

KATHMANDU UNIVERSITY
End Semester Examination
August, 2019

Marks scored:

Level : B.Sc.

Year : I

Course : ENVS 101

Semester : II

Exam Roll No. :

Time: 30 mins.

F. M. : 20

Registration No.:

Date

AUG 16 2019

SECTION "A"

[17Q. × 0.5 = 8.5 marks]

Choose and mark (X) against the correct answer.

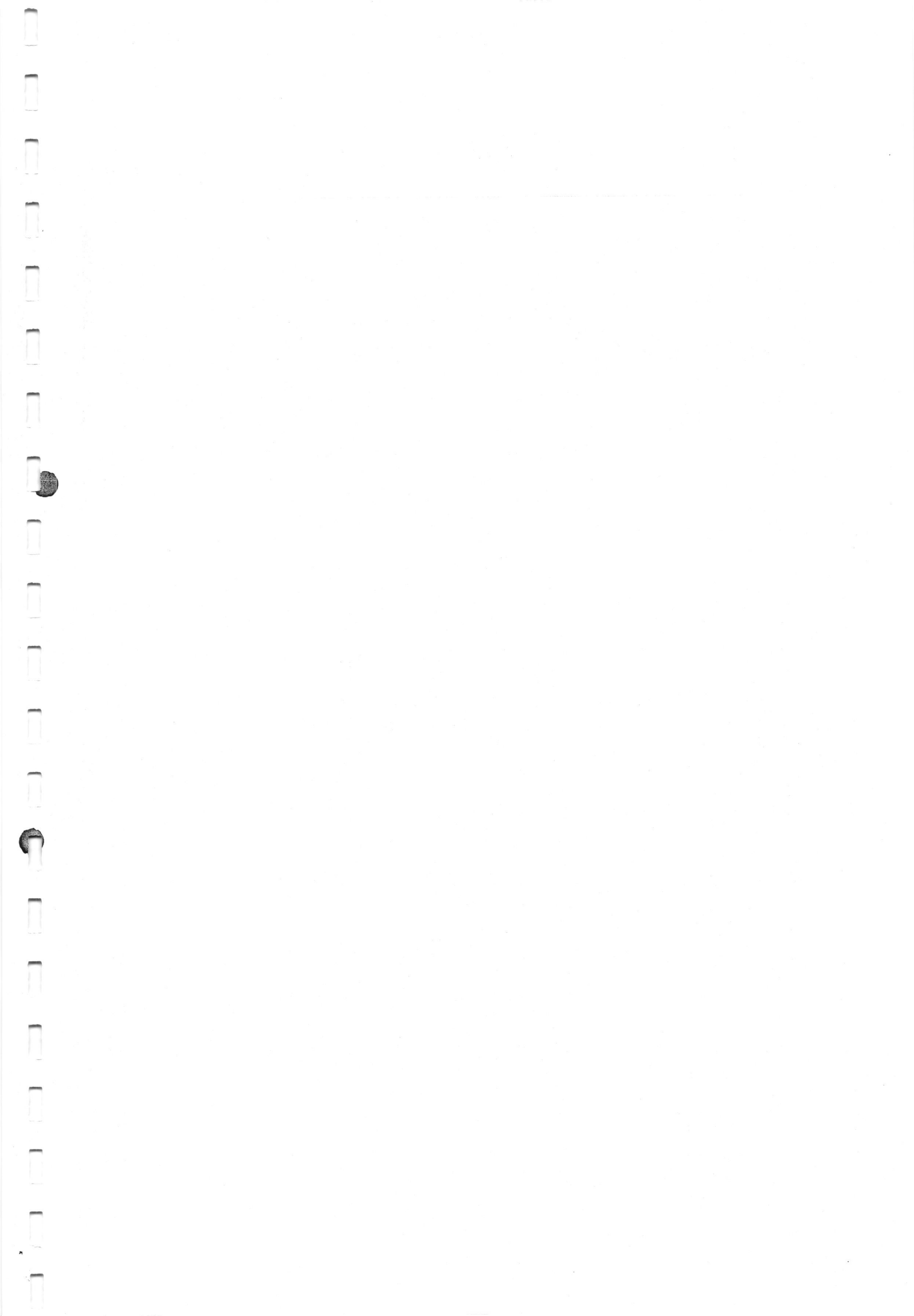
1. The benefits that people derive from nature are called
 environmental processes natural resources
 ecosystem services environmental economics
2. Which of the following involves generation of baseline data?
 system measurement system optimization
 system modelling system simulation
3. Functional attributes of a species is referred to as
 habitat habit niche range
4. The order of decreasing precipitation follows
 Temperate forests > grasslands > tropical forests > deserts
 Grasslands > grasslands > tropical forests > deserts
 Temperate forests > tropical forests > temperate forests > deserts
 Tropical forests > temperate forests > grasslands > deserts
5. Bauxite is the ore of
 Iron Aluminium Copper Silver
6. Anthracite and bituminous are types of
 shale rocks coal tar natural gas
7. The Irish Potato Famine was caused by
 Puccinia graminis *Pytophthora infestans*
 Plasmodium vivax *Periplanata Americana*
8. PAN is a component of
 paddy field emission feedlot emission
 indoor air pollutant photo-chemical smog
9. Which one of the following is emitted from animal feedlots?
 Methane Hydrogen water vapour Nitrogen
10. The largest producer of Uranium is
 Uzbekistan Kazakhstan Kyrgyzstan Tajikistan

