



NETAJI SUBHAS UNIVERSITY

JAMSHEDPUR

(A Unit of Sitwanto Devi Mahila Kalyan Sansthan)

Estd. Under Jharkhand State Private University Act, 2018

Approved by UGC under Section 2(f), AICTE, PCI, BCI, NCTE, INC & JNRC

Ref. No. : NSU/302/2018

Date : 03/11/2018

Board of Studies

Minutes of meeting

Date: 3rd November, 2018

Venue: Conference Room

The following members present in the meeting are as undersigned:

1. Dr. Dinesh Kumar (Head of the Department, Physics)- Chairman *Dinesh*
2. Prof. D.Shome (Dean, Academics) *D.Shome*
3. Mr, Sumit Mahato
4. Dr. Nilratan Chakraborty (Academic Expert) *N.C.*
5. Dr, Anil Kumar Nirala (Academic Expert) *Anil*
6. Dr. Suchandan Das (Industry Expert, CSIR NML) *S.Das*

- The meeting of Board of Studies, Department of Physics was held on 3rd November 2018 with the prime agenda of incorporation of Program outcomes(POs), Program Specific Outcomes (PSOs) and Course Outcomes(COs) in the syllabus structure of Undergraduate and postgraduate programs of Physics and thereby pave the way for outcome based education (OBE).
- The meeting started with the greetings of the members and agreement on the agenda for discussion.
- As the meeting proceeded, the members primarily discussed about the components of Syllabus for Undergraduate & Postgraduate Program, B.Sc Physics Hons. and M.Sc Physics keeping in view CBCS pattern and also pattern offered by the top institutes of India.



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- The members took up the points of interest and applications which will assist in formation of a syllabus thereby promoting participative learning, experiential learning and problem solving approach.
- The members unanimously and meticulously agreed upon the contents of the syllabus to make it effective for the higher academic needs and societal welfare.
- Thereby the syllabus was structured and approved in this BOS meeting.
- The meeting concluded with the vote of thanks by the Chairman and the syllabus of UG and PG programs were formally approved in this BOS meeting.

Dineh
Head
Department of Physics
Netaji Subhas University

Rhoan
Dean Academics
Netaji Subhas University
Jamshedpur, Jharkhand



NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

Estd. Under Jharkhand State Private University Act, 2018

(A Unit of Sitawato Devi Mahila Kalyan Samithan)

Ref. No. : NSU/38A/2018

Date : 12/11/2018

CIRCULAR

Subject: Notification for conducting Board of Studies (BOS) meeting for discussion and approval of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry

All the esteemed members of the Board of Studies (BOS) for discussion and approval of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry are hereby informed that a meeting has been scheduled as per the details below:

Date: 12/11/2018

Time: 2:30 PM

Venue: NSU Conferences Hall

The meeting will be convened for discussion and approval of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry.

Agenda for the Meeting:

1. Inclusion and approval of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry.
2. Any Other Matters with the Permission of the Chair.

All members are kindly requested to attend the meeting and provide valuable inputs for the effective functioning of the academic curriculum.

M. K. Mishra

Dr. Mukesh Kumar Mishra
HOD,
Department of Chemistry
Netaji Subhas University
Jamshedpur



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Estd. Under Jharkhand State Private University Act, 2018

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Ref. No. : NSU/40A/2018

Date : 14/11/2018

Minutes of Board of Studies Meeting

Date: 14-11-2018

Time: 11.30 AM

Agenda – Discussion and approval of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry

A Board of Studies meeting has been called on 14th November, 2018 in the premises of Netaji Subhas University, Jamshedpur, Jharkhand for the discussion and approval of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry. Dr. Mukesh Kumar Mishra, Chairman, of the Board of Studies, Netaji Subhas University, Jamshedpur, will preside over the meeting.

