Enrollment No:	Exam Seat No:
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## **C.U.SHAH UNIVERSITY**

## **Summer Examination-2017**

**Subject Name : Ecology & Evolutionary Biology** 

**Subject Code**: 4SC06EEB1 **Branch**: **B.Sc**(Microbiology, Biotechnology)

Semester: 6 Date: 11/04/2017 Time: 02:30 To 05:30 Marks: 70

**Instructions:** 

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1	Attempt the following questions:	(14)
a)	Define ecology.	1
<b>b</b> )	Define ecosystem.	1
c)	Define population characteristics.	1
<b>d</b> )	Give example of various ecosystems.	1
<b>e</b> )	Enlist the method of analysis for community ecology.	1
f)	Define function of ecosystems.	1
<b>g</b> )	Enlist the biotic factor which affecting ecosystem.	1
h)	Define soil erosion	1
i)	Define mutation.	1
$\mathbf{j}$ )	Enlist the agent responsible for evolutionary changes.	1
<b>k</b> )	Define macroevolution	1
<b>l</b> )	Explain meaning of organic evolution	1
m)	Define enzyme polymorphism	1
n)	Explain coevolution	1

## Attempt any four questions from Q-2 to Q-8

Q-2		Attempt all questions	(14)
	A	Write a note on Hardy-Weinberg principle and its applications.	7
	B	Write a note on population characteristics.	7
Q-3		Attempt all questions	(14)
	$\mathbf{A}$	Write a note on method used for analysis of community ecology.	7
	В	Write a note on modern interpretation of Darwinism.	7

Q-4	Attempt all questions	(14)
A	Explain the theory of origin of life.	7
В	Write a note on Darwin's theory of natural selection.	7
Q-5	Attempt all questions	(14)
A	Write a short note on molecular clocks.	7
В	Explain scope and importance of ecology.	7
Q-6	Attempt all questions	(14)
A	Explain the flow of energy in ecological pyramid.	7
В	Explain Miller's experiment.	7
Q-7	Explain structure and function of ecosystem.	(14)
Q-8	Attempt all questions	(14)
A	Explain Topological factor of environment.	(7)
В	Describe process of genetic drift, gene flow by appropriate examples.	(7)

