Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

THEORY COURSE FILE CONTENTS

Check list Course Outcomes Attainment

S. No.	Contents	Available (Y/N/NA)	Date of Submission	Signature of HOD
1.	Authenticated Syllabus Copy	Y	22/04/2021	
2.	Individual Time Table	Y		
3.	Students' Name List (Approved Copy)	Y		
4.	Course Plan, PO, PSO, COs, CO-PO Mapping, COA Plan, Session Plan and Periodic Monitoring	Y		
5.	Previous Year End Semester Question Papers	Not Available		
6.	Question Bank (All Units - Part A, Part B & C)	Y		
7.	Dissemination of Syllabus and Course Plan to Students	Y		
8.	Lecture Notes - Unit I, II, III & IV	Y		
9.	**Sample Documents and Evaluation Sheet for Internal Assessment** – Tutorials / Assignments / Class Test / Open Book Test / Quiz / Project / Seminar / Role Play if any (Before Mid Term)	Y		
10.	**Mid Term Examination** A. Question Paper / Any Other Assessment Tools Used B. Sample Answer Scripts (Best, Average, Poor) if required C. Evaluation Sheet D. Slow Learners List and Remedial Measures	Y	19/05/2021	
11.	Lecture Notes – Unit IV & V	Y		
12.	**Sample Documents and Evaluation Sheet for Internal Assessment** – Tutorials / Assignments / Class Test /Open Book Test / Quiz / Project / Seminar / Role Play if any (After Mid Term)	Y	21/06/2021 30/06/2021 15/06/2021 19/06/2021	
13.	Course End Survey (Indirect Assessment) & Consolidation	Y		
14.	**End Term Examination** A. Question Paper & Answer Key B. Sample Answer Scripts (Best, Average, Poor) if required	Y	12/08/2021	

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

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C: 0

	C. Evaluation Sheet **D.** Slow Learners List and Remedial Measures.			
15.	Content Beyond the Syllabus (Proof)	N		
16.	Innovative Teaching Tools Used for TLP	N		
17.	Details of Visiting Faculty Session / Industry Expert / Guest Lecture / Seminar / Field Visit / Webinars / Flipped Class Room / Blended Learning / Online Resources etc.	N		
18.	Consolidated Mark Statement	Y		
19.	CO Attainment (Mid Term + Internal Assessment + End Term)	Y		
20.	Gap Analysis & Remedial Measures	Y		
21.	CO - PO Attainment	Y		
22.	Class Record (Faculty Logbook)	Y		

Signature of HOD/ Dean **Signature of Faculty**

Date: **Date:** 29/08/2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

Syllabus Copy

Course Code: ENV21013	Course Name:Env Impact Assessment	L	T	P	C
Version 1.0		3	0	0	0
Pre-requisites/Exposure	Overview on environmental legislation and acts				
Co-requisites	Role of pollution control boards				

Course Objectives

- To provide an overview on environmental legislation and acts applicable for environmental pollution.
- To facilitate understanding on role of pollution control boards and their procedure.
- To facilitate understanding of various aspects related to EIA processes.

Course Content

UNIT I: **10 Lecture Hours**

Definition of Terms: Conventions and protocols; Policy; law; acts and rules; Administrative and legal interpretations; Codes and specifications.

Overview of Environmental Legislation: Overview of Indian environmental law; Pollution control boards – Powers; functions and Procedures.

Unit II: **11 Lecture Hours**

Provisions of: Water Act; Water-cess Act; Air Act; Environmental Protection Act;

Public Liability Insurance Act as Applicable to Industry: Provisions relating to Environmental clearance; Environmental sampling, analysis and reporting of results; Environmental standards; Overview of other key environmental regulations- Municipal solid waste rules; Biomedical waste rules; Hazardous waste, microorganisms, and chemicals rules;

.

Unit III: **12 Lecture Hours**

Legal Aspects of EIA: EIA notification; Environmental clearance process - Screening; scoping; public consultation and appraisal; Objectives and scope of EIA; EIA process flow chart.

.

Unit IV: **9 Lecture Hours**

EMP (Environmental Management Plan) and EIA Documentation: Principles and Elements of approach; identification and mitigation of environmental impacts: types and structure of EIA documents.

Reference Books

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
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C: 0

1. CPCB, Pollution Control Law Series - PCL/2/2001; Central Pollution Control Board (http://envfor.nic.in/cpcb/cpcb.html).
2. Jain R and Clark A, Environmental Technology Assessment and Policy; Ellis Harwood (1989)
3. EIA notification, Gazette Notification: SO 1533 dated 14-09-2006; MOEF. GOI (2006).

Faculty Individual Time Table

ADAMAS UNIVERSITY, KOLKATA

SCHOOL OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

Programme: M. Tech (Environmental Engineering)

Course Code & Course: ENV21013 & Environmental Impact Assessment
Faculty Coordinator: Bidhan Ghosh

Day & Time	9:30-10:25	10:30-11:25	11:30-12:25	12:25-13:30	13:30-14:25	14:30-15:25	15:30-16:25	16:30-17:25	17:30-18:25
Monday				LUNCH BREAK		Env. Impact Assessment			
Tuesday									
Wednesday					Env. Impact Assessment				
Thursday		Env. Impact Assessment							
Friday									
Saturday									

Signature of HOD **Signature of Class Coordinator**

Date: **Date:**

Students Name List

Year: I

Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

Roll Number	Registration Number	Name of the Student
PG/02/MTEVE/2020/002	AU/2020/0004499	Srija SinhaRoy
PG/02/MTEVE/2020/004	AU/2020/0004460	Susmita Pandit
PG/02/MTEVE/2020/003	AU/2020/0004454	Sumit Kumar Khan
PG/02/MTEVE/2020/001	AU/2020/0004291	Snehashis Ghosh

Signature of HOD/Dean

Date:

Signature of Class Coordinator

Date:

COURSE PLAN

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

Target	60% (marks)
Level-1	50% (population)
Level-2	60% (population)
Level-3	70% (population)

1. Method of Evaluation

UG	PG
Internal Assessment (30%) (Quizzes/Tests, Assignments & Seminars etc.)	Internal Assessment (30%) (Quizzes/Tests, Assignments & Seminars etc.)
Mid Semester Examination (20%)	Mid Semester Examination (20%)
End Semester Examination (50%)	End Semester Examination (50%)

*Keep as per Program (UG/PG)

2. Passing Criteria

Scale	PG	UG
Out of 10 Point Scale	CGPA – "5.00" Min. Individual Course Grade – "C" Passing Minimum – 40	CGPA – "5.00" Min. Individual Course Grade – "C" Passing Minimum – 35

*Keep as per Program (UG/PG)

3. Pedagogy

- **Direct Instruction**
- Kinesthetic Learning
- **Flipped Classroom**
- Differentiated Instruction
- Expeditionary Learning
- Inquiry Based Learning
- Game Based Learning
- Personalized Learning

4. Topics introduced for the first time in the program through this course

- (New Topics Related to this Course – Syllabus Revision if any/Content Beyond Syllabus)

5. References:

Text Books	Web Resources	Journals	Reference Books
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Signature of HOD/Dean **Signature of Faculty**

Date: **Date:**29/08/2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7.	**Course**	**: Environmental Impact Assessment**	**L:3**
8.	**Program**	**: M. Tech (Environmental Engineering)**	**T: 0**
9.	**Target**	**: 60%**	**P: 0**
			C: 0

GUIDELINES TO STUDY THE SUBJECT

Instructions to Students:

1. Go through the 'Syllabus' in the LMS in order to find out the Reading List.
2. Get your schedule and try to pace your studies as close to the timeline as possible.
3. Get your on-line lecture notes (Content, videos) at Lecture Notes section. These are our lecture notes. Make sure you use them during this course.
4. check your LMS regularly
5. go through study material
6. check mails and announcements on blackboard
7. keep updated with the posts, assignments and examinations which shall be conducted on the blackboard
8. Be regular, so that you do not suffer in any way
9. C**ell Phones and other Electronic Communication Devices:** Cell phones and other electronic communication devices (such as Blackberries/Laptops) are not permitted in classes during Tests or the Mid/Final Examination. Such devices MUST be turned off in the class room.
10. **E-Mail and online learning tool:** Each student in the class should have an e-mail id and a pass word to access the LMS system regularly. Regularly, important information – Date of conducting class tests, guest lectures, via online learning tool. The best way to arrange meetings with us or ask specific questions is by email and prior appointment. All the assignments preferably should be uploaded on online learning tool. Various research papers/reference material will be mailed/uploaded on online learning platform time to time.
11. **Attendance:** Students are required to have minimum attendance of 75% in each subject. Students with less than said percentage shall NOT be allowed to appear in the end semester examination.

