

#### NARASIMHA REDDY ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to JNTUH,
Hyderabad

# Accredited by NAAC with A Grade, Accredited by NBA

#### **CIVIL ENGINEERING**

### **QUESTION BANK**

Course Title: ENVIRONMENTAL IMPACT ASSESSMENT

Course Code: CE4121OE

**Regulation**: NR21

**Course Objectives:** The objectives of the course are to

Define and Classify Environmental Impacts and the terminology Understands the environmental Impact assessment procedure

Explain the EIA methodology

List and describe environmental audits

**Course Outcomes:** At the end of the course the student will be able to Identify the environmental attributes to be considered for the EIA study

Formulate objectives of the EIA studies

Identify the methodology to prepare rapid EIA

Prepare EIA reports and environmental management plans

## <u>UNIT-I</u> BASIC CONCEPT OF EIA

S.	No	Questions	BT	CO	PO		
Part – A (Short Answer Questions)							
	1	What is Base map?	L1	CO1	PO1		
,	2	What are the objectives of Environmental Impact Assessment	L4	CO1	PO7		
		(EIA)?					
	3	Describe matrix method in detail	L1	CO1	PO2		
4	4	Give a brief account on cost benefit analysis of EIA.	L1	CO1	PO6		
	5	Discuss objectives, merits and demerits of EIA.	L6	CO1	PO7		
(	6	What is overlay methods.	L2	CO1	PO2		
,	7	Discuss objectives, merits and demerits of EIA.	L6	CO1	PO7		
:	8	What is EIA? Explain	L2	CO1	PO5		
9	9	Describe the EIA methodologies	L1	CO1	PO2		
1	.0	Explain the Basic concept of EIA.	L5	CO1	PO1		
		Part – B (Long Answer Questions)					
11	a)	Explain the role of stakeholders in the EIA preparation.	L4	CO1	PO1		
	b)	Define Planning. Explain environmental management planning.	L2	CO1	PO5		
		Give two practical examples.					
12	a)	Explain about the Network method Environmental Media.	L5	CO1	PO7		
	b)	Write about quality index method for carrying out EIA	L2	CO1	PO6		
13	a)	Explain about the preparation of Environmental Base map.	L5	CO1	PO2		
	b)	Explain the limitations of EIA.	L5	CO1	PO7		

14	a)	Develop Environmental base map preparation and explain the	L6	CO1	PO1
		factors affecting EIA impact evaluation and analysis			
	b)	Explain the importance of EIA for developmental projects	L5	CO1	PO11
15	a)	Describe how matrix method is used for EIA of mining project	L1	CO1	PO2
	b)	Discuss objectives, merits and demerits of EIA.	L6	CO1	PO1
16	a)	Explain how you use check list method for EIA? What are the	L5	CO1	PO2
		advantages of check list method over matrix method?			
	b)	Describe Ad-hoc method in detail	L1	CO1	PO2

# <u>UNIT-II</u> ASSESSMENT OF EIA

S.	No	Questions	BT	CO	PO
		Part – A (Short Answer Questions)			
	1	Assess and predict the impacts of project activity on biological	L2	CO2	PO2
		environment.			
2	2	Discuss on development activities on EIA.	L6	CO2	PO4
3	3	Write the methodology for assessment of ground water	L1	CO2	PO2
		characteristics in thestudy area?			
	4	Explain the development activities on vegetation with example	L5	CO2	PO5
	5	Write the methodology for assessment of ground water	L2	CO2	PO7
		characteristics in thestudy area?			
(	6	Explain in detail about impact significance and mitigation	L5	CO2	PO5
		measures			
<i>'</i>	7	How do you plan to evaluate the impact of a project on	L2	CO2	PO11
		vegetation?			
8	8	Explain different methods used for prediction of environmental	L5	CO2	PO2
		impacts.			
	9	Discuss about environmental indices for water and air quality.	L6	CO2	PO5
1	.0	Write a note on Sustainable Forest management.	L1	CO2	PO11
		Part – B (Long Answer Questions)		I	
11	a)	How do you plan to evaluate the impact of a project on	L5	CO2	PO11
		vegetation? Present step by step procedure for the evaluation of			
		impacts on vegetation			
	b)	Explain methods adopted to reduce the impact of projects on	L5	CO2	PO2
10		wildlife.	T 0	G0.2	D0.0
12	a)	Assess and predict the impacts of project activity on biological	L2	CO2	PO2
	1.	environment	T 0	G02	DO 4
10	b)	Differentiate direct and indirect impact in vegetation	L2	CO2	PO4
13	a)	Explain the development activities on vegetation with example?	L5	CO2	PO7
	b)	Write the methodology for assessment of ground water	L2	CO2	PO2
		characteristics in thestudy area?			
14	a)	Analyze the causes for deforestation and evaluate the	L4	CO2	PO7
		environmental impacts of deforestation.			
	b)	Discuss on development activities on EIA.	L6	CO2	PO2

