Faculty of Pharmacy
End Sem (Even) Examination May-2022
PY3HS02 Environmental Sciences

Programme: B. Pharma.   Branch/Specialisation: Pharmacy

Duration: 3 Hrs.   **Maximum Marks: 50**

Note: All questions are compulsory. Internal choices, if any, are indicated.

Q.1 i.   Name the largest freshwater resource on the earth.   **1**

ii.   Which type of biodiversity will not occur between two tigers found in Sundarban and in Karnataka.   **1**

iii. NGT stands for _____. Also mention the year in which it has been formed.   **1**

iv.   Name any one soil reclamation technique.   **1**

v.   Electrostatic precipitation is a remedy for which type of pollution?   **1**

vi.   Which one has more biodiversity? (Aquatic or Terrestrial)   **1**

vii. Name the types of biodiversity.   **1**

viii. Name any three mineral resources found in Madhya Pradesh.   **1**

ix.   Name the measure by which odour of water can be categorized.   **1**

x.   Which type of hardness can be generated by $NaHCO_3$.   **1**

Q.2   Attempt any two:

i.   Define the nature. Also state importance of different discipline in environmental studies.   **5**

ii.   Discuss the problems associated with water and food resources with their remedies.   **5**

iii. (a) How the forest and mineral resources can be conserved? Give three solutions for each.   **5**

(b) Give any two reasons for land degradation.

Q.3   Attempt any six: Two questions from each section is compulsory.
Section - A
i.   Define ecosystem. What is structure and functions of ecosystem?   **5**

P.T.O.

ii.   What are different stages and types of ecological succession?   **5**

iii. Write down structure and function of desert ecosystem.   **5**

Section - B
iv.   Discuss any five measures to reduce water pollution.   **5**

v.   What are the sources of air pollution? Also write its effect on humans.   **5**

vi.   Write the types and features of grassland ecosystem.   **5**

Section - C
vii. What are the characteristic features of aquatic ecosystem?   **5**

viii. Define ecological succession and various factors affecting it.   **5**

ix.   Draw the energy distribution pyramid for an ecosystem and explain each level.   **5**

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Marking Scheme PY3HS02 Environmental Sciences

Q.1
i.	Ice-caps	1 Mark	**1**
ii.	Species biodiversity	1 Mark	**1**
iii.	National Green Tribunal (2010)	1 Mark	**1**
iv.	Leacing	1 Mark	**1**
v.	Air pollution	1 Mark	**1**
vi.	Aquatic	1 Mark	**1**
vii.	Species, Ecological, Genetic	1 Mark	**1**
viii.	Mangnese, Copper, Coal, Al, Bawcite, Calcium rock phosphate, Marble, etc(Any 3)	1 Mark	**1**
ix.	TON Threshold odour number	1 Mark	**1**
x.	Temporary	1 Mark	**1**

Q.2 Attempt any two:
i.	Definition	2 Marks	**5**
	Importance	3 Marks	
ii.	Problems Statement	5 Marks	**5**
iii.	(a) 3 conservation solution	3 Marks	**5**
	(b) 2 reasons for land degradation.	2 Marks	

Q.3 Attempt any six: Two questions from each section is compulsory.

Section - A
i.	Definition	2 Marks	**5**
	Structural ecosystem	1 Mark	
	Functional ecosystem	1 Mark	
	Example	1 Mark	
ii.	Stages of ecological succession	2 Marks	**5**
	Example and illustration	0.5 Mark	
	Types of ecological succession	2 Marks	
	Example and illustration	0.5 Marks	
iii.	Structure of desert ecosystem.	2 Marks	**5**
	Example and illustration	0.5 Mark	
	Function of desert ecosystem.	2 Marks	
	Example and illustration	0.5 Mark	

Section - B
iv.	5 measures	1 Mark each (1 Mark*5)	**5**

v.	Sources of air pollution	3 Marks	**5**
	Effect on humans.	2 Marks	
vi.	Types of grassland ecosystem.	2 Marks	**5**
	Example and illustration	0.5 Mark	
	Features of grassland ecosystem.	2 Marks	
	Example and illustration	0.5 Mark	

Section - C
vii.	Features of aquatic ecosystem	5 Marks	**5**
viii.	Definition	2 Marks	**5**
	Factors affecting	3 Marks	
ix.	Producer (100%), Primary consumer (10%), Secondary consumer (1%), Tertiary consumer (0.1%)	4 Marks	**5**
	Diagram	1 Mark	

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