This much should be enough to get you organized and on your way to having a great semester! If you need us for anything, send your feedback through e-mail somendranath.roy@adamasuniversity.ac.in Please use an appropriate subject line to indicate your message details.

There will no doubt be many more activities in the coming weeks. So, to keep up to date with all the latest developments, please keep visiting this website regularly.

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

RELATED OUTCOMES

1. The expected outcomes of the Program are:

PO1	Domain Knowledge: Apply comprehensive knowledge of theories, concepts and principles for effective control and management of construction industry projects.
PO2	Problem Analysis & Design: Identify and analyze the strategic importance of construction projects and its problems in the perspectives of client, context and constraints and obtain solution using mathematics, engineering and management principles.
PO3	Design/Development of Solutions: Planning, scheduling, and control of construction projects by managing resources and constraints with appropriate consideration for the public health and safety, and the cultural, societal, and economical considerations.
PO4	Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern IT prediction and simulation tools for construction projects.
PO6	Project Management, Governance and Finance: Create comprehensive understanding of the techniques associated with the management of resources and finance, assessment and management of risk and subsequent corporate governance as appropriate to a project manager operating in the construction industry.
PO7	Ethics and Environment: Understand the impact of residential, commercial, industrial and infrastructural projects in societal, ethical and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO9	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO10	Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
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C: 0

2. The expected outcomes of the Specific Program are: (up to 3)

PSO1	PG itself is a specific specialization program. Henceforth, no PSO is required.
PSO2	
PSO3	

3. **The expected outcomes of the Course are: (minimum 4 and maximum 6)**

CO1	**Outline** the environmental legislation, environmental policies of the country and of the international environmental conventions and protocols.
CO2	**Infer** the environmental regulations applicable to the industry and other organizations with significant environmental aspects.
CO3	**Identify** environmental requirements applicable to the environmental impact assessment and about the environmental clearance process of developmental projects.
CO4	**Understand** the methods and tools of identification, prediction and evaluation of environmental impacts of developmental projects.

4. Co-Relationship Matrix
Indicate the relationships by 1- Slight (Low) 2- Moderate (Medium) 3-Substantial (High)

Program Outcomes / Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	3	3	3	3	-	-	3	3	-	3
CO2	3	3	3	3	-	-	3	3	-	3
CO3	3	3	3	3	-	-	3	3	-	3
CO4	3	3	3	3	-	-	3	3	-	3
CO5	3	3	3	3	-	-	3	3	-	3
Average	3	3	3	3	-	-	3	3	-	3

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

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9. **Target** : **60%** **P: 0**
C: 0

5. **Course Outcomes Assessment Plan (COA):**

Course Outcomes	Internal Assessment* (30 Marks)		Mid Term Exam (20 Marks)	End Term Exam (50 Marks)	Total (100 Marks)
	Before Mid Term	After Mid Term			
CO1	5	NA	7	8	20
CO2	5	NA	7	8	20
CO3	3	3	6	8	20
CO4	NA	7	NA	13	20
CO5	NA	7	NA	13	20
Total	13	17	20	50	100

* Internal Assessment – Tools Used: Tutorial, Assignment, Seminar, Class Test etc.

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

OVERVIEW OF COURSE PLAN OF COURSE COVERAGE

Course Activities:

S. No.	Description	Planned			Actual			Remarks
		From	To	No. of Session	From	TO	No. of Session	
1.	Definition of Terms & overview of Environmental Legislation	05.04.2021	29.04.2021	10	06.04.2021	02.06.2021	10	
2.	Provisions of different acts	31.04.2021	27.05.2021	11	09.06.2021	28.07.2021	11	
3.	Different Legal Aspects of EIA	02.06.2021	28.06.2021	12	03.06.2021	12.07.2021	12	
4.	EMP (Environmental Management Plan) and EIA Documentation	30.06.2021	29.07.2021	12	30.06.2021	29.07.2021	12	

Total No. of Instructional periods available for the course: 45 Sessions

Signature of HOD/Dean — **Signature of Faculty**

Date: — **Date: 29.08.2021**

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

SESSION PLAN
UNIT-I

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	01.04.2021	Conventions and protocols	CO1	1	07.04.2021	Conventions and protocols	CO1
2	05.04.2021	Policies & laws	CO1	1	14/04.2021	Policies & laws	CO1
3	07.04.2021	Policies & laws	CO1	1	14/04.2021	Policies & laws	CO1
4	08.04.2021	Policies & laws	CO1	1	21.04.2021	Policies & laws	CO1
5	12.04.2021	Acts and Rules	CO1	1	28.04.2021	Acts and Rules	CO1
6	19.04.2021	Acts and Rules	CO1	1	29.04.2021	Acts and Rules	CO1
7	21.04.2021	Administrative and legal interpretations	CO1	2	05.05.2021	Administrative and legal interpretations	CO1
8	22/26.04.2021	Overview of Indian environmental law	CO1	1	12.05.2021	Overview of Indian environmental law	CO1
9	28.04.2021	Codes and specifications	CO1	1	19.05.2021	Codes and specifications	CO1
10	29.04.2021	Powers, functions and Procedures under pollution control board	CO1	1	02.06.2021	Powers, functions and Procedures under pollution control board	CO1

Year: I

Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

Remarks:

Signature of Faculty

Date: 29.08.2021

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

SESSION PLAN
UNIT-II

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	31.04.2021	Water Act	CO2	2	09.06.2021	Water Act	CO2
2	05.05.2021	Water Act	CO2	1	16.06.2021	Water Act	CO2
3	06.05.2021	Water-cess Act	CO2	1	23.06.2021	Water-cess Act	CO2
4	10.05.2021	Air Act	CO2	1	30.06.2021	Air Act	CO2
5	12.05.2021	Air Act	CO2	1	31.06.2021	Air Act	CO2
6	13.05.2021	Environmental Protection Act	CO2	1	07.07.2021	Environmental Protection Act	CO2
7	17.05.2021	Environmental Protection Act	CO2	1	09.07.2021	Environmental Protection Act	CO2
8	19.05.2021	Provisions relating to Environmental clearance	CO2	1	14.07.2021	Provisions relating to Environmental clearance	CO2
9	20.05.2021	Environmental sampling, analysis and reporting of results	CO2	2	21.07.2021	Environmental sampling, analysis and reporting of results	CO2
10	24.05.2021	Overview of other key environmental regulations	CO2	1	27.07.2021	Overview of other key environmental regulations	CO2

Year: I

Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

11	27.05.2021	Overview of other key environmental regulations	CO2	1	28.07.2021	Overview of other key environmental regulations	CO2

Remarks:

