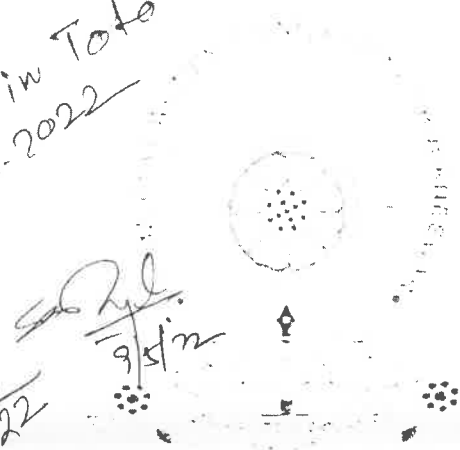
Ms. Ranki
24.4.23

4723

SYLLABUS FOR UNDER GRADUATE COURSE IN CHEMISTRY

(Bachelor of Science Examination)

Approved by
BOS meeting in Tote
held on 9.5.2022
Mohanta
9.5.2022
Potnam
9.05.2022



Approved by
BOS meeting
held on
13.7.2021
Mohanta
13.7.21.
Potnam
13.07.21

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

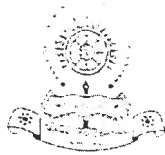
S. Bilawal
9/05.2022

UNDER CHOICE BASED CREDIT SYSTEM

Approved by BOS meeting
held on 25.8.2020
S. Bilawal
25.8.2020
Mohanta

Potnam
25/08/2020

Potnam
25.08.2020



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

Proceeding of the meeting of the Board of Studies in Chemistry

held on 09.05.2022 at 11.30 A.M / P.M. in the University Office.

Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. Dr. Mamata Mohanty
2. Subhalaxmi Bihari
3. Krishna Kalpana Pattnaik
4. Supra Sankar Nayak
- 5.
- 6.
- 7.
- 8.

Prof./Dr. Mamata Mohanty, HOD Chem, R.D.W. University, BBSR is selected as Chairman of the Board for the Academic year 2022-2023

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

1. Mamata Mohanty 9.5.2022
2. Krishna Kalpana Pattnaik
3. Subhalaxmi Bihari 9.5.2022
4. Supra Sankar Nayak 9.5.2022
- 5.
- 6.
- 7.
- 8.

Mamata Mohanty
9.5.2022

Proceedings of the BOS meeting in Chemistry held on 09.05.2022

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A meeting of the Board of Studies in Chemistry was held on 09.05.2022 at 11.30 am in Examination Board Room of Rama Devi Women's University, Bhubaneswar and following solutions were made unanimously.

1. Head of the Department of chemistry, R.D. Women's University will be the Chairman of the Board of Studies of Chemistry for the academic year 2022-2023.
2. Model syllabus for +3 degree science Chemistry (HONS/PASS) under CBCS system was approved in toto.
3. It was recommended that second unit (i.e.25% of total four units) of each subject and paper is hereby earmarked for student self study.(vide DHE Letter no -20119 dt 19.06.2020). to ensure that self study is taken by the students mid semester examination in all subjects/papers shall preferably be based on self-study portion of the syllabus.
4. It was recommended that **Analytical Methods in Chemistry** paper will be treated as DSE-IV alternative to project like 2019 AB.
5. The names for the Board of Conducting Examiners, Moderation Board & Paper Setters for different semesters were recommended.
6. Members authorised Chairman Board of Studies to take decision for any other matters related to Examination in near future.
7. In case of any unavoidable circumstances the decision of the Controller of Examination will be final.
8. Syllabus of Two Value added Courses "Lab Techniques & SOP of Lab Equipments" and "Green Chemistry for Safer Environment" was approved from Academic Session 2022-23.

Signature of the members:

1. Mamata Mohanty 9.5.2022

Mamata Mohanty

2. Krishna Kalpana Patra 9.05.2022

Kalpana Patra

3. Subhalaxmi Bhandari 9.05.2022

S. Bhandari

4. Supra Saha Ray 9.5.22



25/11

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

Proceeding of the meeting of the Board of Studies in Chem. & B.T.
held on 13/07/2021 at 11 A.M / P.M. in the University Office.
Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. Dr. Mamata Mohanty
2. Dr. Santasini Patra
3. Smt. Krishna Kalpana Patraik
4. Subhalaxmi Bijuwal
- 5.
- 6.
- 7.
- 8.

