

SRMVALLIAMMAIENGINEERINGCOLLEGE
(AnAutonomousInstitution)

SRMNagar,Kattankulathur-603203

DEPARTMENTOFCIVIL ENGINEERING
QUESTIONBANK



VIISEMESTER

1903716 -ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

(Common to AGRI, EEE, ECE, CSE & MECH)

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Preparedby

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SUBJECT: 1903716 - ENVIRONMENTAL AND SOCIAL IMPACTASSESSMENT

SEM /YEAR:VII/IV

BRANCH: Common to all branches

UNIT– I: INTRODUCTION

Impacts of Development on Environment – Rio Principles of Sustainable Development
Environmental Impact Assessment (EIA) – COURSE OBJECTIVES : – Historical development –
EIA Types – EIA in project cycle –EIA Notification and Legal Framework– Stakeholders and their
Role in EIA– Selection & Registration Criteria for EIA Consultants

PART-A

1.	What do you mean by EIA?	BT-1	Remembering
2.	Brief about RIO Principles.	BT-1	Remembering
3.	Recall the need for conducting Environmental Impact Assessment?	BT-1	Remembering
4.	What are the key elements in EIA as per Government of India notification?	BT-1	Remembering
5.	Give the need and importance of EIA.	BT-1	Remembering
6.	Recall Article 38 A & Article 51 A (g) under Indian context.	BT-1	Remembering
7.	Name few important environment acts.	BT-1	Remembering
8.	Enlist various types of EIA.	BT-1	Remembering
9.	Recall the 3 core values of EIA.	BT-1	Remembering
10.	Give the various sectors of impact assessment divisions.	BT-1	Remembering
11.	Write about EIA Notification 2020.	BT-3	Applying
12.	Name the different types of impact assessment.	BT-1	Remembering
13.	Who are all involved in an EIA study?	BT-1	Remembering
14.	Give any 4 Rio principles of sustainable development.	BT-1	Remembering
15.	Recite the main objectives of environment acts.	BT-3	Applying
16.	How can stakeholders contribute to the EIA process?	BT-1	Remembering
17.	What are all the acts under which NGT deals with the civil cases related to environment?	BT-1	Remembering
18.	How is EIA used to assess the environmental impacts?	BT-1	Remembering
19.	What is important for the stakeholders in the EIA process?	BT-1	Remembering
20.	Express the important aspects of EIA.	BT-2	understanding
21.	Express the Salient Features of latest Amendment to EIA Notification.	BT-2	understanding
22.	What are all the benefits of EIA?	BT-1	Remembering
23.	Indicate the Shortcomings of Environmental Impact Assessment.	BT-1	Remembering
24.	Group the Environmental Components of EIA.	BT-1	Remembering
25.	Name the regional offices places in India for drafting EIA.	BT-1	Remembering

PART-B

1.	Outline the EIA for Development Assistance in detail.	BT-2	understanding
2.	Explain briefly, why environment protection is necessary?	BT-1	Remembering
3.	Brief in detail about a) Rio +5 summit b) Rio +10 summit. c) Rio +20 summit	BT-1	Remembering
4.	Indicate and brief the various International conferences and conventions on environment.	BT-2	understanding
5.	Write short notes on a) Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA) b) The National Green Tribunal Act, 2010 c) Compensatory Afforestation Fund Act, 2016 d) The energy conservation act, 2001 e) Biological diversity act 2002	BT-3	Applying
6.	Describe in detail about EIA legal framework (Expert Committee).	BT-2	understanding
7.	Discuss about the history of EIA a) Worldwide b) India	BT-3	Applying
8.	Enlist and recall Rio principles (Declaration) on Environment and Sustainable Development	BT-1	Remembering
9.	Discuss in detail about the typology of Participation in EIA.	BT-3	Applying
10.	Interpret the Criteria for registration of EIA Consultant organization.	BT-3	Applying
11.	Brief and relate the Constraints to Stakeholder Involvement in EIA	BT-3	Applying
12.	Discover and brief the various types of EIA.	BT-1	Remembering
13.	Paraphrase a) The Wildlife (Protection) Act, 1972 b) The Water (Prevention and Control of Pollution) Act c) The Air (prevention and control of pollution) act d) The Environment (Protection) Act	BT-2	understanding
14.	Discover about various environmental policies.	BT-3	Applying
15.	Record any 13 Rio principles of sustainable development in detail.	BT-3	Applying
16.	Order and brief the salient features of EIA.	BT-1	Remembering
17.	Write short notes a) Montreal Protocol b) Kyoto Protocol	BT-2	understanding

