

BACHELOR OF ENGINEERING (CIVIL ENGINEERING), FIFTH YR, FIRST Semester  
SUPPLEMENTARY EXAMINATION 2018 (OLD)

FIFTH YR, FIRST Semester Supplementary EXAMINATION ( 2017

SUBJECT: ECOLOGY AND ENVIRONMENTAL MANAGEMENT

Time: Two hours/Three hours/Four hours/Six hours

Full Marks 30/100

Use a separate Answer-Script for each part

No. of Questions	Part I (Marks:50)	Marks
	<p>Answer any Three (3) question Two (2) marks are reserved for neatness and to the point answer. Assume relevant data if necessary</p>	
<p>Q1.</p> <p>Write short notes on :- (any four)</p> <p>a) Lentic Environment</p> <p>b) Food web</p> <p>c) Biological magnification</p> <p>d) Landscape Ecology</p> <p>e) Artificial ecosystem</p> <p>f) Ecological pyramid</p>		<p>4 x 4 = 16</p>
<p>Q2.</p> <p>a) Define Ecology. What is its need for studying as Civil Engineering paper? What are the different subdivisions of ecology as subject?</p> <p>b) Justify the significance and importance of solar powered ecosystem?</p>		<p>2+3+5 6</p>
<p>Q3.</p> <p>a) What do you understand by ecosystem? Explain briefly the biotic components of an ecosystem</p> <p>b) What is biogeochemical cycle? What is its significance? Draw a neat labeled sketch of Phosphorous Cycle and explain briefly its significance with limitation.</p>		<p>6 10</p>
<p>Q4.</p> <p>a) Describe the major components of pond ecosystem with a neat sketch</p> <p>b) Briefly discuss on various communities normally exist in the limnetic zone in aquatic environment from producer to consumers with a neat sketch. Give suitable examples.</p>		<p>8 8</p>

**Bachelor of Engineering (Civil Engg) Supplementary Examination 2018 (Old)**

(5<sup>th</sup> Year 1st semester)

**Ecology and Environmental Management**

Time: Three Hours

Full Marks: 100

Use separate answer script for each part

(50 marks for each part)

**Part-II**

Answer Question No. 1 and any Two from the rest. Answers should be brief. Answer Question No. 1 first.

1. a) 'Environmental Impact Assessment (EIA) is a REDUCTION step'-explain.
- b) Why an EIA study cannot be done without the help of pollution models?
- c) When and for which projects was EIA started in India?
- d) Why is back ground concentration so called?
- e) Compare LCA and EIA.
- f) Write the full form of (i) SEIAA (ii) DEAC (iii) MoEFCC (iv) NEPA
- g) What are given in following appendixes (i) II (ii) III A (iii) IV (iv) V of EIA notification?
- h) Define a Professional with respect to Appendix VI of EIA notification.
- i) Name the three regulatory authorities with respect to EIA.
- j) What is the basic limitation of EIA study in India?

2x10=20

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2. a) Write all the threshold values of the projects from the Schedule:  
(i) Mining of Minerals (ii) Thermal Power Plants
- b) Name two projects or activities for which all projects belong to 'A' Category project.
- c) Write in details about the application procedure for environmental clearance.
- d) Mention the basis for Screening of B type projects. 6+2+5+2=15
3. a) What are the advantages of a proper public consultation step?
- b) What may be appraised for a B2 project prior environmental clearance?
- c) What is ToR? What is its validity? How is it responsible for minimizing the cost of an EIA study? Can something additional beyond ToR be added during appraisal stage?
- d) Comment about validity of EC. 4+3+6+2=15
4. a) Mention the General Condition & its significance. Comment about its leniency.
- b) What is common about Items 4(d), 4(f), 5(e), 5(f) of the schedule?
- c) Discuss about time frame of appraisal. 7+3+5=15