Prof. Dr. Mamata Mohanty, HOD, Chemistry is selected as Chairman of the Board for the Academic year 2021..

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. Mohanty (Mamata Mohanty)
2. Patra (Santasini Patra)
3. Patraik (Krishna Kalpana Patraik)
4. S. Bijuwal (Subhalaxmi Bijuwal)
- 5.
- 6.
- 7.
- 8.

Mamata Mohanty
CHAIRMAN 13-7-21

Proceedings of the BOS meeting in chemistry held on 13.7.2021.

A meeting of the Board of the Studies in chemistry was held on 13.7.2021 at 11 am and in the Dept. of chemistry, R.D. Women's University, Bhubaneswar and following resolutions were made unanimously,

1. The Head of the Department ^(HOD) of chemistry, R.D. Women's University will be the Chairman of the Board of Studies of chemistry for the year 2021-22.
2. Syllabus for +3 degree science chemistry Honors and Pass ^{under} CBCS system was approved as such in toto.
3. The names for the Board of Conducting Examiners, Paper setters & Moderation Board for different Semester Examinations were recommended.
4. Members authorized Chairman of the Board of ~~conducting~~ Examiners Studies to take decision for any other matters related to Examination in near future.
5. In case of any unavoidable circumstances the decision of the Controller of Examination will be final.

M. Mohanty
13.7.2021
(Dr. Mamata Mohanty)

Patra
13/07/2021
(Dr. Santosini Patra)

Patra
13.07.21
(Smt Krishna Kalpane Patra)

S. Bilwal
13.7.21
(Smt. Sakshami Bilwal)

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AGENDA OF THE B.O.S MEETING IN RESPECTIVE SUBJECTS FOR 2021-2022

To recommend the name with Contact No (Whatsapp) and email id for Board of Conducting Examiners, Moderation Board & Paper Setters for the following +3 Degree (Arts, Science & Commerce) / PG/ B Ed/Ph.D (Course Work) Examination 2021-22 in the prescribed format.

2. To recommend the list of Examiners (External & Internal) for PG/B.Ed./Ph.D(Course Work)
3. To recommend the Syllabus of the +3 Degree PG/B.Ed./ Ph.D (course work) Examination 2021.
 - (i) The Final copy of the Syllabus as recommended is to be signed by the members in the first page and the last page.
 - (ii) Any addition/ deletion /correction is to be signed by the members in the relevant page(s).

+3 Degree Examinations

- a) +3 Degree 1st, 3rd & 5th Semester Arts/Science/Commerce(Pass & Hons) Regular Examination, 2021 (Model Syllabus).
- b) +3 Degree 2nd, 4th & 6th Sem. Arts/Science/Commerce(Pass & Hons) Regular Examination, 2022 (Model Syllabus).

P.G Examinations.

- a. M.A./M.Sc./M.Com. 1st Sem. & 3rd Sem. (CBCS) Reg. & Back Examination 2021
- b. M.A./M.Sc./M.Com. 2nd Sem. & 4th Sem. (CBCS) Reg. & Back Examination 2022.

B.Ed Examination

B.Ed 1st Yr and 2nd Yr Reg. & Back Examination 2021/22.

Ph.D

PhD-course work Examination 2021

5. other matters if any.

CONTROLLER OF EXAMINATION

N.B. : The members are requested to finalize the items as per the Agenda. The Proceedings of the meeting will be signed by the controller of Examinations before meeting is over as desired by Vice-Chancellor.



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

Proceeding of the meeting of the Board of Studies in Chemistry
held on 25.8.2020 at 11.00 A.M / P.M. in the University Office,
Bhoi Nagar, Bhubaneswar-22.

Members Present :

1. Prof. P.K. Sahoo,
2. ~~Prof~~ Dr. Mamata Mohanty
3. Dr. Santosini Patra
4. Dr. Jamini Ranjan Mohanty
5. Smt. Krishna Kalpana Patra
- 6.
- 7.
- 8.

Prof./ Dr. Mamata Mohanty, HOD, Chemistry, R.D.W.U, is selected as Chairman of the Board for the Academic year 2020-21.

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. Mamata Mohanty
2. ~~Sahoo~~
3. Santosini Patra.
4. Jamini Ranjan Mohanty
5. Krishna Kalpana Patra
- 6.
- 7.
- 8.

Mamata Mohanty
CHAIRMAN 25-8-2020

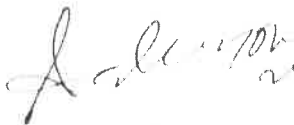
28/3

Resolution of the Board of Studies Meeting of Chemistry
held on 25.8.2020 at 11 am.

