B.TECH/CE/6TH SEM/CIVL 3242/2025

ENVIRONMENTAL IMPACT ASSESSMENT (CIVL 3242)

Time Allotted: 2½ hrs Full Marks: 60

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and any 4 (four) from Group B to E, taking one from each group.

Candidates are required to give answer in their own words as far as practicable.

1.

	Group -	A				
Answe	er any twelve:	12 × 1 = 12				
Choose the correct alternative for the following						
(i)	i) Pyramid of energy depicts the total amount of energy (a) Available in the ecological community (b) Utilized by the organism at each trophic level (c) At consumers level. (d) All of these					
(ii)	Crocodile is an example of species in (a) Tropical rain forest ecosystem (c) Freshwater ecosystem	(b) Marine ecosystem (d) All of these				
(iii)	Shark is an example of species in (a) Lentic ecosystem (c) Ocean ecosystem	(b) Pond ecosystem(d) Small lagoon ecosystem				
(iv)	An EIA is a tool for (a) Economic analysis of the project (c) Decision making aspect	(b) To obtain financial fund(d) All of these				
(v)	The number of steps activities for EIA s (a) 3 (c) 2	study should not be less than (b) 4 (d) 5				
(vi)	EIA study was introduced in India in th (a) 1978 (c) 1989	le year (b) 1986 (d) 2001				
(vii)	Fly ash generation problem mainly occ (a) Coal washery (c) Mining industry	eurs in (b) Thermal power plant (d) Fish processing units				

(viii)	Negative effects of hydroelectric power plants (a) Production of huge suspension solids as sediment (b) Community displacement (c) Disruption of water flow (d) All of the above		
(ix)	The major function of the State pollution control boards in India is (a) To control river pollution (b) To prepare EIA documents (c) To set environmental standards (d) To arrange and disburse funding for preparing EIA		
(x)	NAPCC stands for (a) National action plan on carbon credit (b) National action plan for carbon sequestration (c) National action plan on climate change (d) National assessment plan for carbon credit		
	Fill in the blanks with the correct word		
(xi)	Rapid EIA study is conducted for a duration of		
(xii) Lentic water environment is an example of			
(xiii)	Lotic Environment is observed in		
(xiv)	Category A projects require clearance from		
(xv)	EIA report is prepared and submitted to the for approval.		
	Group - B		
(a)	With the help of neat sketch explain different regions of pond eco system. [(CO2)(Remember/LOCQ)]		
(b)	Briefly explain with example the economic significance of grazing ecosystem. What is the difference between food web and food chain? [(CO2)(Remember/LOCQ)] $6 + 6 = 12$		
(a)	Explain the term Biogeochemical cycle? What is its ecological significance? [(CO2)(Remember/LOCQ)]		
(b)	Describe with neat diagram on nitrogen biogeochemical cycle. [(CO3)(Remember/LOCQ)] $6 + 6 = 12$		
	Group - C		
(a)	What is EIA? When it is mandatory? [(CO3)(Analyse/HOCQ)]		

2.

3.

4.

Describe with line chart of different steps of conducting EIA study for clearance (b) [(CO2)(Apply/IOCQ)]5 + 7 = 12 and appraisal of a new project.

5. (a) What are desirable EIA methodologies? [(CO2)(Analyse/HOCQ)] Explain the criteria for selection of methodology? (b) [(CO3)(Remember/LOCQ)] Write down the focus and objectives of EIA methodologies? (c) [(CO2)(Remember/LOCQ)] 4 + 4 + 4 = 12Group - D What are the structures of a standard EIA report? What are the control strategies 6. (a) for mitigating air pollution in coal based thermal power plant? [(CO3)(Remember/LOCQ)] (b) Describe the steps and necessary procedures for preparation of EIA document for a thermal power project. [(CO4)(Apply/IOCQ)] 6 + 6 = 127. (a) What in meant by Environmental risk assessment? What is its significance? What are the ecological effects likely to be inducted during operation of a water resources project? [(CO3)(Remember/LOCQ)] How impact of water quality on streams is induced due to construction of a (b) thermal power plant? [(CO4)(Apply/IOCQ)] 7 + 5 = 12Group - E (a) 8. What are the International laws regarding EIA study? [(CO3)(Remember/LOCQ)] How public hearing of stake holders is conducted? (b) [(CO4)(Remember/LOCQ)] What are the guide lines of public hearing arrangement for EIA? (c) [(CO3)(Remember/LOCQ)] 3 + 5 + 4 = 129. What are the revised amended Rules on Solid waste management rules in India? (a) [(CO3)(Analyse/HOCQ)] (b) What is Environmental health assessment study? [(CO3)(Remember/LOCQ)] (c) Give some out line on environmental management plan (EMP) for EIA Study. [(CO3)(Remember/LOCQ)] 4 + 4 + 4 = 12

Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	67.7	18.8	13.5