The Board of Studies was established under the Statute of Netaji Subhas University's No. 32. The following members were present in the meeting:

1. Dr. Mukesh Kumar Mishra, HOD (Chemistry) – Chairman *M. K. Mishra*
2. Dr. C. K. Singh, Assistant Professor, Jamshedpur Co-operative College, Jamshedpur (External Member) *C. K. Singh*
3. Dr. R.N. Mandal – KMPM INTER COLLEGE, Jamshedpur (External Member) *R.N. Mandal*
4. Dr. A. I. Mohanty, Scientist, CSIR-NML, Jamshedpur. (Industry person) *A. Mohanty*
5. Mr. Pankaj Pandey, Assistant Professor, Member NSU *P. Pandey*

The members of the Board approved the inclusion of PO, CO in the syllabus of B.Sc. Chemistry Honours and M.Sc. Chemistry

[Signature]
Dean Academics
Netaji Subhas University
Jamshedpur

M. K. Mishra
Chairman
Board of Studies
Netaji Subhas University



NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

Estd. Under Jharkhand State Private University Act, 2018

(A Unit of Swamiji Devi Mahila Kalyan Sansthan)

Ref. No. : NSU / 41A / 2018

Date : 25 / 10 / 2018

Minutes of Board of Studies Meeting

Department Of Mathematics

Time: 12.30 PM

Agenda – Formation of Course Outcome, Program Outcome and Programme Specific Outcome and Aligning it with the syllabus formation for B.Sc In Math (Hons.) & M.Sc Maths.

A Board of Studies meeting has been called on 25 October 2018 in the premises of Netaji Subhas University Jamshedpur, Jharkhand for Formation of **Course Outcome, Program Outcome and Programme Specific Outcome** for B.Sc in Maths (Hons.) & M.Sc Maths

Members Present:

- Prof. Dilip Shome - Dean Academics ,Chairman (IC)
- Mr. S. jyotishi – Assistant Professor, Department of Maths.
- Mr. Sumit Mahato - Assistant Professor, Department of Life Science.
- Dr. P.C Banerjee – Associate professor (Kolhan University) ,External Expert
- Dr Moiz Ashraf - Associate Professor (Kolhan University) External Expert
- Mr. Debasis Bajpaie- Deputy General Manager (TATA MOTORS), Industrial Expert

Handwritten signatures:
Dilip Shome
S. Jyotishi
Sumit Mahato
P.C Banerjee
Moiz Ashraf
Debasis Bajpaie



NETAJI SUBHAS UNIVERSITY

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Ref. No. : NSU/41A/2018

Date : 25/10/2018

As the meeting got underway, the Chairman greeted the new members of the Board of Studies and introduced the agenda. According to the agenda, the following decisions were made.

Agendas Discussed:

1. **Defining Course Outcome (CO) for Each Subject**
 - Discussion on formulating measurable learning outcomes for each subject in the B.Sc in Maths Hons & M.sc Maths program.
 - Ensuring COs reflect cognitive, psychomotor, and affective learning domains.
2. **Establishing Program Outcome (PO) for the Degree**
 - Setting broad skills and knowledge expectations for graduates, including mathematical expertise, Rational thinking, decision-making skill .
3. **Developing Programme Specific Outcome (PSO)**
 - Identifying specialized learning objectives specific to B.Sc Maths Hons & M.sc Maths.
 - Develop a strong understanding of fundamental concepts in pure and applied mathematics.
4. **Aligning COs, POs, and PSOs with Syllabus Design**
 - Integrating the formulated outcomes into the syllabus framework.
 - Ensuring that every subject contributes to achieving the POs and PSOs effectively.
5. **Adopting an Outcome-Based Education (OBE) Model**
 - Implementing an assessment strategy that links learning outcomes with evaluation methods.
6. **Evaluation and Review Mechanism**
 - Establishing a regular review committee to update COs, POs, PSOs, and syllabus.