Following resolutions were made unanimously:

1. The chairman of the Board of Studies of Chemistry for the year 2020-21 will be the HOD, ^{Dept of} Chemistry of R.D. Women's University, Bhubaneswar.
2. Syllabus for +3 degree science ~~course~~ chemistry (Hons) and Pass CBCS semester course was recommended.
3. The ~~Regal~~ names of the Board of Conducting Examinations, Paper Setters, Moderation Board for ~~both~~ different-semester/terminal examinations were recommended.
4. Members authorised chairman of the Board of Studies to take decision for any other matters relating to Examination in near future.
5. The blended learning approach for the UG course (Hons/Pass/GE), Unit-2 is adopted as per Govt. Rules (HE letter no 20119/HE dt 19.6.2020)
6. In case of any unavoidable circumstances the decision of the Controller of Examination will be final.

Mamata Mohanty
25.8.2020


Kusum Kalpana Patra
25.08.2020

Jamini Ranjan Mohanty
25.08.2020.

Santoshini Patra,
25/08/2020



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RAMA DEVI WOMEN'S UNIVERSITY, BHUBANESWAR

Proceeding of the meeting of the Board of Studiesin.....Chemistry....

held on 16.04.2019 at 01.00 P.M. in the University Office, Bhoingar, Bhubaneswar-22.

Members Present :

1. Prof. P.K. Lakshmi (Prof. P.K. Lakshmi), VC
2. (Dr) Sankipriya Das
3. Santorini Patra,
4. Jamini R. Mohanty
5. Mamata Mohanty
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

The recommendations of the Board in respect of the +3 Degree Regulations, Detailed Common Syllabus, Text Books and other items for +3 Degree Course are appended with the prescribed form effective from the year 2019-20.

Signature of the Members :-

Mamata Mohanty
CHAIRMAN

1. Prof. P.K. Lakshmi
2. (Dr) Sankipriya Das
3. Santorini Patra,
4. Jamini R. Mohanty
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

readings of the Board of Studies meeting 285
Chemistry held on 16.4.19 at 1 PM. and

Following Resolutions were made.

- i) State model syllabus for Under Graduate course in chemistry under CBCS system is adopted in toto ~~from~~ with effect from the year 2019-20.
- ii) Draft regulation for +3 degree course recommended by Government effective from 2019-20 is adopted except some modifications proposed for clause (12.3) ^{which} as suggested as given below.
 - The question papers shall be divided into 3 parts
 - Part I will carry 12 one mark questions in the form of fill in the blanks or one word answers (12 marks) ($1 \times 12 = 12$ marks).
 - Part II will carry 10 two mark questions of which 8 have to be answered. The answer should be written 45 words max. ($2 \times 8 = 16$ marks)
 - Part III will carry 4 eight mark questions of EITHER OR format. The EITHER OR in question will be unitwise. The answer should be written 100 words maximum ~~24 marks~~ ($8 \times 4 = 32$ marks)

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16/4/19

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16.4.19

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16/4/19

Mohd
16.4.19

-2

**STATE MODEL SYLLABUS FOR UNDER
GRADUATE
COURSE IN CHEMISTRY
(Bachelor of Science Examination)**

**UNDER
CHOICE BASED CREDIT SYSTEM**

Approved by BOS - Chem on 16.4.19

[Signature]
16/4/19

Tah -
16/4/19

[Signature]
16.4.19

[Signature]
16.4.19.