Signature of Faculty

Date: 29.08.2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

SESSION PLAN
UNIT-III

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	02.06.2021	EIA notification	CO3	1	02.06.2021	Topics to be Covered	CO3
2	03.06.2021	EIA notification	CO3	1	03.06.2021	EIA notification	CO3
3	07.06.2021	EIA notification	CO3	1	07.06.2021	EIA notification	CO3
4	09.06.2021	Environmental clearance process	CO3	1	09.06.2021	EIA notification	CO3
5	10.06.2021	Environmental clearance process	CO3	1	10.06.2021	Environmental clearance process	CO3
6	14.06.2021	Environmental clearance process	CO3	1	14.06.2021	Environmental clearance process	CO3
7	16.06.2021	Objectives and scope of EIA	CO3	1	16.06.2021	Environmental clearance process	CO3
8	17.06.2021	Objectives and scope of EIA	CO3	1	17.06.2021	Objectives and scope of EIA	CO3

Year: I

Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

9	21.06.2021	Objectives and scope of EIA	CO3	1	21.06.2021	Objectives and scope of EIA	CO3
10	23.06.2021	EIA process flow chart	CO3	1	23.06.2021	Objectives and scope of EIA	CO3
11	24.06.2021	EIA process flow chart	CO3	1	24.06.2021	EIA process flow chart	CO3
12	28.06.2021	EIA process flow chart	CO3	1	28.06.2021	EIA process flow chart	CO3

Remarks:

Signature of Faculty

Date: 29.08.2021

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

SESSION PLAN
UNIT-IV

Session Plan				Actual Delivery			
Lect.	Date	Topics to be Covered	CO Mapped	Lect.	Date	Topics Covered	CO Achieved
1	30.06.2021	Principles and Elements of approach	CO4	1	30.06.2021	Principles and Elements of approach	CO4
2	01.07.2021	Principles and Elements of approach	CO4	1	01.07.2021	Principles and Elements of approach	CO4
3	05.07.2021	Principles and Elements of approach	CO4	1	05.07.2021	Principles and Elements of approach	CO4
4	08.07.2021	Principles and Elements of approach	CO4	1	08.07.2021	Principles and Elements of approach	CO4
5	12.07.2021	Principles and Elements of approach	CO4	1	12.07.2021	Principles and Elements of approach	CO4
6	14.07.2021	Principles and Elements of approach	CO4	1	14.07.2021	Principles and Elements of approach	CO4
7	15.07.2021	Principles and Elements of approach	CO4	1	15.07.2021	Principles and Elements of approach	CO4
8	19.07.2021	Principles and Elements of approach	CO4	1	19.07.2021	Principles and Elements of approach	CO4
9	22.07.2021	Principles and Elements of approach	CO4	1	22.07.2021	Principles and Elements of approach	CO4
10	26.07.2021	Types and structure of EIA documents.	CO4	1	26.07.2021	Types and structure of EIA documents.	CO4
11	28.07.2021	Types and structure of EIA documents.	CO4	1	28.07.2021	Types and structure of EIA documents.	CO4

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

12	29.07.2021	Types and structure of EIA documents.	CO4	1	29.07.2021	Types and structure of EIA documents.	CO4

Remarks:

Signature of Faculty

Date: 29.08.2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

PERIODIC MONITORING

Actual date of completion and remarks, if any

Components		From	To	From	To
Duration (Mention from and to Dates)		05.04.2021	27.05.2021	02.06.2021	29.07.2021
Percentage of Syllabus covered		50%		50%	
Lectures	Planned	1	23	24	45
	Taken				
Tutorials	Planned	NA			
	Taken				
Test/Quizzes/ Mid Semester/ End Semester	Planned	1	1 (MID)	1	1 (END)
	Taken				
	CO's Addressed	CO1 & CO2	CO1, CO2 & CO3	CO4	CO1, CO2, CO3, CO4
	CO's Achieved				
Assignments	Planned	1	1		1
	Taken				
	CO's Addressed	CO1 & CO2	CO3	CO3	CO4
	CO's Achieved				
Signature of Faculty					
Head of the Department					
OBE Coordinator					

Signature of HOD/ Dean

Date

Signature of Faculty

Date 29.08.2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

PERIODIC MONITORING

Attainment of the Course (Learning) Outcomes:

Components	Attainment level	Action Plan	Remarks
Assignment	CO1:	Submission Target 16.05.2021	Assignment Questions covered Definition of Terms & overview of Environmental Legislation
	CO2:		
	CO3:	Submission Target 25.06.2021	Assignment Questions covered Provisions of different acts
	CO4:	Submission Target 30.07.2021	Assignment Questions covered Different Legal Aspects of EIA
Quiz/Test etc.	CO1:	Conducted on 15.05.2021	Provisions of different acts
	CO2:		
	CO3:	----	
	CO4:	Conducted on 28.07.2021	Different Legal Aspects of EIA
Mid Semester	CO1:	Scheduled on	Question bank given to understand pattern
	CO2:		
	CO3:		
	CO4:	-----	
End Semester	CO1:	Scheduled on	Question bank given to understand pattern
	CO2:		
	CO3:		
	CO4:		
Any Other	CO1:	NA	
	CO2:		
	CO3:		
	CO4:		

Signature of HOD/ Dean — Signature of Faculty

Date — Date 29.08.2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

Previous Year Question Papers

[Not Available]

Question Bank Sample

School: SOET — **Department: CE**
Course Code: ENV21013 — **Course Name: Environmental Impact Assessment**
Program: M. Tech. — **Semester: II**

Sl. No.	Question	Level of Difficulty (Easy/ Medium / Difficult)	Knowledge Level (Bloom's Taxonomy)	Course Outcome (CO)
	Part A (Multiple Choice Questions) (1 mark each)			
1.	GIS is applied to study (A) View shed analysis (B) Environmental Impact Assessment (C) Wildlife habitat analysis and migration routes planning (D) All of the above	**Easy**	R	CO1
2.	The validity period of Environmental Clerance after Environmental Impact Assessment is least for (A) Mining projects	**Easy**	U	CO2

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

	(B) River valley projects (C) Harbour projects (D) Area development projects			
3.	In Environmental assessment study, interpretation and evaluation should consider (A) Uncertainty of possible impacts (B) Significance of measured impacts (C) Comparison of alternatives (D) All of the above	**Easy**	U	CO2
4.	Who are responsible for the public consultation process of EIA? (A) State Pollution Control Board (B) State Pollution Control Board and District Collector (C) State Pollution Control Board and CPCB Chairman (D) State Pollution Control Board and Civil Society	**Medium**	U	CO3
5.	Arrange the following components of an environmental management system in a sequential order. Choose the correct answer from the codes given below: I. Planning II. Environmental policy III. Implementation IV. Monitoring	**Medium**	R	CO3

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

	V. Review Codes: (A) I, II, III, V, IV (B) II, I, III, IV, V (C) I, III, II, IV, V (D) I, V, III, II, IV			
6.	A core part of Impact Management is developing an EMP –environmental management plan. Please indicate which items from the list below are contents of the EMP. a. Mitigation b. Monitoring c. Capacity Development d. Implementation Schedule and Cost Estimates e. Contingency plans f. Above all.	**Medium**	R, U	CO4
7.	What kind of monitoring is referred to when we speak of monitoring a development project? a. Monitoring indicators that measure the impacts on the environment and communities as a result of the development project. b. Ensuring the fulfillment of all the commitments made in the approved EIA. c. Keeping track of changes that may happen in the environment and communities because of the project and other local and/or global changes, such as changes in livelihoods due to economic crisis or migration, differences in water availability due to drought, etc. d. Above all.	**Difficult**	U, Ap	CO4
	Part B (Definition/Naming Questions) (2 marks each)			
1.	What are the important components of EIA?	**Easy**	R	CO1
2.	What is the need for EIA in developed countries?	**Medium**	U	CO2