15	a)	Deforestation is one of the global concerns of today. In this	L2	CO2	PO7
		context, discuss the following:			
		a) Causes of deforestation			
		b) Sustainable forest management.			
	b)	Provide an example of an activity that can adversely impact the	L2	CO2	PO1
		air environmentand suggest an appropriate mitigation action.			
16	a)	Discuss about environmental indices for water and air quality.	L6	CO2	PO5
	b)	Explain different methods used for prediction of environmental	L5	CO2	PO7
		impacts.			

# <u>UNIT–III</u> PROCUREMENT OF EIA

S.	No	Questions	BT	CO	PO			
	Part – A (Short Answer Questions)							
	1	Explain different methods used for prediction of environmental	L5	CO3	PO7			
		impacts						
4	2	Write on Procurement of soil quality	L2	CO3	PO5			
(	3	What are the generic impacts of projects on flora and fauna?	L4	CO3	PO11			
4	4	Explain mitigation measures to control soil erosion.	L5	CO3	PO2			
	5	How do you plan to control dust pollution in mine site?	L2	CO3	PO3			
(	5	Explain in detail about impact significance and mitigation measures.	L5	CO3	PO5			
,	7	Explain the salient aspects and importance of EMP in EIA process	L5	CO3	PO7			
8	3	Evaluate impact prediction and describe the identification and incorporation of soil pollution mitigation measures.	L5	CO3	PO2			
9	9	Analyze the procurement of relevant soil quality and assess the impact significance	L4	CO3	PO7			
1	0	Discuss in detail about the general methodology for the assessment of impacts of developmental activities on soil environment	L5	CO3	PO5			
		Part – B (Long Answer Questions)	•	•				
11	a)	Explain in detail about impact significance and mitigation measures.	L5	CO3	PO5			
	b)	Analyze the procurement of relevant soil quality and assess the impact significance	L4	CO3	PO7			
12	a)	Discuss the mitigation measures for soil and groundwater impacts.	L5	CO3	PO5			
	b)	Discuss in detail about the general methodology for the assessment of impacts of developmental activities on soil environment	L5	CO3	PO5			
13	a)	Explain different methods used for prediction of environmental impacts	L5	CO3	PO7			
	b)	How do you plan to control dust pollution in mine site?	L1	CO3	PO7			
14	a)	Explain the salient aspects and importance of EMP in EIA process	L5	CO3	PO11			

	b)	Write on Procurement of soil quality	L1	CO3	PO2
15	a)	Considering thermal power project as an example, explain the	L2	CO3	PO5
		appropriate mitigation measures to control environmental			İ
		impacts of the power plant.			İ
	b)	What are the generic impacts of projects on flora and fauna?	L4	CO3	PO2
16	a)	Evaluate impact prediction and describe the identification and	L5	CO3	PO6
		incorporation of soil pollution mitigation measures.			İ
	b)	Write causes and effects of deforestation	L1	CO3	PO3

