Sardar Patel University
M. Sc. (Integrated) Biotechnology - 7th Semester Examination
PS07CIGGB1: Ecology and Toxicology
Tuesday, 18th October 2016
Time: 02:00 pm to 05:00 pm

Note: Figures to the right indicate marks. Draw diagrams wherever necessary.

Marks: 70
[80]
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Q-2	Ansv	wer in short. (Attempt any seven)	[14]
	1.	Enlist the major biomes in the world.	
	2.	What, is food web? Give an example.	
	3.	Write a note on Taiga.	
	4.	Differentiate commensalism and symbiosis.	
	5.	What is greenhouse effect?	
	6. 7.	Write a short note on transformations by microorganisms.	
	8.	Write the role of polychlorinated biphenyls on environment.	
	9.	Differentiate DNA hypomethylation and DNA hypermethylation What do you mean by metastasis?	
Q – 3	(a)	Give a detail account on the components of an ecosystem.	[06]
	(b)	Write an essay on the types of aquatic ecosystems.	[06]
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	(b)	What is a Biome? Write about any four types of Terrestrial Biomes.	[06]
Q-4	(a)	Define bio-geochemical cycle. Explain any two cycles exists in the ecosystem.	[06]
	(b)	Write a note on energy flow and various pyramids in the ecosystem. OR	[06]
	(b)	Explain Hydrosere in detail with example. Add a note on human influence on succession.	[06]
Q-5	(a)	What is Biotoxin? Discuss in detail about any three biotoxins studied by you with suitable examples.	[06]
	(p)	Give a detail account on transformations in animals and higher plants. OR	[06]
	(b)	Discuss in detail about the toxic effects of non-metallic elements in environment.	[06]
Q-6	(a)	What do you mean by biomarker? Discuss in detail about the selection of	[06]
-	` /	biomarkers in event of toxic exposures.	
	(b)	Define apoptosis. Give a brief account on apoptosis due to exposure of arsenic and cadmium.	[06]
		OR	
	(b)	Write a detail note on the role of environmental factors in carcinogenesis.	[06]