PART-C

1.	Discuss in detail about EIA Notification 2020.	BT-3	Applying
2.	Explain the commitments of India in the field of environment.	BT-2	understanding
3.	Take a reference country and compare the EIA with that of India.	BT-3	Applying
4.	Discuss about any 5 environmental legislation acts in detail.	BT-2	understanding
5.	As a student, Why EIA is important in your perspective? Tell your views on this.	BT-2	understanding

UNIT–II:ENVIRONMENTAL ASSESSMENT

Screening and Scoping in EIA – Drafting of Terms of Reference, Baseline monitoring, Prediction and Assessment of Impact on land, water, air, noise and energy, flora and fauna - Matrices – Networks – Checklist Methods - Mathematical models for Impact prediction – Analysis of alternatives.

PART-A

1.	Write the various objectives of sustainable development.	BT-3	Applying
2.	Recall the physical variables that affects the environment.	BT-1	Remembering
3.	Sketch the project cycle in EIA.	BT-1	Remembering
4.	Who are all the Main Participants of EIA?	BT-1	Remembering
5.	Express ERA in your words.	BT-2	Understanding
6.	Give the composition of the expert committees for EIA.	BT-2	Understanding
7.	Record the Methodologies for EIA.	BT-1	Remembering
8.	What is screening in EIA Process?	BT-1	Remembering
9.	What is scoping in EIA process?	BT-1	Remembering
10.	Distinguish between Screening and Scoping in EIA.	BT-2	Understanding
11.	Discuss about the Requirements of EIA Methodologies.	BT-3	Applying
12.	Recall the objectives of EIA Methodologies?	BT-1	Remembering
13.	Define SEIA.	BT-1	Remembering
14.	Differentiate Regional and Rapid EIA.	BT-2	Understanding
15.	State Baseline monitoring.	BT-1	Remembering
16.	Define sustainable development.	BT-1	Remembering
17.	Enlist Methods of Impact Identification.	BT-1	Remembering
18.	Generalize the factors that decides the choice of EIA method.	BT-3	Applying
19.	Name the types of checklist method of EIA.	BT-1	Remembering
20.	Give the types of matrix method of EIA.	BT-1	Remembering
21.	Enlist the factors affecting selection of preferred alternatives.	BT-1	Remembering
22.	Recall the merits and demerits of Matrix method.	BT-1	Remembering
23.	Recite the advantages and disadvantages of Adhoc method.	BT-1	Remembering
24.	Enlist the criteria for the selection of EIA methodology.	BT-1	Remembering
25.	List few environmentally sensitive areas.	BT-2	Understanding

PART-B

1.	Overview of the stages of the EIA process.	BT-1	Remembering
2.	Relate and summarize key considerations in selecting Environmental impact assessment methodologies.	BT-2	Understanding
3.	Describe Environment Risk assessment in detail.	BT-3	Applying
4.	What are all the sections comes under Terms of Reference in EIA?	BT-1	Remembering
5.	With a neat sketch, discuss about checklist method of EIA.	BT-3	Applying
6.	Discuss about Adhoc Method on the basis of impact identification strength.	BT-3	Applying
7.	Paraphrase about Matrices methods along with its types.	BT-2	Understanding
8.	With a neat sketch, discuss about network model of EIA.	BT-3	Applying
9.	What is an overlay model in EIA? Brief with merits and demerits.	BT-1	Remembering
10.	Explain the Prediction and Assessment of Impact on land.	BT-2	Understanding
11.	Summarize the Prediction and Assessment of Impact on water.	BT-2	Understanding
12.	Discuss about the Prediction and Assessment of Impact on air.	BT-2	Understanding
13.	Relate and report the impact noise and energy in EIA assessment.	BT-2	Understanding
14.	Write down the advantages and disadvantages of checklist, matrices and networks methods of impact identification.	BT-1	Remembering
15.	What do you mean by sustainable development? Brief it.	BT-2	Understanding
16.	Paraphrase the prediction and assessment of impact on flora and fauna.	BT-2	Understanding
17.	Brief about a. various category of EIA projects. b. Environment sensitive areas	BT-3	Applying