## <u>UNIT-IV</u> ENVIRONMENTAL AUDIT

S.	No	Questions	BT	CO	PO		
Part – A (Short Answer Questions)							
-	1	What is the purpose of post Environmental Audit?	L1	CO4	PO1		
	2	What are the steps involved in pre audit activities?	L4	CO4	PO1		
3	3	What is Audit data?	L1	CO4	PO2		
4	4	What are the principle areas of environmental auditing?	L4	CO4	PO2		
4	5	Discuss evaluation of audit data and preparation of Audit	L5	CO4	PO5		
		report.					
(	5	How often environment audit are conducted in an organization?	L1	CO4	PO7		
7	7	What are the main Objectives of Environmental Audit?	L4	CO4			
		Explain.					
8	8	What are the Post Audit Activities?	L4	CO4	PO2		
Ģ	9	Describe the process of Audit protocol.	L1	CO4	PO6		
1	0	Explain the On-site audit and Post audit activities.	L5	CO4	PO6		
		Part – B (Long Answer Questions)					
11	a)	Explaining the importance of Environmental Audit, describe	L5	CO4	PO7		
		how it can help in mitigation of impacts.					
	b)	Write notes on: i) Audit protocol ii) Post audit	L1	CO4	PO5		
12	a)	What are the main Objectives of Environmental Audit?	L4	CO4	PO5		
		Explain.					
	b)	What is environment audit? What are its main objectives and	L1	CO4	PO6		
		discuss the advantages of the same.					
13	a)	How often environment audit are conducted in an organization?	L1	CO4	PO7		
	b)	What are the principle areas of environmental auditing	L4	CO4	PO7		
14	a)	Discuss evaluation of audit data and preparation of Audit	L5	CO4	PO11		
		report.					
	b)	Bring out detailed comparison between an environmental	L1	CO4	PO11		
		review and an environmental audit					
15	a)	What are the steps involved in pre audit activities?	L1	CO4	PO2		
	b)	What is the purpose of post Environmental Audit?	L1	CO4	PO2		
16	a)	Explain the On-site audit and Post audit activities.	L5	CO4	PO1		
	b)	What is Audit data?	L1	CO4	PO2		

# $\frac{\text{UNIT-V}}{\text{ENVIRONMENTAL PROTECTION ACT}}$

S.	No	Questions	BT	CO	PO		
	Part – A (Short Answer Questions)						
-	1	Write a note on the environmental protection act	L2	CO5	PO2		
4	2	What are the powers of State pollution control boards?	L4	CO5	PO2		
3	3	Develop and analyze an EIA report for a steel plant near coastal	L6	CO5	PO3		
		area					
4	4	Explain one case study on EIA in Industries.	L5	CO5	PO7		
4	5	Describe different sources of air pollution	L1	CO5	PO7		
(	6	Discuss the importance of EMP. Explain how it is prepared	L6	CO5	PO3		
		taking thermal power plant as an example					
	7	Describe the salient features of i) Motor Act ii) Wild life act	L1	CO5	PO2		
8	8	Describe the salient features of i) Water Act ii) Air act	L1	CO5	PO2		
Ģ	9	Present salient aspect of The Environmental Protection Act and	L2	CO5	PO5		
		take holders in implementation of this act.					
1	0	Write a detailed note on generalized approach for assessment of	L1	CO5	PO2		
		air pollutionImpact.					
		Part – B (Long Answer Questions)	1				
11	a)	Explain the importance of Environmental regulation.	L2	CO5	PO2		
	b)	Describe the salient features of i) Water Act ii) Air act	L1	CO5	PO2		
12	a)	Explain the various issues to be considered during the planning	L5	CO5	PO5		
		stages of an industry in order to reduce environmental impacts					
	b)	Describe the salient features of i) Motor Act ii) Wild life act	L1	CO5	PO7		
13	a)	Explain one case study on EIA in Industries.	L5	CO5	PO2		
	b)	Write a note on the environmental protection act	L1	CO5	PO5		
14	a)	Explain the various issues to be considered during the planning	L5	CO5	PO7		
		stages of an industry in order to reduce environmental impacts					
	b)	Develop and analyze an EIA report for a steel plant near coastal	L6	CO5	PO7		
		area					
15	a)	Present salient aspect of The Environmental Protection Act and	L2	CO5	PO7		
		take holders in implementation of this act.					
	b)	Describe different sources of air pollution	L1	CO5	PO7		
16	a)	Discuss the importance of EMP. Explain how it is prepared	L6	CO5	PO2		
		taking thermal power plant as an example					
	b)	What are the powers of State pollution control boards?	L4	CO5	PO7		

<sup>\*</sup> Blooms Taxonomy Level (BT) (L1 - Remembering; L2 - Understanding; L3 - Applying; L4 - Analyzing; L5 - Evaluating; L6 - Creating)

**Course Outcomes (CO)** 

**Program Outcomes (PO)** 

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