[Signature]
16.4.19

Mamata Mofanty

HOD, Chemistry, RDWU

Course structure of UG Chemistry Honours

| Semester | Course | Course Name | Credits | Total marks |
|------------|------------------|----------------------------|-----------|-------------|
| I | AECC-I | AECC-I | 04 | 100 |
| | C-I | Inorganic Chemistry-I | 04 | 75 |
| | C-I Practical | Inorganic Chemistry-I Lab | 02 | 25 |
| | C-II | Physical Chemistry-I | 04 | 75 |
| | C-II Practical | Physical Chemistry-I Lab | 02 | 25 |
| | GE-I | GE-I | 04 | 75 |
| | GE-I Practical | GE-I Lab | 02 | 25 |
| | | Total | 22 | 400 |
| II | AECC-II | AECC-II | 04 | 100 |
| | C-III | Organic Chemistry-I | 04 | 75 |
| | C-III Practical | Organic Chemistry-I Lab | 02 | 25 |
| | C-IV | Physical Chemistry-II | 04 | 75 |
| | C-IV Practical | Physical Chemistry-II | 02 | 25 |
| | GE-II | GE-II | 04 | 75 |
| | GE-II Practical | GE-II Lab | 02 | 25 |
| | | Total | 22 | 400 |
| III | C-V | Inorganic Chemistry-II | 04 | 75 |
| | C-V Practical | Inorganic Chemistry-II Lab | 02 | 25 |
| | C-VI | Organic Chemistry-II | 04 | 75 |
| | C-VI Practical | Organic Chemistry-II Lab | 02 | 25 |
| | C-VII | Physical Chemistry-III | 04 | 75 |
| | C-VII Practical | Physical Chemistry-III Lab | 02 | 25 |
| | | GE-III | GE-III | 04 |
| | GE-III Practical | GE-III Lab | 02 | 25 |

| | | | | |
|----------|-------------------|-----------------------------|-----------|-------------|
| | SEC-I | SEC-I | 04 | 100 |
| | | Total | 28 | 500 |
| IV | C-VIII | Inorganic Chemistry-III | 04 | 75 |
| | C-VIII Practical | Inorganic Chemistry-III Lab | 02 | 25 |
| | C-IX | Organic Chemistry-III | 04 | 75 |
| | C-IX Practical | Organic Chemistry-III Lab | 02 | 25 |
| | C-X | Physical Chemistry-IV | 04 | 75 |
| | C-X Practical | Physical Chemistry-IV Lab | 02 | 25 |
| | GE-IV | GE-IV (Theory) | 04 | 75 |
| | GE-IV Practical | GE-IV (Practical) | 02 | 25 |
| | SEC-II | SEC-II | 04 | 100 |
| | | Total | 28 | 500 |
| Semester | Course | Course Name | Credits | Total marks |
| V | C-XI | Organic Chemistry-IV | 04 | 75 |
| | C-XI Practical | Organic Chemistry-IV | 02 | 25 |
| | C-XII | Physical Chemistry-V | 04 | 75 |
| | C-XII Practical | Physical Chemistry-V | 02 | 25 |
| | DSE-I | DSE-I | 04 | 75 |
| | DSE-I Practical | DSE-I Lab | 02 | 25 |
| | DSE-II | DSE-II | 04 | 75 |
| | DSE-II Practical | DSE-II Lab | 02 | 25 |
| | | Total | 24 | 400 |
| VI | C-XIII | Inorganic Chemistry- IV | 04 | 75 |
| | C-XIII Practical | Inorganic Chemistry-IV | 02 | 25 |
| | C-XIV | Organic Chemistry-V | 04 | 75 |
| | C-XIV Practical | Organic Chemistry-V | 02 | 25 |
| | DSE-III | DSE-III | 04 | 75 |
| | DSE-III Practical | DSE-III Lab | 02 | 25 |

| | | | |
|------------------|--------------|-----|------|
| DSE-IV | DSE-IV | 04 | 75 |
| DSE-IV Practical | DSE-IV Lab | 02 | 25 |
| OR | | | |
| DSE-IV | Dissertation | 06 | 100* |
| | | 24 | 400 |
| | TOTAL | 148 | 2600 |

Discipline Specific Elective Papers: (Credit: 06 each)

(4 papers to be selected by students of Chemistry Honours): DSE (1-IV)

1. Polymer Chemistry
2. Green Chemistry
3. Industrial Chemicals & Environment
4. Inorganic Materials of Industrial Importance
5. *Dissertation (can be opted as alternative of DSE-IV only and of 6 credits.
Dissertation content: 60, Seminar cum Viva:40)
6. Analytical Methods in Chemistry (Alternative)

HONOURS PAPERS:

Core course – 14 papers

Discipline Specific Elective – 4 papers (out of the 6 papers suggested)

Generic Elective for non-Chemistry students – 4 papers. In case the University offers 2 subjects as GE, then papers 1 and 2 will be the GE paper.

Marks per paper - Midterm: 15 marks, End term: 60 marks, Practical- 25 marks
Total – 100 marks Credit per paper – 6

Teaching hours per paper – 40 hours Theory classes + 20 hours Practical classes

**SYLLABUS: CHEMISTRY
SEMESTER-I
CORE PAPER I
INORGANIC CHEMISTRY-I**

COURSE OUTCOMES:

After reading this paper, students will be able to have