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

3.	What are ecologically sensitive areas?	**Difficult**	U	CO4
Part C (Short Questions) (3-4 marks each)				
1.	What are the objectives behind EIA studies?	**Easy**	R	CO2
2	What is the relation between EIA and sustainable development?	**Easy**	U, Ap	CO1
3.	Discuss the role of expert judgments in EIA studies.	**Easy**	R	CO2
4.	What are sectorial guidelines for EIA studies?	**Medium**	U	CO4
5.	What are the core aspects of the systematic sequential approach?	**Medium**	U	CO3
6.	How Networks methods are useful for EIA studies?	**Medium**	R, U	CO2
7.	What are the Models for impact predictions?	**Difficult**	R, U	CO4
8.	What is a general checklist of environmental impacts?	**Difficult**	R	CO3
9.	Write an account on the principles of a disaster management plan for industries?	**Difficult**	U	CO2
Part D (Explanation Based Questions) (5 marks each)				
1.	Which aspects considered under the review of the environmental management plan?	**Easy**	R	CO2
2.	Discuss the importance of field visits in EIA studies.	**Easy**	U	CO3
3.	Explain the importance of ISO 14000 for industries.	**Medium**	U	CO1
4.	Discuss the drawbacks of EIA process in India.	**Medium**	U	CO2
5.	Add a note on the checklist for energy conservation as per EIA notification.	**Difficult**	Ap	CO4
6.	What is the scope of EIA studies in relevance to developing countries?	**Difficult**	U	CO4
Part E (Questions Based on Reasoning) (5 marks each)				
1.	Explain the evolution of EIA practices throughout the world.	**Easy**	R	CO2
2.	What are the general requirements for environmental audit under Rule 14, Form V of Environment	**Easy**	U	CO2

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

	(Protection) Act, 1986?			
3.	Discuss the salient features of the coastal management zone notification.	**Medium**	U	CO1
4.	Explain any five methods of monitoring and analysis of samples?	**Medium**	U, Ap	CO2
5.	Discuss the guidelines given by MoEFCC on methodologies used in EIA studies?	**Difficult**	Ap	CO3
6.	What the various ways for impact mitigation measures?	**Difficult**	U, R	CO4
Part F (Application Based Questions) (5-10 marks each)				
1.	Explain the requirements for accreditation of EIA consultants?	**Easy**	R	CO2
2.	What is the Leopold matrix? How is it formed to assess impacts?	**Easy**	U	CO3
3.	Which aspects are considered under the checklist of impacts for the water environment?	**Medium**	U	CO2

School: SOET — **Department: CE**
Course Code: ENV21013 — **Course Name: Environmental Impact Assessment**
Program: M. Tech. — **Semester: II**

Sl. No.	**Question**	**Level of Difficulty (Easy/ Medium / Difficult)**	**Knowledge Level (Bloom's Taxonomy)**	**Course Outcome (CO)**
Part A (Multiple Choice Questions) (1 mark each)				
1.	GIS is applied to study (A) View shed analysis (B) Environmental Impact Assessment	**Easy**	R	CO1

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

	(C) Wildlife habitat analysis and migration routes planning (D) All of the above			
2.	The validity period of Environmental Clerance after Environmental Impact Assessment is least for (A) Mining projects (B) River valley projects (C) Harbour projects (D) Area development projects	**Easy**	U	CO2
3.	In Environmental assessment study, interpretation and evaluation should consider (A) Uncertainty of possible impacts (B) Significance of measured impacts (C) Comparison of alternatives (D) All of the above	**Easy**	U	CO2
4.	Who are responsible for the public consultation process of EIA? (A) State Pollution Control Board (B) State Pollution Control Board and District Collector (C) State Pollution Control Board and CPCB Chairman (D) State Pollution Control Board and Civil Society	**Medium**	U	CO3

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

5.	Arrange the following components of an environmental management system in a sequential order. Choose the correct answer from the codes given below: I. Planning II. Environmental policy III. Implementation IV. Monitoring V. Review Codes: (A) I, II, III, V, IV (B) II, I, III, IV, V (C) I, III, II, IV, V (D) I, V, III, II, IV	**Medium**	R	CO3
6.	A core part of Impact Management is developing an EMP –environmental management plan. Please indicate which items from the list below are contents of the EMP. a. Mitigation b. Monitoring c. Capacity Development d. Implementation Schedule and Cost Estimates e. Contingency plans f. Above all.	**Medium**	R, U	CO4
7.	What kind of monitoring is referred to when we speak of monitoring a development project? a. Monitoring indicators that measure the impacts on the environment and communities as a result of the development project. b. Ensuring the fulfillment of all the commitments made in the approved EIA. c. Keeping track of changes that may happen in the	**Difficult**	U, Ap	CO4

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

	environment and communities because of the project and other local and/or global changes, such as changes in livelihoods due to economic crisis or migration, differences in water availability due to drought, etc. d. Above all.			
	Part B (Definition/Naming Questions) (2 marks each)			
1.	What are the important components of EIA?	**Easy**	R	CO1
2.	What is the need for EIA in developed countries?	**Medium**	U	CO2
3.	What are ecologically sensitive areas?	**Difficult**	U	CO4
	Part C (Short Questions) (3-4 marks each)			
1.	What are the objectives behind EIA studies?	**Easy**	R	CO2
2	What is the relation between EIA and sustainable development?	**Easy**	U, Ap	CO1
3.	Discuss the role of expert judgments in EIA studies.	**Easy**	R	CO2
4.	What are sectorial guidelines for EIA studies?	**Medium**	U	CO4
5.	What are the core aspects of the systematic sequential approach?	**Medium**	U	CO3
6.	How Networks methods are useful for EIA studies?	**Medium**	R, U	CO2
7.	What are the Models for impact predictions?	**Difficult**	R, U	CO4
8.	What is a general checklist of environmental impacts?	**Difficult**	R	CO3
9.	Write an account on the principles of a disaster management plan for industries?	**Difficult**	U	CO2
	Part D (Explanation Based Questions) (5 marks each)			
1.	Which aspects considered under the review of the environmental management plan?	**Easy**	R	CO2
2.	Discuss the importance of field visits in EIA studies.	**Easy**	U	CO3
3.	Explain the importance of ISO 14000 for industries.	**Medium**	U	CO1

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

4.	Discuss the drawbacks of EIA process in India.	**Medium**	U	CO2
5.	Add a note on the checklist for energy conservation as per EIA notification.	**Difficult**	Ap	CO4
6.	What is the scope of EIA studies in relevance to developing countries?	**Difficult**	U	CO4
Part E (Questions Based on Reasoning) (5 marks each)				
1.	Explain the evolution of EIA practices throughout the world.	**Easy**	R	CO2
2.	What are the general requirements for environmental audit under Rule 14, Form V of Environment (Protection) Act, 1986?	**Easy**	U	CO2
3.	Discuss the salient features of the coastal management zone notification.	**Medium**	U	CO1
4.	Explain any five methods of monitoring and analysis of samples?	**Medium**	U, Ap	CO2
5.	Discuss the guidelines given by MoEFCC on methodologies used in EIA studies?	**Difficult**	Ap	CO3
6.	What the various ways for impact mitigation measures?	**Difficult**	U, R	CO4
Part F (Application Based Questions) (5-10 marks each)				
1.	Explain the requirements for accreditation of EIA consultants?	**Easy**	R	CO2
2.	What is the Leopold matrix? How is it formed to assess impacts?	**Easy**	U	CO3
3.	Which aspects are considered under the checklist of impacts for the water environment?	**Medium**	U	CO2

Internal Assessment/ Class Test [Unit: III & IV]

1st Assignment: Environmental Mitigation plan for Fishery project / Environmental Mitigation Plan for a Fruit Garden Project / Environmental Mitigation Plan on Mango farm /

2nd Assignment: According to earth's history today we are running through the forth era where up to 3rd era, they are destroyed or extinct by nature itself. But in

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course	**: Environmental Impact Assessment**	**L:3**
8. Program	**: M. Tech (Environmental Engineering)**	**T: 0**
9. Target	**: 60%**	**P: 0**
		C: 0

this 4th era, human being are involved and the extinction of 4th era either by nature itself or human being themselves - Explain the statement.