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Ref. No. : NSU / UIA / 2018

Date : 25/10/2018

Resolutions Passed:

1. **Finalization of COs, POs, and PSOs**
 - The committee resolved to finalize and approve the Course Outcomes, Program Outcomes, and Programme Specific Outcomes for B.Sc in Maths Hons & M.Sc Maths.
2. **Integration with the Syllabus**
 - It was resolved that the formulated COs, POs, and PSOs will be integrated into the revised syllabus for B.Sc in Maths Hons & M.Sc Maths.
3. **Periodic Review Mechanism**
 - A resolution was passed to conduct an annual syllabus and outcome review meeting to ensure relevance and effectiveness.
4. **Adoption of Outcome-Based Learning (OBE)**
 - It was decided that the syllabus will incorporate an Outcome-Based Education (OBE) approach for better learning assessment.
5. **Faculty Training for Implementation**
 - Faculty members will be trained to design lesson plans and assessments that align with COs, POs, and PSOs.
6. **Industry Alignment and Internship Enhancement**
 - The Board resolved to collaborate with industry professionals to enhance internship opportunities and practical learning experiences.
7. **Submission for Approval**
 - The finalized COs, POs, PSOs, and syllabus will be forwarded to the Academic Council for approval and implementation from the next academic session.

The meeting concluded with all members agreeing to the proposed resolutions and action plan.

Chairman

Netaji Subhas University

Jamshedpur

Dean Academics
Netaji Subhas University
Jamshedpur, Jharkhand

Netaji Subhas University

Jamshedpur



NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

Estd. Under Jharkhand State Private University Act, 2018
(A Unit of Bharatpur Devi Mahila Kalyan Samithi)

Ref. No. : NSU/39A/2018

Date : 13/11/2018

BOARD OF STUDIES IN DEPARTMENT OF BOTANY

Minutes of Board of Studies Meeting

Date: 13-11-2018

Time: 2.00 PM

A meeting of Board of Studies has been organized on 13-11-2018 at Department of Botany, Netaji Subhas University, Jamshedpur, and Jharkhand. The meeting shall be chaired by Dr. M.K.Sinha Chairman, and Board of Studies of Department of Botany.

The Board of Studies has been constituted as per Statute No. – 32, Clause (ii) of Netaji Subhas University, Jamshedpur. It consists of following members:

1. Dr. M.K.Sinha – HOD (Botany) - Chairman *M.K.Sinha*
2. Dr.Vijay Kant Pandey – HOD , Department of Agriculture , Sainath University , Jharkhand (External Member) *V.K.Pandey*
3. Mr. Amit Prasad (Sriamulya Organic)- Industry person *Amit*
4. Mr. Ganesh Prasad (Technology Resource Communication Service Centre)- Industry person *Ganesh P*
5. Mr. Om Prakash Sharma, Controller of Examination, NSU Invitee Member *O.P.Sharma*
6. Prof. D Shome – Dean Academics, NSU, Invitee Member *D.Shome*
7. Mr Srimanta Santra– Associate Professor-Member *S.Santra*
8. Mr.Sumit Kumar Mahato – Assistant Professor-Member *Sumit*





NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

Estd. Under Jharkhand State Private University Act, 2018
(A Unit of Sitawati Devi Mahila Kalyan Sansthan)

Ref. No. : NSU/39A/2018

Date : 13/11/2018

At the onset, the Chairman welcomed the members of the Board of Studies and placed the agenda for the deliberation. The following deliberations were made as per the circulated agenda:

Agenda:

1. Confirmation of previous meeting minutes
2. Incorporation of Course Outcomes (COs), Program Outcomes (POs), and Program Specific Outcomes (PSOs)
3. Approval of syllabus and examination patterns

Deliberations and Resolutions:

1. Confirmation of Previous Meeting Minutes:

The members confirmed and approved the minutes of the last Board of Studies meeting.

2. Incorporation of Course Outcomes (COs), Program Outcomes (POs), and Program Specific Outcomes (PSOs):

The Board discussed the need to clearly define and incorporate COs, POs, and PSOs into the academic framework to align with national education standards and accreditation requirements.

Program Outcomes (POs): Upon completion of the program, students will be able to:

1. Demonstrate fundamental knowledge of botany, including plant diversity, physiology, and ecology.
2. Apply scientific principles to analyze and solve biological problems.
3. Conduct research using modern scientific techniques and methodologies.
4. Communicate scientific concepts effectively through written and verbal means.





NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

Estd. Under Jharkhand State Private University Act, 2018
(A Unit of Sitawanti Devi Mahila Kalyan Samithi)

Ref. No.: NSU/39A/2018

Date: 13/11/2018

5. Exhibit ethical responsibility and sustainable environmental practices in the field of botany.
6. Develop critical thinking and problem-solving skills relevant to biological sciences.
7. Engage in lifelong learning and interdisciplinary collaboration.

Program Specific Outcomes (PSOs): Upon completion of the Botany program, students will be able to:

1. Identify, classify, and analyze various plant species and their ecological interactions.
2. Apply biotechnological tools and techniques in plant research.
3. Assess the impact of environmental changes on plant ecosystems and biodiversity conservation.
4. Implement sustainable agricultural and horticultural practices using scientific methods.

Course Outcomes (COs): Each course will have clearly defined outcomes aligning with the above-mentioned POs and PSOs. The faculty will develop COs for all courses, and these will be reviewed and approved in the next Board of Studies meeting.

The Board resolved that a committee comprising Dr. M.K.Sinha (Chairman), Dr. Vijay kant Pandey (External member), Mr. Amit Prasad (Industry person), Mr. Ganesh Prasad, (Industry person), Mr. Srimanta Santra (Member) and Mr. Sumit Kumar Mahato (Member) will finalize the COs for each subject and ensure their integration into the syllabus.

3. Revision of Syllabus and Examination Patterns:

The Board approved modifications to the B.Sc. (Hons) and M.Sc. (Botany) syllabus. The evaluation pattern for B.Sc. Botany and M.Sc. Botany was reconfirmed, ensuring internal assessments and end-semester examinations align with the revised curriculum.

- The Board agreed to incorporate skill-based modules and practical training sessions.





NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

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(A Unit of Minimum Sixty Statute (Kajam Statute))

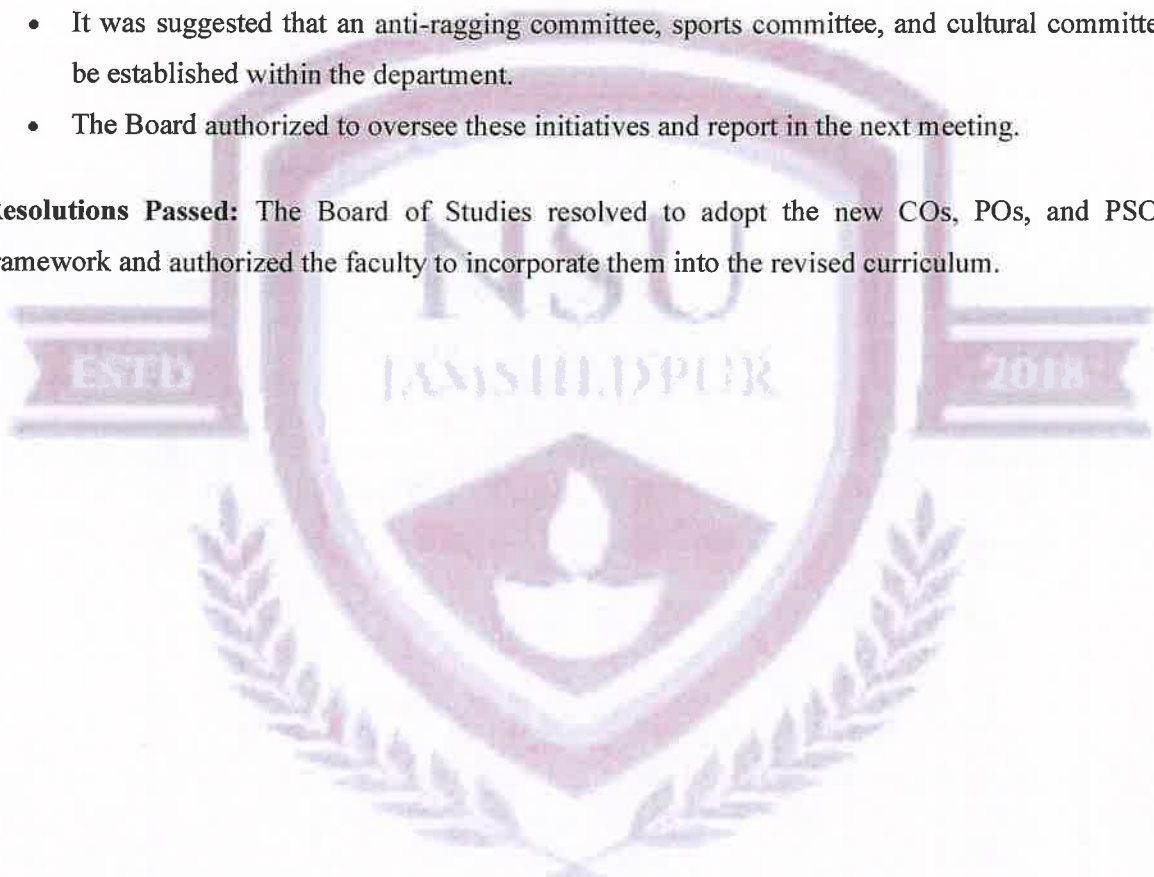
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Date : 13/11/2018

