

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

M.E DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025

Second Semester

Environmental Engineering

EV4004 / PEVE2404- Environmental Impact Assessment

Regulations – 2021/2024

Duration : 3 Hrs

Maximum: 100 Marks

PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BLT	CO	Marks
1.	What is meant by FONSI?	L1	1	2
2.	Enlist the different categories of project in EIA.	L1	1	2
3.	Mention any two prediction tools used in EIA.	L1	2	2
4.	What are the impacts on the water environment due to industries?	L1	2	2
5.	State the key environmental and social effects of the Kudankulam Nuclear Power Plant.	L1	3	2
6.	Name any four impacts on society due to urban sprawl.	L1	3	2
7.	Mention any two key components of mitigation plans in an EMP.	L1	4	2
8.	Define Environmental Management Plan (EMP).	L1	4	2
9.	List any two environmental impacts commonly associated with mining projects.	L1	5	2
10.	State four key environmental concern associated with cement plants.	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a i Explain the steps involved in preparing initial environmental examination (IEE) for a construction of thermal power plant.	L2	1	8
	ii Describe in detail about the historical development of EIA.	L2	1	8
	Or			
	b i Explain the stages of the EIA process including screening, scoping, analysis, and mitigation with a case study.	L2	1	12
	ii Write the significance of EIA consultant accreditation.	L2	1	4
12.	a i Explain the various methods of Environmental Impact Assessment (EIA), including checklists, matrices, and networks.	L2	2	8
	ii Explain the role of noise assessment in EIA and the	L3	2	8

techniques used to measure and mitigate noise pollution.

Or

	b i	Explain the application of mathematical modeling in predicting impacts on air and water quality.	L3	2	8
	ii	Assess the process and importance of cumulative impact assessment with examples from different environmental components.	L3	2	8
13.	a i	Discuss the relationship between social impacts and changes in community and institutional arrangements during project development.	L2	3	8
	ii	Explain the key factors and methodologies used in socio-economic impact assessment.	L2	3	8
Or					
	b i	Describe the components and significance of mitigation and rehabilitation plans in EIA.	L3	3	8
	ii	Evaluate the role of rehabilitation and resettlement in addressing individual and family-level impacts due to development projects.	L3	3	8
14.	a i	Explain the steps involved in the preparation, implementation, and review of an Environmental Management Plan.	L3	4	8
	ii	Explain in detail about the ethical and quality aspects of environmental impact assessment for a highway project.	L3	4	8
Or					
	b i	Explain in detail about the policy and guidelines available for class A projects in India.	L4	4	8
	ii	Elaborate on the ethical and quality aspects to be considered during the Environmental Impact Assessment process.	L3	4	8
15.	a i	Analyze a case study on the environmental management practices in a petroleum refining industry.	L4	5	8
	ii	Evaluate the functioning and challenges of Common Hazardous Waste Facilities (CHWF) through a case study.	L3	5	8
Or					
	b i	Discuss the environmental impacts of a case study related to a thermal power plant and explain the mitigation measures adopted.	L4	5	8
	ii	Explain the significance of EIA in highway development projects with the help of a relevant case study.	L3	5	8