3rd Assignment: A car washing and lubricating company has been operating for several years (more than 10 years) in a terrain with the following characteristics: porous, filterable, with a frantic level near to the surface (1.5 m depth). The company is location is located close by to an estuary branch which is quite useful for them since they discharge all the disposal and waste generated by this activity directly into the estuary. The disposals contain a high level of oil and greases. All the dumping from the car maintenance goes directly into the soil since there are not palettes or gutters. The lubricating company operates for 20 hrs for 7 days per week. The municipality since the local people has complained has arranged the execution of an EIA and you are a part of it.

I. What type of professional will be part of the consultancy group performing the EIA? What will be the minimum that you can proposes?
II. Mention three environmental impact of this activity.

4th Assignment: **Case:** An important mining company has been operating for about 4 yrs in a coastal region. The mining activity of this company is very intense. This company has effectively implemented its EMP with great success, mitigating the environmental impacts caused by this activity. Up to date the results of the environmental auditory show up that this company completely fulfills all the legal requirements, laws and environmental standards established by the authorities. Since 1 yr this company is part of a trial against the community, which argues that after the company has started its mining activity in the zone, the quality of the water has been significantly deteriorated and that this company is operating in a protected area. The Company argues that it has relevant proofs in order to demonstrate that they have not polluted the environment but the others industries located in the zone. The mining company emphasizes that when they began the activities the environment was already polluted specially the water and that the quality standards of the water were not good at all.

Q**. (i) mention two environmental impacts this company might cause into the environment and 2 ways to mitigate this impacts that should be included in its EMP.**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course	**: Environmental Impact Assessment**	**L:3**
8. Program	**: M. Tech (Environmental Engineering)**	**T: 0**
9. Target	**: 60%**	**P: 0**
		C: 0

ASSIGNMENT – ENV21013 – UNIT I AND II

(Answer all of the questions)

1. Write down some important Powers of CPCB and SPCB in India. **(CO1)** (2+3)
2. Write down some important Codes and specifications related to Environment. Briefly discuss. **(CO1)** (5)
3. Briefly discuss about Water Cess Act, 1977. **(CO2)** (5)
4. Discuss about an overview of Public Liability Insurance Act, 1991. **(CO2)** (5)
5. What are Form 3, Form 8 and Form 9 as per Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016? Define hazardous chemical. **(CO2)** (3 + 2)
6. Define GMO. Discuss briefly about the Regulatory framework in India related to GMO. **(CO2)** (1 + 4)

CLASS TEST – ENV21013 – UNIT I AND II

(Answer all questions – 4 X 5)

1. Briefly discuss about 'The National Green Tribunal Act, 2010' as an 'Indian environmental law'. **(CO1)**
2. Discuss about the Functions of the SPCBs in India. **(CO1)**
3. Write down some important Provisions of Water (Prevention and Control of Pollution) Act, 1974. **(CO2)**
4. Write a short note on Environment (Protection) Act, 1986. **(CO2)**

Assessment Test Answer Script

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

	ADAMAS UNIVERSITY **MID-SEMESTER EXAMINATION** (Academic Session: 2020 – 21)		
Name of the Program:	M.Tech. (Environmental Engineering)	**Semester:**	II
Paper Title:	Environmental Impact Assessment	**Paper Code:**	ENV21013
Maximum Marks:	20	**Time Duration:**	2 Hrs
Total No. of Questions:	08	**Total No of Pages:**	02
(Any other information for the student may be mentioned here)	**1.** At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. **2.** All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. **3.** Assumptions made if any, should be stated clearly at the beginning of your answer.		

Group A
Answer All the Questions (5 x 1 = 5)

Q. No.	Question	Knowledge Level	Course Outcome
1	What is a convention related to Environment? Give example.	R	**CO1**
2	Define environmental policy?	R	**CO1**
3	What is Ramsar convention?	R	**CO1**
4	Arrange the following components of an environmental management system in a sequential order. Choose the correct answer from the codes given below: I. Planning II. Environmental policy	R	**CO3**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

	III. Implementation IV. Monitoring V. Review Codes: (A) I, II, III, V, IV (B) II, I, III, IV, V (C) I, III, II, IV, V (D) I, V, III, II, IV		
5	What kind of monitoring is referred to when we speak of monitoring a development project? **(a)** Monitoring indicators that measure the impacts on the environment and communities as a result of the development project. **(b)** Ensuring the fulfilment of all the commitments made in the approved EIA. **(c)** Keeping track of changes that may happen in the environment and communities because of the project and other local and/or global changes, such as changes in livelihoods due to economic crisis or migration, differences in water availability due to drought, etc. **(d)** Above all.	U, Ap	**CO3**
	Group B **Answer All the Questions (3 x 5 = 15)**		
6 a)	What is Kyoto Protocol? Briefly discuss.	R	**CO1**
	(OR)		
6 b)	Illustrate about Environmental laws related to pollution control.	U	**CO1**
7 a)	i) What are the important components of EIA? ii) Write schematically the EIA process.	U	**CO3**
	(OR)		
7 b)	i) Define EIA according to Sadler, 1996. ii) Write column wise the difference between Environmental Impact Assessment and Strategic Environmental Assessment.	R	**CO3**

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

8 a)	i) What is the need for EIA in developed countries? ii) What is the scope of EIA studies in relevance to developing countries?	U	**CO3**
	(OR)		
8 b)	Write note on screening and scoping as elements of EIA.	U	**CO3**

Evaluation Sheet – Internal Assessment

Roll Number	Registration Number	Name of the Student	Internal Assessment (30)				
			Assignment	Class Test	Case Study	etc.	Total
PG/02/MTEVE/2020/002	AU/2020/0004499	Srija SinhaRoy		29			29
PG/02/MTEVE/2020/004	AU/2020/0004460	Susmita Pandit		29			29
PG/02/MTEVE/2020/003	AU/2020/0004454	Sumit Kumar Khan		28			28
PG/02/MTEVE/2020/001	AU/2020/0004291	Snehashis Ghosh		28			28

Signature of HOD/Dean **Signature of Faculty**

Date: **Date: 29/08/2021**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

Evaluation Sheet – Mid Semester

Roll Number	Registration Number	Name of the Student	Marks (20)
PG/02/MTEVE/2020/002	AU/2020/0004499	Srija SinhaRoy	19
PG/02/MTEVE/2020/004	AU/2020/0004460	Susmita Pandit	19
PG/02/MTEVE/2020/003	AU/2020/0004454	Sumit Kumar Khan	19
PG/02/MTEVE/2020/001	AU/2020/0004291	Snehashis Ghosh	19

Signature of HOD/Dean

Date:

Signature of Faculty

Date: 29/08/2021

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

Planning for Remedial Classes – Mid Semester

Sl. No.	Name of Student	Roll No.	Reg. No.	Mid Sem Marks	Remedial Classes Held							Class test on the basis of Remedial Classes	End Sem Marks	Improvement (Y/N)
					Date									
					Venue									
					Time									
1.	Srija SinhaRoy	PG/02/MTEVE/2020/002	AU/2020/0004499	19										
2.	Susmita Pandit	PG/02/MTEVE/2020/004	AU/2020/0004460	19										
3	Sumit Kumar Khan	PG/02/MTEVE/20	AU/2020/0004454	19										

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

		20/003												
4	Snehashis Ghosh	PG/02/MTEV E/2020/001	AU/2020/0004291	19										

Signature of HOD/ Dean **Signature of Faculty**

Date: **Date: 29/08/2021**

End Semester Question Papers – Set A

ADAMAS UNIVERSITY PURSUE EXCELLENCE	**ADAMAS UNIVERSITY** **END SEMESTER EXAMINATION** (Academic Session: 2020 – 21)		
Name of the Program:	M.Tech. (Environmental Engineering)	**Semester:**	II
Paper Title:	Environmental Impact Assessment	**Paper Code:**	ENV21013
Maximum Marks:	50	**Time Duration:**	3 Hrs
Total No. of Questions:	17	**Total No of Pages:**	02
(Any other information for the student may be mentioned here)	**1.** At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. **2.** All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. **3.** Assumptions made if any, should be stated clearly at the beginning of your answer.		