4. Other Academic Matters:

- The Board recommended organizing seminars, workshops, and industry interactions to enhance student learning.
- It was suggested that an anti-ragging committee, sports committee, and cultural committee be established within the department.
- The Board authorized to oversee these initiatives and report in the next meeting.

Resolutions Passed: The Board of Studies resolved to adopt the new COs, POs, and PSOs framework and authorized the faculty to incorporate them into the revised curriculum.





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Estd. Under Jharkhand State Private University Act, 2018
(A Unit of Sister's Devi Mahatai Mahila Mahavidyalaya)

Ref. No. : NSU/39A/2018

Date : 13/11/2018

S.No	Members	Designation	Signature
1	Dr. M.K.Sinha	HOD (Botany) , Chairman	
2	Dr.Vijay Kant Pandey	HOD , Department of Agriculture , Sainath University , Jharkhand (External Member)	
3	Mr. Om Prakash Sharma	Controller of Examination, NSU, Invitee Member	
4	Mr. Amit Prasad	Sriamulya Organic, Industry person	
5	Mr. Ganesh Prasad	Technology Resource Communication Service Centre, Industry person	
6	Prof. D Shome	Dean Academics, NSU, Invitee Member	
7	Mr Srimanta Santra	Associate Professor, NSU, Member	
8	Mr.Sumit Kumar Mahato	Assistant Professor-Member, NSU, Member	

Dean Academics
Netaji Subhas University
Jamshedpur

Chairman (BOS)
Netaji Subhas University
Jamshedpur





NETAJI SUBHAS UNIVERSITY JAMSHEDPUR

Estd. Under Jharkhand State Private University Act, 2018

(A Unit of Sitaramo Devi Mahila Kalyan Samithi)

Ref. No. : MSU/39/2018

Date : 13/11/2018

BOARD OF STUDIES IN DEPARTMENT OF ZOOLOGY

Minutes of Board of Studies Meeting

Date: 13-11-2018

Time: 2.00 PM

A meeting of Board of Studies has been organized on 13-11-2018 at Department of Zoology, Netaji Subhas University, Jamshedpur, and Jharkhand. The meeting shall be chaired by Mr. Sumit Kumar Mahato, and Board of Studies of Department of Zoology.

The Board of Studies has been constituted as per Statute No. – 32, Clause (ii) of Netaji Subhas University, Jamshedpur. It consists of following members:

1. Mr. Sumit Kumar Mahato – HOD (Zoology) - Chairman *MSM*
2. Dr. Bimlendu Kumar Roy (External Member) – Department of Life Sciences, SaiNath University, Ranchi *B Roy*
3. Ms. Shweta Mishra - Assistant Professor-Member *Shweta*
4. Ms. Jyoti Kumari - Assistant Professor-Member *Jyoti Kumari*
5. Mr. Om Prakash Sharma, Controller of Examination, NSU Invitee Member *Opur*
6. Prof. D Shome – Dean Academics, NSU, Invitee Member
7. Mr. Amit Prasad (Sriamulya Organic) - Industry person *Amit*
8. Mr. Ganesh (Technology Resource Communication Service Centre) - Industry person *Ganesh Prasad*

