

**AGA KHAN UNIVERSITY EXAMINATION BOARD**

**SECONDARY SCHOOL CERTIFICATE**

**CLASS IX EXAMINATION**

**MAY 2015**

**Environmental Studies Paper II**

**Time: 2 hours 20 minutes    Marks: 45**

**INSTRUCTIONS**

**Please read the following instructions carefully.**

1. Check your name and school information. Sign if it is accurate.

**I agree that this is my name and school.  
Candidate's signature**

2. RUBRIC. There are SEVEN questions. Answer ALL questions. Questions 5, 6 & 7 each offer TWO choices. Attempt any ONE choice from each.
3. When answering the questions:  
  
Read each question carefully.  
Use a black pencil for diagrams. DO NOT use coloured pencils.  
DO NOT use staples, paper clips, glue, correcting fluid or ink erasers.  
Complete your answer in the allocated space only. DO NOT write outside the answer box.
4. The marks for the questions are shown in brackets ( ).

Q.1. (Total 7 Marks)

- a. A number of international agencies and organizations are working for the conservation of biodiversity and protection of our environment. Acronyms of THREE of these organizations are given below. Write their full forms. (3 Marks)

i. UNESCO

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ii. SDC

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iii. WHO

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- b. The atmosphere is a layer of gases surrounding the planet Earth which is divided into five layers. Troposphere and stratosphere are two of these layers. Describe TWO characteristics of each of these layers. (4 Marks)

Troposphere:

i. 

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ii. 

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Stratosphere:

i. 

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ii. 

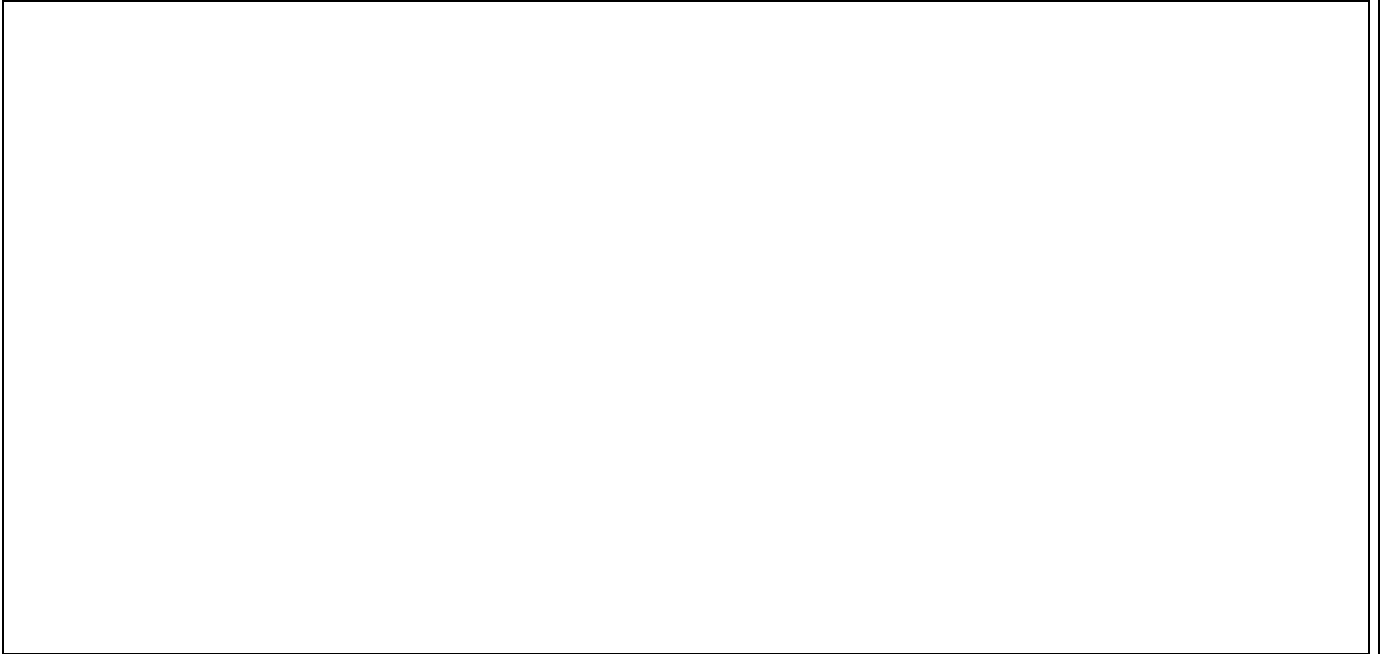
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Q.2.