PART-C

1.	Enlist and brief the Criteria for selection of EIA Methods.	BT-3	Applying
2.	With examples, explain about impact prediction in EIA.	BT-3	Applying
3.	Write short notes on a. Identification of the project components b. Identification of the project actions c. Identification and evaluation of the relevance of the impact factors	BT-2	Understanding
4.	With the help of case study, explain about the various methodologies of impact prediction.	BT-3	Applying
5.	Enlist and explain about various consideration of alternatives in EIA.	BT-1	Remembering

UNIT–III:ENVIRONMENTAL MANAGEMENT PLAN

Plan for mitigation of adverse impact on water, air and land, water, energy, flora and fauna – Environmental Monitoring Plan – EIA Report Preparation – Review of EIA Reports – Addressing the issues related to the Project Affected People -Environmental Clearance Post Project Monitoring.

PART-A

1.	What is the need for Environmental Management System (EMS)?	BT-1	Remembering
2.	Define Environment Management Plan.	BT-1	Remembering
3.	Define Bio-diversity.	BT-1	Remembering
4.	Define life cycle management.	BT-1	Remembering
5.	Give the steps in Preparation of EIA report	BT-1	Remembering
6.	What do you understand by mitigation?	BT-1	Remembering
7.	Differentiate ERA and ERM.	BT-2	Understanding
8.	Give different types of monitoring in EIA.	BT-1	Remembering
9.	Tell about Environment ethics.	BT-1	Remembering
10.	Define mitigation monitoring.	BT-1	Remembering
11.	Define compliance monitoring.	BT-1	Remembering
12.	What is an impact mitigation plan?	BT-1	Remembering
13.	Sketch the framework for risk management.	BT-1	Remembering
14.	Enlist the difficulties in implementing EMP.	BT-1	Remembering
15.	Define Environmental audit.	BT-1	Remembering
16.	What are the objectives of environmental audit?	BT-1	Remembering
17.	Differentiate the terms monitoring, surveying and surveillance.	BT-2	Understanding
18.	What is an EIA report?	BT-1	Remembering
19.	Tell the object of Environment audit.	BT-1	Remembering
20.	Differentiate deforestation and afforestation.	BT-2	Understanding
21.	Recall the benefits of environment audit.	BT-1	Remembering
22.	Give the types of environment audit.	BT-1	Remembering
23.	Cite the limitations of environment audit.	BT-2	Understanding
24.	Why EIA reports are prepared?	BT-1	Remembering
25.	Brief about Environmental Clearance.	BT-2	Understanding

PART-B

1.	Write short notes on a) Functions of corporate environment department b) Functions of project environment management cell c) Functions of construction contractors	BT-1	Remembering
2.	Review the mitigation measures of adverse environmental impacts during operational phase of engineering project.	BT-3	Applying
3.	Discuss in detail about the steps in Preparation of EIA report.	BT-3	Applying
4.	Review the mitigation measures of adverse environmental impacts during construction phase of engineering project.	BT-3	Applying
5.	Review the mitigation measures of adverse environmental impacts against biological impact.	BT-3	Applying
6.	Review the mitigation measures of adverse environmental impact monitoring of groundwater	BT-3	Applying
7.	Outline the environmental monitoring requirement, sampling methods,	BT-2	Understanding

	frequency and reporting requirements for Air Quality Monitoring.		
8.	Describe the working of environmental management plan.	BT-3	Applying
9.	Outline the stages involved in legal land acquisition process.	BT-2	Understanding
10.	Discuss about mitigations on construction and operational phase of land environment.	BT-1	Remembering
11.	Discuss the mitigation measures for energy conservation.	BT-2	Understanding
12.	Discuss about mitigations on construction and operational phase of air polluted environment.	BT-2	Understanding
13.	Briefly discuss about Environmental monitoring.	BT-2	Understanding
14.	Discuss about a) Types of environment audit b) Environmental Audit Steps	BT-2	Understanding
15.	Write short notes on a) Air Environment b) Biological Environment c) Noise Environment d) Land Environment	BT-1	Remembering
16.	Outline Environment clearance.	BT-2	Understanding
17.	Discuss about the problems associated with exploitation of forest.	BT-2	Understanding