Head
Department of Zoology
Netaji Subhas University





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(A Unit of Saranto Devi Mahila Kalyan Sansthan)

Ref. No. : _____

Date : 13/11/2018

At the onset, the Chairman welcomed the new members of the Board of Studies and placed the agenda for the deliberation. The following deliberations were made as per the circulated agenda:

Agenda:

1. Confirmation of previous meeting minutes
2. Incorporation of Course Outcomes (COs), Program Outcomes (POs), and Program Specific Outcomes (PSOs)
3. Approval of syllabus and examination patterns

Deliberations and Resolutions:

1. Confirmation of Previous Meeting Minutes:

The members confirmed and approved the minutes of the last Board of Studies meeting.

2. Incorporation of Course Outcomes (COs), Program Outcomes (POs), and Program Specific Outcomes (PSOs):

The Board discussed the need to clearly define and incorporate COs, POs, and PSOs into the academic framework to align with national education standards and accreditation requirements.

Program Outcomes (POs): Upon completion of the program, students will be able to:

1. Demonstrate fundamental knowledge of botany, including Animal diversity, physiology, and Ecology .
2. Apply scientific principles to analyze and solve biological problems.
3. Conduct research using modern scientific techniques and methodologies.
4. Communicate scientific concepts effectively through written and verbal means.



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Ref. No. : _____

Date : 13/11/2018/

5. Exhibit ethical responsibility and sustainable environmental practices in the field of Zoology.
6. Develop critical thinking and problem-solving skills relevant to biological sciences.
7. Engage in lifelong learning and interdisciplinary collaboration.

Program Specific Outcomes (PSOs): Upon completion of the Zoology program, students will be able to:

1. Identify, classify, and analyze various Animal species and their ecological interactions.
2. Apply biotechnological tools and techniques in Animal science research.
3. Assess the impact of environmental changes on Animal physiology and biodiversity conservation.
4. Implement sustainable habitat and zoological practices using scientific methods.

Course Outcomes (COs): Each course will have clearly defined outcomes aligning with the above-mentioned POs and PSOs. The faculty will develop COs for all courses, and these will be reviewed and approved in the next Board of Studies meeting.

The Board resolved that a committee comprising Mr. Sumit Kumar Mahato (Chairman), Dr Bimelendu Kumar Roy (External member), Mr .Amit Prasad(Industry person)Mr. Ganesh Prasad,(Industry person), Ms Jyoti Kumari(Member)and Ms Sweta Kumari (Member)will finalize the COs for each subject and ensure their integration into the syllabus.

3. Revision of Syllabus and Examination Patterns:

The Board approved modifications to the B.Sc. (Hons) and M.Sc. Zoology syllabus. The evaluation pattern for B.Sc. Zoology and M.Sc. Zoology was reconfirmed, ensuring internal assessments and end-semester examinations align with the revised curriculum.



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(A Unit of Swarnato Devi Shiksha Kalyan Sansthan)