Group A
Answer All the Questions (5 x 1 = 5)

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

		Knowledge Level	
1	What was the purpose of Montreal Protocol?	**R**	**CO1**
2	In which year Environment (Protection) Act was enacted?	**R**	**CO2**
3	EIA is defined as	**U**	**CO3**
4	How many countries have legislation on EIA?	**U**	**CO3**
5	SIA stands for	**R**	**CO4**
Group B **Answer All the Questions (5 x 2 = 10)**			
6 a)	What is Convention on Biological Diversity?	**R**	**CO1**
(OR)			
6 b)	What are the benefits of Environmental policy?	**R**	**CO1**
7 a)	What is Environmental Clearance?	**R**	**CO2**
(OR)			
7 b)	Explain the procedure of sample collection in respect of Surface water.	**U**	**CO2**
8 a)	What are the permissible limits of SO_2 and NO_2 concentration in ambient air (both Annual and 24 hours time weighted average) for "Industrial, Residential, Rural and Other Area" as per NAAQS?	**R**	**CO2**
(OR)			
8 b)	What specific aspects does a good EIA report and review include?	**R, Ap**	**CO3**
9 a)	What is essential in an EIA?	**U**	**CO3**
(OR)			
9 b)	How bad is our environment?	**R**	**CO3**
10 a)	What is the importance of environmental impact assessment when a project is to be established in a given area?	**U**	**CO4**
(OR)			
10 b)	The methodology used to predict impacts depends on	**U**	**CO4**
Group C **Answer All the Questions (7 x 5 = 35)**			
11 a)	Illustrate about the functions of the Central Pollution Control Board at the National Level in India.	**U**	**CO1**
(OR)			
11 b)	Explain the responsibilities of the Ministry of Environment, Forest and Climate Change (MoEFCC).	**U**	**CO1**
12 a)	Summarize important provisions of Water (Prevention and Control of Pollution) Cess Act, 1977.	**U**	**CO2**
(OR)			

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

12 b)	Explain the major objectives of Public Liability Insurance Act, 1991.	**U**	**CO2**
13 a)	i) What is Bio-medical waste? ii) Explain the main objectives of Bio-medical Waste Management Rules, 2016.	**R, U**	**CO2**
	(OR)		
13 b)	Explain briefly about some important provisions of Solid Waste Management Rules, 2016.	**U**	**CO2**
14 a)	Illustrate about the Manifest System used specifically for the transport of hazardous wastes.	**U**	**CO2**
	(OR)		
14 b)	Nature is not dependent on us, but we are dependent on the nature. Justify the statement.	**U**	**CO3**
15 a)	**Read the following case and answer the questions:** A car washing and lubricating company has been operating for several years (more than 10 yr) in a terrain with the following characteristics: porous, filterable with a frantic level near to the surface (1.5 m depth). The company is located close by to an estuary branch which is quite useful for them since they discharge all the disposals and waste generated by this activity directly into the estuary. These disposals contain a high level of oils and greases. All the dumping from the car maintenance goes directly into the soil since there are not palettes or gutters. The lubricating company operates for 20hrs for seven days per week. The Municipality since the local people has complained has arranged the execution of an EIA and you are part of it. i) What type of professionals will be part of the consultancy group performing the EIA? What will be the minimum that you can propose? ii) Mention three environmental impacts of this activity.	**R, Ap**	**CO3**
	(OR)		
15 b)	Which offices/agencies are involved for EIA commission? Name the expertise in EIA commission in a tabular chart.	**U**	**CO3**
16 a)	Write note on screening and scoping as elements of EIA.	**U, R**	**CO3**
	(OR)		
16 b)	What are the key steps in developing an EMP?.	**U**	**CO4**

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

17 a)	Define Environmental Remediation. Describe the potential impacts arising out of your own project and remediation measures for that proposed industry.	**U**	**CO4**
(OR)			
17 b)	Why EMP is important? Write the schematic procedure for EIA approval.	**U, Ap**	**CO4**

End Semester Question Papers – Set B

ADAMAS UNIVERSITY PURSUE EXCELLENCE	**ADAMAS UNIVERSITY** **END SEMESTER EXAMINATION** (Academic Session: 2020 – 21)		
Name of the Program:	M.Tech. (Environmental Engineering)	**Semester:**	II
Paper Title:	Environmental Impact Assessment	**Paper Code:**	ENV21013
Maximum Marks:	50	**Time Duration:**	3 Hrs
Total No. of Questions:	17	**Total No of Pages:**	03
(Any other information for the student may be mentioned here)	**4.** At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam. **5.** All parts of a Question should be answered consecutively. Each Answer should start from a fresh page. **6.** Assumptions made if any, should be stated clearly at the beginning of your answer.		

Group A
Answer All the Questions (5 x 1 = 5)

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

		Knowledge Level	
1	What was the purpose of Cartagena Protocol?	R	CO1
2	In which year Water (Prevention and Control of Pollution) Act was enacted?	R	CO2
3	In which year EIAs was commenced?	U	CO3
4	A short-term environmental impact assessment (EIA) has a time period of.	U	CO3
5	What is a contingency plan?	R	CO4
Group B Answer All the Questions (5 x 2 = 10)			
6 a)	What is CITES?	R	CO1
(OR)			
6 b)	What is Environmental law?	R	CO1
7 a)	How are the projects categorized in India for Environmental Clearance?	R	CO2
(OR)			
7 b)	Explain the colour coding of Biomedical wastes.	U	CO2
8 a)	What are the permissible limits of PM_{10} and $PM_{2.5}$ concentration in ambient air (both Annual and 24 hours time weighted average) for "Industrial, Residential, Rural and Other Area" as per NAAQS?	R	CO2
(OR)			
8 b)	What is included in an Impact assessment?	R, Ap	CO3
9 a)	What are the scope and steps involved in EIA?	U	CO3
(OR)			
9 b)	What is true of the Scoping step?	R	CO3
10 a)	How many types of impact assessments are there?	U	CO4
(OR)			
10 b)	What is an indicator and how you must choose them. Give an example.	U	CO4
Group C Answer All the Questions (7 x 5 = 35)			
11 a)	i) Illustrate about the functions of the Central Pollution Control Board as State Boards for the Union Territories in India. ii) Explain the powers of Central Pollution Control Board in India.	U	CO1
(OR)			

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

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8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