PART-C

1.	With the example, explain the mitigation measures proposed to be adopted during the construction and operation phases of the project overall mitigation measures	BT-3	Applying
2.	Prioritize and explain Environmental Audit Stages.	BT-2	Understanding
3.	Summarize some good practice note addressing the grievances from Project-Affected Communities.	BT-3	Applying
4.	Outline the environmental monitoring requirement, sampling methods, frequency and reporting requirements for water Quality Monitoring.	BT-3	Applying
5.	Explain Environmental Monitoring Plan for Air and water bodies.	BT-3	Applying

UNIT-IV: SOCIO ECONOMIC ASSESSMENT

Baseline monitoring of Socio economic environment – Identification of Project Affected Personal – Rehabilitation and Resettlement Plan- Economic valuation of Environmental impacts – Cost benefit Analysis.

PART-A

1	What is Socio-Economic Impact Assessment?	BT-1	Remembering
2	Define baseline monitoring.	BT-1	Remembering
3	What do you mean by resettlement?	BT-1	Remembering
4	Define Rehabilitation.	BT-1	Remembering
5	Define cost benefit analysis.	BT-1	Remembering
6	Enlist the application CBA.	BT-1	Remembering
7	Enlist the six steps of SEIA.	BT-1	Remembering

8	What are re-rehabilitation and resettlement (R&R) benefits?	BT-1	Remembering
9	Discuss about Environmental Economics.	BT-3	Applying
10	Enlist various types of cost.	BT-1	Remembering
11	Sketch the information flow in prediction and assessment of socio economic impacts.	BT-2	Understanding
12	Sketch the Procedure for assessing socio-economic impact significance.	BT-2	Understanding
13	Explain the four main phases of LCA.	BT-3	Applying
14	What are the limitations under National Rehabilitation and resettlement policy 2007?	BT-1	Remembering
15	Define LCA.	BT-1	Remembering
16	What are all the advantages of CBA?	BT-1	Remembering
17	Define Financial Evaluation	BT-1	Remembering
18	Why undertake a cost-benefit analysis?	BT-1	Remembering
19	Define displaced persons and displaced family.	BT-1	Remembering
20	Recall the possibilities of people getting affected because of improper environment.	BT-1	Remembering
21	List few environment impacts.	BT-1	Remembering
22	What are all the disadvantages of CBA?	BT-1	Remembering
23	Define Economics.	BT-1	Remembering
24	What does Rehabilitation Action Plan covers?	BT-1	Remembering
25	What do you mean by cost benefit analysis?	BT-1	Remembering

PART B

1	Discuss in detail about the activities involved in R & R programme.	BT-2	Understanding
2	Elaborate the main R & R institutions involved in detail.	BT-3	Applying
3	Discuss about cost benefit analysis.	BT-2	Understanding
4	Explain about SIA approaches and methodologies.	BT-2	Understanding
5	Discuss about conceptual frame work for socio-economic assessment.	BT-2	Understanding
6	Brief the tasks of health impact assessment.	BT-2	Understanding
7	Explain in detail about various types of cost.	BT-3	Applying
8	Discuss the socio-economic factors and their potential changes resulting from project implementation.	BT-2	Understanding
9	Relate about Impact Prediction with and without Project in detail.	BT-3	Applying
10	Write short notes on a) goals and purpose of LCA b) stages in LCA	BT-3	Applying
11	Report about the rehabilitation due to dams & mines	BT-3	Applying
12	What are the major types of LCA? Explain them in detail.	BT-3	Applying
13	Discuss about the displacement due to National Parks.	BT-2	Understanding
14	Discuss about rehabilitation issues.	BT-2	Understanding

15	Discuss about the natural and manmade reasons for rehabilitation.	BT-2	Understanding
16	Brief about Rehabilitation Action Plan.	BT-2	Understanding
17	Summarize any one R&R Plan in India.	BT-3	Applying

PART-C

1.	Discuss about Rehabilitation & Resettlement plan for Jamrani dam multipurpose project	BT-2	Understanding
2.	Explain about KELO Project.	BT-3	Applying
3.	Give Screening Criteria Application checklist methodology for addressing socio-economic impacts.	BT-2	Understanding
4.	Explain in detail about NRRP – 2007.	BT-3	Applying
5.	Tell about the classification and prediction of impacts.	BT-3	Applying

