

U.G. 3rd Semester Examination - 2021**ENVIRONMENTAL SCIENCE****[HONOURS]****Course Code : ENVS-H-CC-P-06****(Biodiversity and Conservation)****[PRACTICAL]**

Full Marks : 20

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

Answer the following :

10×2=20

- Describe various techniques available to assess phytodiversity of any terrestrial ecosystem. Prepare a biodiversity document based on terrestrial phytodiversity of your locality.

5+5=10

OR

Describe different techniques used for assessing animal diversity in aquatic ecosystems. Prepare a biodiversity document based on faunal diversity of your locality.

5+5=10

- Define diversity index. State the significance of diversity indices in estimation of biodiversity of any

ecosystem. Estimate the status of biodiversity of following ecosystems :

Species Name	Number of individual		
	Ecosystem A	Ecosystem B	Ecosystem C
<i>Gazella bennettii</i>	200	250	900
<i>Axis axis</i>	250	350	1100
<i>Antelope cervicapra</i>	150	600	650
<i>Boselaphus tragocamelus</i>	450	150	1000
<i>Sus scrofa</i>	350	100	750

2+3+5=10

OR

Define ecorestoration. How ecosystems are being restored? Find out the Simpson's diversity index, and Simpson's reciprocal index for each of the following ecosystems:

Species Name	Number of individual		
	Ecosystem A	Ecosystem B	Ecosystem C
Blue-throated Barbet	10	100	50
Common Kingfisher	25	50	45
Green Bee-eater	140	85	55
Common Hoopoe	90	150	100
Parrots	35	65	150

2+3+5=10

[Turn over]