11 b)	Explain the responsibilities of SPCBs in India for Environmental Pollution control.	**U**	**CO1**
12 a)	Summarize important provisions of Air (Prevention and Control of Pollution) Act, 1981.	**U**	**CO2**
	(OR)		
12 b)	Explain the background for enacting Public Liability Insurance Act, 1991 in India.	**U**	**CO2**
13 a)	Illustrate about some important provisions of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989.	**U**	**CO2**
	(OR)		
13 b)	i) What is Hazardous waste? ii) Explain the main objectives of Hazardous and other Wastes (Management & Trans-boundary Movement) Rules, 2016.	**R, U**	**CO2**
14 a)	Explain the procedure of sample collection in respect of Ground water.	**U**	**CO2**
	(OR)		
14 b)	What are the 5 major environmental problems? - Describe shortly.	**U**	**CO3**
15 a)	Name the biggest environmental problems in the world today? Write with one/two sentences.	**R, Ap**	**CO3**
	(OR)		
15 b)	Why multidisciplinary team is involved in the EIA process?	**U**	**CO3**
16 a)	What are the components of EIA? Explain with one/two sentences.	**U, R**	**CO3**
	(OR)		
16 b)	Write schematically the key stages of EIA with one/two line explanation/s of each stage.	**U**	**CO4**
17 a)	**Read the following case and answer the questions:** An important mining company has been operating for about 4 yrs in a coastal region. The mining activity of this company is very intense. This company has effectively implemented its EMP with great success, mitigating the environmental impacts caused by this activity. Up to date the results of the environmental auditory show up that this company completely fulfils all the legal requirements, laws and environmental standards established by the authorities. Since 1 yr this company is part of a trial against the community, which argues that after the company has started its mining activity in the zone, the quality	**U**	**CO4**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
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9. Target : 60% — P: 0
C: 0

	of the water has been significantly deteriorated and that this company is operating in a protected area. The Company argues that it has relevant proofs in order to demonstrate that they have not polluted the environment but the others industries located in the zone. The mining company emphasizes that when they began the activities the environment was already polluted specially the water and that the quality standards of the water were not good at all. i) Mention two environmental impacts this company might cause into the environment and 2 ways to mitigate this impacts that should be included in its EMP.		
	(OR)		
17 b)	Mention the steps (in order) needed to get the environmental license. Briefly explain each of them	**U, Ap**	**CO4**

Answer Key (Sample)

Answer Script (Sample)

Evaluation Sheet (End Semester)

Roll Number	Registration Number	Name of the Student	Marks (50)
PG/02/MTEVE/2020/002	AU/2020/0004499	Srija SinhaRoy	47
PG/02/MTEVE/2020/004	AU/2020/0004460	Susmita Pandit	46
PG/02/MTEVE/2020/003	AU/2020/0004454	Sumit Kumar Khan	43
PG/02/MTEVE/2020/001	AU/2020/0004291	Snehashis Ghosh	45

Signature of HOD/Dean **Signature of Faculty**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

Date: — Date: 29/08/2021

Planning for Remedial Classes – End Semester

Sl. No.	Name of Student	Roll No.	Reg. No.	End Sem Marks	Remedial Classes Held							Class test on the basis of Remedial Classes	Supple Exam Marks	Impr ment (Y/N
					Date									
					Venue									
					Time									
1.	Srija SinhaRoy	PG/02/MTEVE/2020/002	AU/2020/0004499	47										
2.	Susmita Pandit	PG/02/MTEVE/2020/004	AU/2020/0004460	46										
3	Sumit Kumar Khan	PG/02/MTEVE/2020/003	AU/2020/0004454	43										

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

4	Snehashis Ghosh	PG/02/MTEVE/2020/001	AU/2020/0004291	45										

Signature of HOD/ Dean **Signature of Faculty**

Date **Date: 29/08/2021**

Consolidated Mark Statement

Roll Number	Registration Number	Name of the Student	Total Marks			
			Mid Semester (20)	Internal Assessment (30)	End Semester (50)	Total (100)
PG/02/MTEVE/2020/002	AU/2020/0004499	Srija SinhaRoy	19	29	47	95
PG/02/MTEVE/2020/004	AU/2020/0004460	Susmita Pandit	19	29	46	94
PG/02/MTEVE/2020/003	AU/2020/0004454	Sumit Kumar Khan	19	28	43	90
PG/02/MTEVE/2020/001	AU/2020/0004291	Snehashis Ghosh	19	28	45	92

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

Signature of Dean/HOD **Signature of Faculty**

Date: **Date: 29/08/2021**

COURSE END SURVEY

INDIRECT ASSESSMENT

Sample format for Indirect Assessment of Course outcomes:

NAME: **Srija SinhaRoy**
ROLL NO.: PG/02/MTEVE/2020/002
REG. NO..: AU/2020/0004450
COURSE: ENV21013 & Environmental Impact Assessment
PROGRAM: M. Tech. (Environment Engineering)

Please rate the following aspects of course outcomes of **Environmental Impact Assessment**
Use the scale 1-5 (Poor – Excellent)

Course Outcomes	Statement	1	2	3	4	5
CO1	Can you able to Discuss the Elements, Tools & Methods of Construction Management?					5
CO2	Are you able to Recognize the Fundamentals of Network Analysis to Schedule a Project with Constraints?					5
CO3	Do you Understand Different Approaches of Time and Cost Control of Construction Projects?					5
CO4	Will you Demonstrate Different Types of Project Information, it's Accuracy and Uses in an Organization?					5
CO5	Are you able to Select a Data Base Model to Control Project Information Flow of a Construction Project?					5

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

						5

Sample format for Indirect Assessment of Course outcomes:

NAME: **Susmita Pandit**
ROLL NO.: PG/02/MTEVE/2020/004
REG. NO..: AU/2020/0004460
COURSE: ENV21013 & Environmental Impact Assessment
PROGRAM: M. Tech. (Environment Engineering)

Please rate the following aspects of course outcomes of **Environmental Impact Assessment**
Use the scale 1-5 (Poor – Excellent)

Course Outcomes	Statement	1	2	3	4	5
CO1	Can you able to Discuss the Elements, Tools & Methods of Construction Management?					5
CO2	Are you able to Recognize the Fundamentals of Network Analysis to Schedule a Project with Constraints?					5
CO3	Do you Understand Different Approaches of Time and Cost Control of Construction Projects?					5
CO4	Will you Demonstrate Different Types of Project Information, it's Accuracy and Uses in an Organization?					5
CO5	Are you able to Select a Data Base Model to Control Project Information Flow of a Construction Project?					5
						5

Sample format for Indirect Assessment of Course outcomes:

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

NAME: **Snehashis Ghosh**
ROLL NO.: PG/02/MTEVE/2020/001
REG. NO..: AU/2020/0004291
COURSE: ENV21013 & Environmental Impact Assessment
PROGRAM: M. Tech. (Environment Engineering)

Please rate the following aspects of course outcomes of **Environmental Impact Assessment**
Use the scale 1-5 (Poor – Excellent)

Course Outcomes	Statement	1	2	3	4	5
CO1	Can you able to Discuss the Elements, Tools & Methods of Construction Management?					5
CO2	Are you able to Recognize the Fundamentals of Network Analysis to Schedule a Project with Constraints?					5
CO3	Do you Understand Different Approaches of Time and Cost Control of Construction Projects?					5
CO4	Will you Demonstrate Different Types of Project Information, it's Accuracy and Uses in an Organization?					5
CO5	Are you able to Select a Data Base Model to Control Project Information Flow of a Construction Project?					5
						5

Sample format for Indirect Assessment of Course outcomes:

NAME: **Sumit Kumar Khan**
ROLL NO.: PG/02/MTEVE/2020/003
REG. NO..: AU/2020/0004454

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy **Course Code: ENV21013**

7. Course : Environmental Impact Assessment **L:3**
8. Program : M. Tech (Environmental Engineering) **T: 0**
9. Target : 60% **P: 0**
C: 0

COURSE: ENV21013 & Environmental Impact Assessment
PROGRAM: M. Tech. (Environment Engineering)

Please rate the following aspects of course outcomes of **Environmental Impact Assessment**
Use the scale 1-5 (Poor – Excellent)

Course Outcomes	Statement	1	2	3	4	5
CO1	Can you able to Discuss the Elements, Tools & Methods of Construction Management?					5
CO2	Are you able to Recognize the Fundamentals of Network Analysis to Schedule a Project with Constraints?					5
CO3	Do you Understand Different Approaches of Time and Cost Control of Construction Projects?					5
CO4	Will you Demonstrate Different Types of Project Information, it's Accuracy and Uses in an Organization?					5
CO5	Are you able to Select a Data Base Model to Control Project Information Flow of a Construction Project?					5
						5