SECTION "C"

[10 marks]

Fill in the blanks.

21. The different ecosystem services provided by nature are _____, _____, _____ and _____.
22. The full form of MEA is _____.
23. The full form of ITTO is _____.
24. The process of succession which starts from bare rock without soil is called _____.
25. The excessive presence of nutrients in water bodies cause _____.
26. Heterospecific relationship where one organism benefits at the expense of other is called _____.
27. The main sources of food production are _____, _____ and _____.
28. The bulk of the natural gas is formed by _____.
29. The increase in the concentration of pollutants/contaminants with increase in trophic levels is called _____.
30. The first communities which colonize a habitat during ecological succession are called _____.
31. Pieces of earth's crust lying above the mantle are called _____.
32. Possibility of being harmed by a hazard is called _____.
33. The different layers of the earth are _____, _____ and _____.



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Level : B.Sc.
Year : I
Time : 2 hrs. 30 mins.

Course : ENV5 101
Semester: II
F. M. : 55

SECTION "D"

[3 Q. × 7 = 21 marks]

Attempt *ALL* questions.

1. Define ecosystem services. Give an account of the different ecosystem services provided by rivers citing appropriate examples.
2. Describe the different sustainable methods of agricultural practices to mitigate soil erosion.
3. Define food security. Describe the different components of food security.

SECTION "E"

4. Write short notes on: [4 × 3 = 12]
 - a. Biofuels
 - b. Debt for nature swap
 - c. Industrial ecology
 - d. Community forestry in Nepal.
5. Differentiate between (*ANY FOUR*): [4 × 2 = 8]
 - a. Point and non-point sources of pollution.
 - b. Hazard and risk.
 - c. High waste and low waste approach of solid waste management.
 - d. Mineral reserve and mineral resource.
 - e. Primary ecological succession and secondary ecological succession.
6. Give reasons why (*ANY FOUR*): [4 × 2 = 8]
 - a. Population pyramids with a broad base indicate an increasing population
 - b. Fossil fuels are considered as non-renewable sources of energy
 - c. PM_{2.5} is more harmful than PM₁₀.
 - d. Phytoplanktons are the sole producers in open oceans.
 - e. Elephants are considered as keystone species.
7. List the following: [2 × 3 = 6]
 - a. One example each of regional MEA, global MEA, bilateral MEA with definition.
 - b. The principles of five Rs of waste management.

