

PUNJAB ENGINEERING COLLEGE, CHANDIGARH



GSN 101 (Introduction to Environmental Sciences)

Mid-Term Exam , Semester 18192

Time-- 90 min

Max Mark-- 90

SID 18105061

Name RISHABH GOEL

\* All questions are compulsory and carry equal marks .

\* Answers of all the parts of a question should be written together. **DO NOT** answer the questions/parts haphazardly.

1. What are the impacts of urbanization? Explain in detail giving one suitable case study. (5+5)
2. a) List the major urban environmental issues in India. (5)  
b) If environmental degradation is considered as a side effect of development, express your views on the current pattern of development activities in India. (5)
3. a) Discuss the significance of raising public awareness about environmental issues.(2)  
Enumerate the methods that can be deployed for it. (2)  
b) Write short notes on;
  1. Components of environment (1+1)
  2. Segments of environment
- c.) What is Gaia theory? What is its significance in environmental sciences? (2+2)
4. a) Discuss the impacts of modern agriculture on environment . (5)  
b) Water could be the source of the world's next big conflict. Explain briefly (5)
5. Explain in detail about the causes , effects and controlling methods for the following;
  1. Soil erosion
  2. Desertification (5+5)
6. a) Discuss the ethical dilemma with dams in Indian context . (5)  
b) Discuss the role of an individual in conservation of natural resources . (5)
7. a) Explain the concept of Ecological Pyramids. (5)  
b) Discuss briefly trophic levels, food chain and food web. (5)
8. a.) With a neat sketch, explain how the element "Carbon" is recycled in nature? (5)  
b) Discuss the environmental factors affecting the performance of an aquatic ecosystem (5)
9. What is ecological succession? Describe the stages of succession. (4+6)



PUNJAB ENGINEERING COLLEGE, CHANDIGARH

GSN 101 (Introduction to Environmental Sciences)

End-Term Exam , Semester 18192

Time--3 hours

Max Marks--80 (50% Weightage)

SID 18105061

Name RISHABH GOEL

\*All questions are compulsory and carry equal marks.

\*Answers of all parts of a question should be written together. **DO NOT** answer the questions/parts haphazardly.

1. a.) "Ignorance regarding protection of environment will lead to detrimental consequences." Comment with illustrations. (5)  
b.) What are the major objectives of environmental education? (5)
2. a.) Explain methods to disseminate environmental information among people. (4)  
b.) Discuss briefly about the type, components and segments of environment. (6)
3. a.) Explain different energy sources in detail. (6)  
b.) Discuss briefly the environmental effects of mining. (4)
4. a.) Write a short note on any ONE air pollution control device used in industries describing its working principle, the kind of pollutant(s) it can effectively remove and its efficiency. (2+2+2)  
b.) Differentiate between primary and secondary air pollutants, with suitable examples. (4)
5. Explain in detail about Causes, Effects and Control measures of;  
a.) Soil pollution (2+2+1)  
b.) Marine pollution. (2+2+1)
6. a.) Differentiate between EIA and LCA. (4)  
b.) What is the procedure of conducting them? Give one example of each. (4)  
c.) Also write objectives of LCA. (2)
7. a.) Explain the phenomenon of 'greenhouse effect'. (3)  
b.) What factors are responsible for the global warming? (4)  
c.) Discuss safety measures recommended to control the effect. (3)
8. a.) What do you understand by ozone layer depletion? Give causes and effect of this phenomenon. (2+4)  
b.) What is rain water harvesting? Illustrate its methodology. (2+2)