Ref. No. : _____

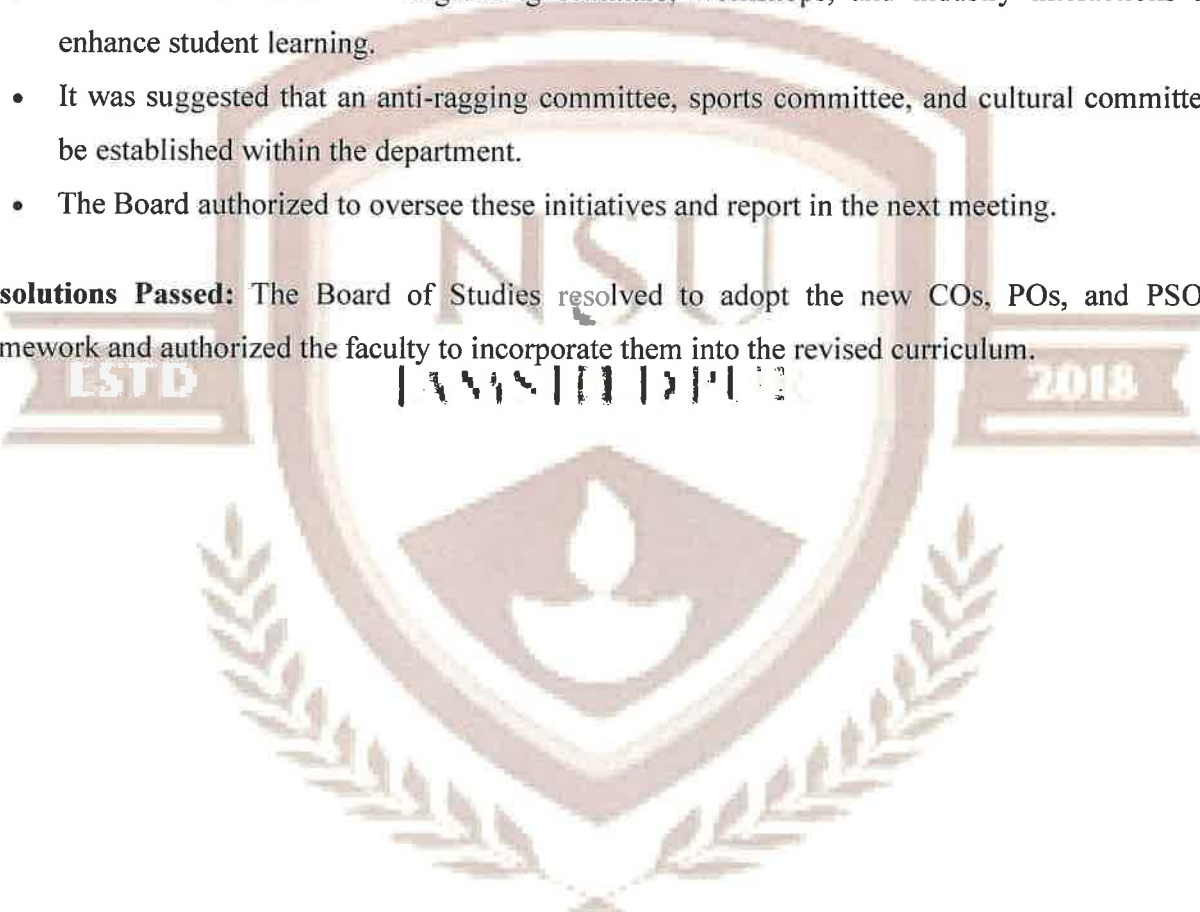
Date : 13/11/2018

- The Board agreed to incorporate skill-based modules and practical training sessions.

4. Other Academic Matters:

- The Board recommended organizing seminars, workshops, and industry interactions to enhance student learning.
- It was suggested that an anti-ragging committee, sports committee, and cultural committee be established within the department.
- The Board authorized to oversee these initiatives and report in the next meeting.

Resolutions Passed: The Board of Studies resolved to adopt the new COs, POs, and PSOs framework and authorized the faculty to incorporate them into the revised curriculum.





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(A Unit of Sarwan Devi Mahila Kalyan Samithi)

Ref. No. :

Date : 13/11/2018 .

S.No	Members	Designation	Signature
1	Mr. Sumit Kumar Mahato	HOD (Zoology) , Chairman	
2	Dr. Bimelendu Kumar Roy	HOD , Department of Life sciences, Sainath University , Jharkhand(External Member)	
3	Mr. Om Prakash Sharma	Controller of Examination, NSU, Invitee Member	
4	Ms Sweta Mishra	Assistant Professor	
5	Ms Jyoti Kumari	Assistant Professor	
6	Prof. D Shome	Dean Academics, NSU, Invitee Member	
7	Mr. Ganesh	Technology Resource Communication Service Centre Industry person	
8	Mr. Amit Prasad	Industry Person (Sriamulya Organic)	

Chairman
Netaji Subhas University
Jamshedpur

Dean Academics
Netaji Subhas University
Jamshedpur

Head
Department of Zoology
Netaji Subhas University

