

(A) Write a note on Biodiversity.

10/12/19

BIODIVERSITY-II AND ECOLOGY - B

Time Allowed : Three Hours]

[Maximum Marks : 75

Note: Attempt *one* questions each from Sections A, B, C and D carrying 15 marks each and the entire Section E consisting of 10 short answer type questions carrying 1½ marks each.

- Section : A**
1. (a) Describe the respiratory system of *Periplaneta Americana*. 7½+7½=15
 - (b) Write short note on antennary gland of Prawn.
 2. (a) Draw well labelled diagram of circulatory system of Pila. 10+5=15
 - (b) Write short note on pedicellariae of Starfish.
- Section : B**
3. Classify the following and write ecological note on each of the following:

(a) Locust	(b) Centripede.	
(c) Hermit crab.	(d) Anodonta.	(e) Loligo

5×3=15
 4. (a) Write general features of Phylum Arthropoda. 10+5=15
 - (b) Give diagnostic features of Phylum Mollusca.
- Section : C**
5. (a) Write note on energy pyramid.
 - (b) Describe briefly 'nitrogen cycle' in nature. 7½+7½=15
 6. Describe various morphological adaptations in animals in different habitat. 15
- Section : D**
7. (a) What are non-renewable resources ? How these can be conserved? 7½+7½=15
 - (b) Write short note on the importance of biodiversity. 15
 8. Write the major causes and impact of soil pollution.
- Section : E**
9. Explain briefly note on the following:

(a) What is radula ? Give radular formula.	(b) Define haemocoel.
(c) Differentiate between insect and spider.	(d) Define predation and commensalism.
(e) What is meant by noise pollution ?	(f) Name three species of honey bee.
(g) How does hemichordates resemble with chordates ?	
(h) Give an example of negative interaction (interspecific).	
(i) Draw diagram of leg of cockroach and label various podomeres.	
(j) Give the main morphological difference between male and female cockroach.	1½×10=15