INDIRECT ASSESSMENT CONSOLIDATION

ADAMAS UNIVERSITY, KOLKATA **SCHOOL OF ENGINEERING & TECHNOLOGY** **DEPARTMENT OF CIVIL ENGINEERING** **CO Indirect Assessment**		
Programme: **Batch: 2020-22**		**Academic Year:2020-21**
Course Code & Name: ENV21013	**Environmental Impact Assessment**	
Course Outcome	**Students Feed Back (5)**	**Attainment (100)**

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

CO1	5	100
CO2	5	100
CO3	5	100
CO4	5	100
etc.	5	100
Signature of HOD/Dean **Date:**		**Signature of Faculty** **Date: 29/08/2021**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy Course Code: ENV21013

7. Course : Environmental Impact Assessment L:3
8. Program : M. Tech (Environmental Engineering) T: 0
9. Target : 60% P: 0
C: 0

CO ATTAINMENT – GAP ANALYSIS & REMEDIAL MEASURES

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO ATTAINMENT - GAP ANALYSIS & REMEDIAL MEASURES

Batch :	2020-22					Academic Year:	2020-21
Course Code & Name			Name of the Coordinator			Year & Semester	
ENV21013 Environmental Impact Assessment			Bidhan Ghosh			I & II	
CO	Direct Assessment	Indirect Assessment	CO Attainment	Target	CO Attainment Gaps	Action for Bridge the Gap	Target Modification
CO1	100	100	100	80	-20		90
CO2	100	100	100	80	-20		90
CO3	100	100	100	80	-20		90
CO4	100	100	100	80	-20		90
CO5	100	100	100	80	-20		90

Signature of HOD/Dean **Signature of Faculty**

Date: **Date: 29/08/2021**

Year: I
Semester: II

6. Name of the Faculty: Dr. Somendra Nath Roy — Course Code: ENV21013

7. Course : Environmental Impact Assessment — L:3
8. Program : M. Tech (Environmental Engineering) — T: 0
9. Target : 60% — P: 0
C: 0

CO-PO ATTAINMENT

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF
DEPARTMENT OF
CO-PO ATTAINMENT

Programme : M. Tech (Env. Engg)	Year & Sem: I & II	Academic Year: 2020 -21	Batch:2020-22

Course Code	Course Name	CO-PO	PO1	PO2	PO3	PO4	PO 5	PO 6	PO 7	PO 8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
ENV21013	Environmental Impact Assessment	Relationship	CO1, CO2, CO3, CO4,	CO1, CO2, CO3, CO4,	CO1, CO2, CO3, CO4,	CO2, CO3, CO4,	NA	NA	NA	NA	CO1, CO2, CO4,	NA	NA	NA	NA	NA	NA

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0

		Mapping Value	3	3	3	3	NA	NA	NA	NA	3	NA	NA	NA	NA	NA	NA
		Attainment	**3**	**3**	**3**	**3**	**NA**	**NA**	**NA**	**NA**	**3**	**NA**	NA	NA	NA	NA	NA

Signature of HOD/Dean **Signature of Faculty**

Date: **Date: 29/08/2021**

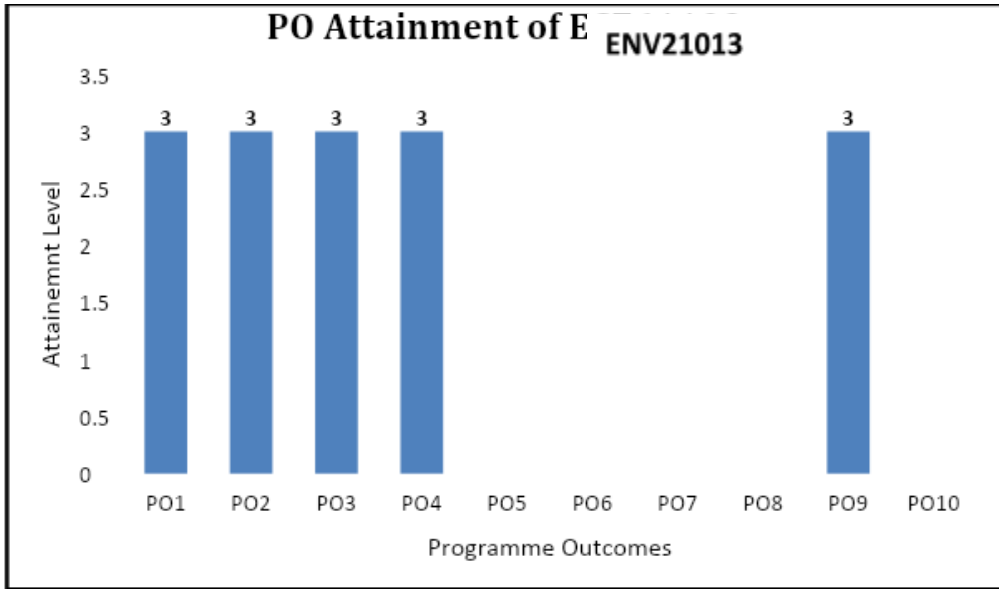
PO ATTAINMENT OF THE COURSE

Year: I

Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7. **Course** : **Environmental Impact Assessment** **L:3**
8. **Program** : **M. Tech (Environmental Engineering)** **T: 0**
9. **Target** : **60%** **P: 0**
C: 0



Signature of HOD/Dean

Date:

Signature of Faculty

Date: 29/08/2021

Year: I
Semester: II

6. **Name of the Faculty: Dr. Somendra Nath Roy** **Course Code: ENV21013**

7.	**Course**	**: Environmental Impact Assessment**	**L:3**
8.	**Program**	**: M. Tech (Environmental Engineering)**	**T: 0**
9.	**Target**	**: 60%**	**P: 0**
			C: 0

INSTRUCTIONS FOR FACULTY

Instructions for Faculty

- Faculty should keep track of the students with low attendance and counsel them regularly.
- Course coordinator will arrange to communicate the short attendance (as per University policy) cases to the students and their parents monthly.
- Topics covered in each class should be recorded in the table of RECORD OF CLASS TEACHING (Suggested Format).
- Internal assessment marks should be communicated to the students twice in a semester.
- The file will be audited by respective Academic Monitoring and Review Committee (AMRC) members for theory as well as for lab as per AMRC schedule.
- The faculty is required to maintain these files for a period of at least three years.
- This register should be handed over to the head of department, whenever the faculty member goes on long leave or leaves the Colleges/University.
- For labs, continuous evaluation format (break-up given in the guidelines for result preparation in the same file) should be followed.
- Department should monitor the actual execution of the components of continuous lab evaluation regularly.
- Instructor should maintain record of experiments conducted by the students in the lab weekly.
- Instructor should promote students for self-study and to make concept diary, due weightage in the internal should be given under faculty assessment for the same.
- Course outcome assessment: To assess the fulfilment of course outcomes two different approaches have been decided. Degree of fulfillment of course outcomes will be assessed in different ways through direct assessment and indirect assessment. In Direct Assessment, it is measured through quizzes, tests, assignment, Mid-term and/or End-term examinations. It is suggested that each examination is designed in such a way that it can address one or two outcomes (depending upon the course completion). Indirect assessment is done through the student survey which needs to be designed by the faculty (sample format is given below) and it shall be conducted towards the end of course completion. The evaluation of the achievement of the Course Outcomes shall be done by analyzing the inputs received through Direct and Indirect Assessments and then corrective actions suggested for further improvement.
- **Submission Targets of Course Contents:**
  - **S. No. 1 to 8 : Before Starting the Course**
  - **S. No. 9 & 10 : After Mid Semester Examination**
  - **S. No. 11 to 18 : Immediately After End Semester Examination**
  - **S. No. 19 to 22 : After Declaration of Result of the Course**