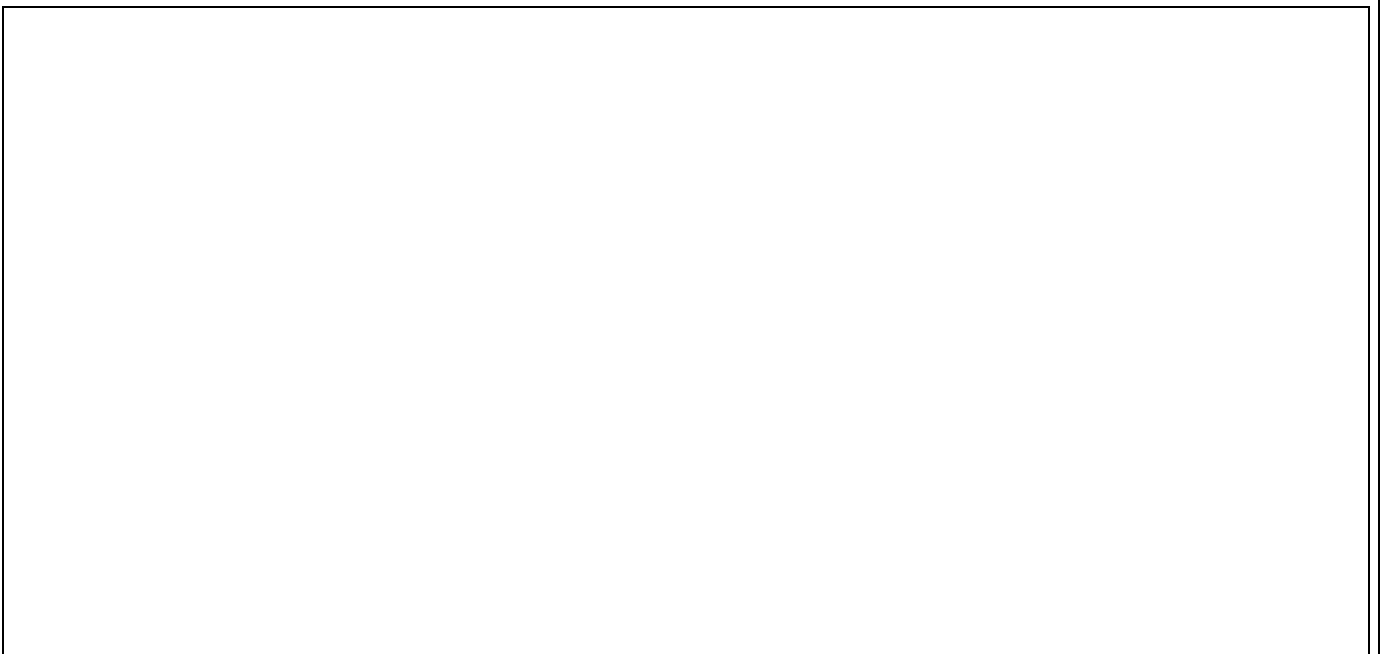
(Total 8 Marks)

- a. Construct a labelled carbon cycle to show the circulation of carbon between biotic and abiotic components of the ecosystem. (4 Marks)



- b. Use the given list of organisms to construct a food web comprising of at least THREE food chains. (NOTE: It is not necessary to include all the organisms.) (4 Marks)

bats	beetles	snakes	maize plant	eagles	squirrels	humans	rabbits
mouse	caterpillars	oak tree	cows	frogs	berries	hawks	grasshopper



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Q.3. (Total 8 Marks)

- a. As per the Population Census Organization at Islamabad (1998), in the past few years, there has been a drastic increase in human population in Pakistan. Give FOUR possible reasons for this rise in population. (4 Marks)

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- b. Write any FOUR effects that a rapid increase in population can have on the economic growth of a developing country. (4 Marks)

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Q.4.

(Total 7 Marks)

- a. Smoking is not only harmful for smokers but also for the non-smokers who are in close proximity to the smoker. Mention any THREE effects to show passive smoking is injurious to health. (3 Marks)

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- b. Noise, whether of a community or produced by an occupation, has become a serious health hazard in recent years. Suggest any FOUR ways to control noise pollution. (4 Marks)

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Q.5.

(Total 5 Marks)

**EITHER**

- a. What constitutes the environment of an organism? For each of the following disciplines, state TWO ways in which it is interlinked with environmental studies.

- i. Chemistry                      ii. Ecology

**OR**

- b. With human interventions, planet Earth is becoming warmer and the effects of the rising temperature are gradually becoming evident. Describe any FIVE impacts of this global climatic change on the environment.

[illegible]

Q.6.

(Total 5 Marks)

**EITHER**

- a. Explain how human activities have disturbed the nitrogen cycle. Also state any THREE consequences of this disturbance.

**OR**

- b. What is an ecosystem? For each of the following, give TWO reasons why it is important for human beings.

- i. Sunlight

- ii. Water

[illegible]

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Q.7.

(Total 5 Marks)

## EITHER

- a. Describe the FIVE stages by which sewage is processed in a water treatment plant.

**OR**

- b. We are surrounded by different appliances and electronic devices that are continuously emitting harmful radiations. Suggest any FIVE precautionary measures one should take to avoid unnecessary exposure to cell phone radiations.

[illegible]

END OF PAPER