UNIT-V:CASE STUDIES

EIA case studies pertaining to Infrastructure Projects – Real Estate Development - Roads and Bridges – Multi-storey Buildings Mass Rapid Transport Systems - Ports and Harbor – Airports - Dams and Irrigation projects - Power plants – Water supply and drainage projects- Waste water treatment plants, STP – Mining Projects

PART-A

1	Define Infrastructure.	BT-1	Remembering
2	Tell us about real estate and its development in India.	BT-1	Remembering
3	List few waste water treatment plants in India.	BT-1	Remembering
4	Enlist few mining projects in India.	BT-1	Remembering
5	What do you mean by sustainable development?	BT-1	Remembering
6	Who is involved in an EIA study?	BT-1	Remembering
7	Tell the important aspects of EIA	BT-1	Remembering
8	Report the benefits of EIA.	BT-3	Applying
9	Name the acts involved in EIA formation.	BT-1	Remembering
10	What is the role of central government on EIA?	BT-1	Remembering
11	Why EIA notification is sent for public hearing?	BT-1	Remembering
12	Outline the limitations of EIA	BT-1	Remembering
13	Recall the some power plant projects that influences EIA.	BT-1	Remembering
14	Tell us how irrigation projects involved in EIA.	BT-1	Remembering
15	What are the Constraints to Stakeholder Involvement in EIA?	BT-1	Remembering
16	Recall the some Road and Bridge projects that influences EIA.	BT-1	Remembering
17	Differentiate Environment audit and environment plan.	BT-2	understanding
18	What do you mean by case study analysis?	BT-1	Remembering
19	When was the latest EIA notification published? Discuss about it.	BT-1	Remembering
20	What is Rio principles is all about? Brief it.	BT-1	Remembering
21	Do EIA necessary in countries like India? Justify your answer.	BT-1	Remembering
22	Name the Physical Resources of Environmental Impact of Industrial Development.	BT-1	Remembering

23	Name the Ecological Resources of Environmental Impact of Industrial Development.	BT-1	Remembering
24	Discuss about project sitting.	BT-2	understanding
25	Give the important aspects of EIA.	BT-1	Remembering

PART-B

1	Report an example EIA case studies pertaining to Infrastructure Projects.	BT-4	Analysis
2	Examine and infer EIA case studies pertaining to Multi-storey Buildings	BT-4	Analysis
3	Construct the Comparative review of EIA procedures and practices.	BT-2	understanding
4	With help of case study, discuss about EIA of Bulk Drug Industry - Environmental Impact Assessment.	BT-4	Analysis
5	Summarize the Environmental impact assessment study of Navimumbai international airport	BT-2	understanding
6.	Write short notes on physical and ecological resources in evaluating the impact of industrial development projects.	BT-1	Remembering
7.	With help of case study, discuss about assessment of Impacts of Traffic and Transportation.	BT-4	Analysis
8.	Report the General Guidelines for Preparation of TORs for EIA.	BT-3	Applying
9.	Report a case study of EIA pertaining to Ports and Harbor.	BT-3	Applying
10.	Discover Environmental Impacts of Highway/Road Development Projects	BT-3	Applying
11.	Interpret a case study of EIA pertaining to Real Estate Development.	BT-3	Applying
12.	Discuss about 2006 Amendment of EIA Notification and its impacts.	BT-3	Applying
13.	Discuss about National Environmental policy act.	BT-3	Applying
14.	How irrigation projects will have an impact on environment? Explain with the help of a case study.	BT-3	Applying
15.	Discuss about Preparation of EIA for Industrial Projects.	BT-3	Applying
16.	Report EIA analysis of thermal power plant at Raigarh.	BT-4	Analysis
17.	With help of case study, discuss about assessment of Impacts of Waste water treatment plants	BT-4	Analysis

PART-C

1.	How is EIA used to assess the environmental impacts? Explain with examples.	BT-3	Applying
2.	With help of case study, discuss about assessment of Impacts of Water supply and drainage projects.	BT-4	Analysis
3.	Take a mining affected area and report the impact related to environment.	BT-4	Analysis
4.	Explain with the help of Case Study about the Impact Assessment on Soil Erosion due to Highway Construction	BT-3	Applying
5.	Report EIA analysis of any dams constructed in India.	BT-4	Analysis