22ESP209N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)

Branch - **ENVIRONMENTAL SCIENCE**

ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT SYSTEM

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 × 1 = 10)

Question No.	Question	K Level	CO
1	Which of the following is not a component studied in Environmental Impact Assessment? a) Flora and Fauna b) Social and Cultural aspects c) Financial auditing d) Baseline environment	K1	CO1
2	The first comprehensive EIA Notification in India was issued in: a) 1992 b) 1994 c) 1996 d) 2006	K2	CO1
3	Which EIA methodology uses cause-effect relationships to identify impacts? a) Checklist method b) Network method c) Matrix method d) Overlay mapping	K1	CO1
4	Matrix method in EIA is mainly useful for: a) Spatial distribution of impacts b) Identifying interactions between activities and impacts c) Visual representation of ecosystems d) Valuing natural resources	K2	CO1
5	Use value, option value and existence value are types of: a) Social impacts b) Economic values of environment c) Cultural resources d) Land-use values	K1	CO4
6	The Hedonic Pricing Method is used for valuing: a) Air pollution damages b) Property values influenced by environmental quality c) Direct use of forests d) Agricultural productivity	K2	CO4
7	The main objective of Environmental Audit is to: a) Increase company profit b) Ensure compliance and improve environmental performance c) Replace EIAs d) Promote tourism	K1	CO4
8	Which of the following is a type of Environmental Audit? a) Site assessment and liability audit b) Energy audit c) Waste audit d) All of the above	K2	CO4
9	The purpose of an Environmental Management System (EMS) is to: a) Manage financial resources b) Provide a structured approach to environmental protection c) Replace pollution control laws d) Conduct environmental litigation	K1	CO5
10	ISO 14001 certification deals with: a) Quality Management b) Environmental Management Systems c) Occupational Safety d) Energy Efficiency	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Question No.	Question	K Level	CO
11.a.	Explain the scope, objectives, and importance of Environmental Impact Assessment.	K2	CO1
	(OR)		
11.b.	Briefly explain the role of Analysis of Alternatives in the EIA process. Why is the 'no project' option considered important?	K3	
12.a.	Write short notes on: (a) Environmental Impact Statement (EIS) (b) Environmental Management Plan (EMP)	K2	CO2
	(OR)		
12.b.	Why is early integration of EIA important for sustainable project development?	K4	
13.a.	Discuss valuation techniques used in environmental economics for assessing environmental impacts.	K3	CO3
	(OR)		
13.b.	Compare different EIA methodologies: Ad-hoc method, checklist method, and matrix method.	K4	
14.a.	Explain the scope, objectives, and benefits of Environmental Audit.	K2	CO4
	(OR)		
14.b.	Describe the stages in Life Cycle Assessment (LCA) and its applications.	K3	
15.a.	Explain the role of Cost–Benefit Analysis (CBA) in Environmental Impact Assessment. How are environmental impacts valued in monetary terms?	K3	CO5
	(OR)		
15.b.	Compare & Contrast between ISO 14000 and ISO 14001? Discuss the merits of implementing an EMS for an industry.	K4	

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Question No.	Question	K Level	CO
16	Critically evaluate the merits and demerits of EIA studies in project planning and decision-making.	K5	CO1
17	Design a detailed procedure for obtaining Environmental Clearance with reference to Terms of Reference (ToR), baseline studies, public participation, and review.	K6	CO2
18	Evaluate the role of simulation and modeling techniques in strengthening impact prediction in EIA.	K5	CO3
19	Develop a step-by-step methodology for conducting a Waste Minimization Audit with suitable examples.	K6	CO4
20	Critically analyze the difference between ISO 14000 and ISO 14001. Suggest how EMS can improve corporate environmental performance.	K5	CO5

Z-Z-Z END