

**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.

Group – A

1. Answer any twelve:

12 × 1 = 12

Choose the correct alternative for the following

- (i) Producers are
(a) Herbivores (b) Heterotrophs
(c) Autotrophs (d) All of these
- (ii) The term ecosystem was first proposed by
(a) E. Haeckel (b) E. Warming
(c) A. Tansley (d) Aristotle
- (iii) Cropland ecosystem is an example of
(a) Grassland ecosystem (b) Grazing ecosystem
(c) Artificial ecosystem (d) All of these
- (iv) Teak wood is a typical example of
(a) Tropical seasonal forest (b) Sub-tropical rain forest
(c) Tropical rain forest ecosystem (d) Temperate rain forest.
- (v) Crocodile is an example of species in
(a) Tropical rain forest ecosystem (b) Marine ecosystem
(c) Freshwater ecosystem (d) All of these
- (vi) An EIA notification by ministry of environment and forest was introduced in the year
(a) 1989 (b) 1994 (c) 2006 (d) 1986
- (vii) Synecology focuses on the interactions between species and
(a) Ecological community (b) Multiple ecosystems
(c) Large geographical area (d) All of these
- (viii) 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 (a), (b) & (c)

- (ix) An EIA is a tool for
 (a) Economic analysis of the project (b) To obtain financial fund
 (c) Decision making aspect (d) All of these
- (x) Leopold matrix procedure is based on
 (a) Numerical weighing (b) Network analysis
 (c) Evaluation by checklist (d) Scaling tickmark.

Fill in the blanks with the correct word

- (xi) The forest ecosystem provides wildlife _____.
- (xii) The behavioural ecology examines adaptation of _____.
- (xiii) Rapid EIA study is conducted for duration of _____.
- (xiv) Cost -Benefit analysis in EIA report accessible to public domain increases _____.
- (xv) Hazardous Waste Management rules first came into the effect in the year _____.

Group - B

2. (a) What do you mean by ecological system? What is its significance? [[CO1](Remember/LOCQ)]
- (b) With help of a neat diagram describe different components of ecological pyramid. [[CO2](Analyse/HOCQ)]
- (c) Explain the classification tropic level. How it can be sustainable? [[CO3](Remember/LOCQ)]
3 + 5 + 4 = 12
3. (a) With the help of neat sketch explain different regions of pond eco system. [[CO2] (Apply/IOCQ)]
- (b) Briefly explain with example the economic significance of grazing ecosystem. [[CO3] (Remember/LOCQ)]
- (c) What is the difference between food web and food chain? [[CO1] (Remember/LOCQ)]
6 + 4 + 2 = 12

Group - C

4. (a) What do you understand by EIA study? Write down different steps for conducting EIA study. [[CO4](Remember/LOCQ)]
- (b) Discuss the limitation of EIA study in India. [[CO4](Remember/LOCQ)]
- (c) Do you feel scoping and screening are essential? State the reasons. [[CO5](Apply/IOCQ)]
4 + 4 + 4 = 12
5. (a) Discuss the significance and importance of public participation of EIA study . [[CO4] (Analyse/HOCQ)]
- (b) Explain in detail for checklist method of EIA study. [[CO4](Remember/LOCQ)]
- (c) Enumerate different procedures for EIA study. [[CO5](Apply/IOCQ)]
4 + 6 + 2 = 12

Group - D

6. (a) What are the structures of a standard EIA report? [[CO3](Analyse/HOCQ)]
 (b) Describe the contents and documentation of EIA study in reference to a typical mining or water resources projects. [[CO4](Remember/LOCQ)]
 (c) What are the strategies and management plan for disposal solid waste emanating from thermal power plant? [[CO2](Apply/IOCQ)]
3 + 5 + 4 = 12
7. (a) What is meant by Environmental risk assessment? What is its significance? [[CO5](Remember/LOCQ)]
 (b) How impact of water quality on streams is induced due to construction of a thermal power plant? [[CO4](Remember/LOCQ)]
 (c) What are the ecological effects likely to be induced during operation of a water resources project? [[CO2](Apply/IOCQ)]
3 + 6 + 3 = 12

Group - E

8. (a) What is LCA (Life cycle assessment)? What is its importance? [[CO4](Remember/LOCQ)]
 (b) Describe briefly on hazardous management rule. What are the key features of the above rules? [[CO4](Remember/LOCQ)]
 (c) What is Legimative social impact analysis? How such analysis is practical? [[CO6](Apply/IOCQ)]
3 + 6 + 3 = 12
9. (a) Discuss the role of state pollution control boards in India for clearance of projects. [[CO4](Remember/LOCQ)]
 (b) Discuss the amended rules on impact assessment notification in 2006 over and above 1994. [[CO6](Remember/LOCQ)]
 (c) Write the role of state pollution control boards for giving consent to project proponent in the context of river pollution. [[CO6](Remember/LOCQ)]
4 + 4 + 4 = 12

Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	65	23	12

Course Outcome (CO):

After the completion of the course students will be able to

1. Learn and understand the basics of ecology and environment.
2. Characterize the different types of ecosystem and their inter-relationship.
3. Assess risks posing threats to the environment.
4. Assess different cases studies/ examples of EIA in practice.
5. Assess the importance of stakeholders in the EIA process.
6. Understand and implement the analysis of EIA for various projects.

*LOCQ: Lower Order Cognitive Question; IOCQ: Intermediate Order Cognitive Question; HOCQ: Higher Order Cognitive Question.

