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ZIET, CHANDIGARH

REVISION PAPER, SET- II

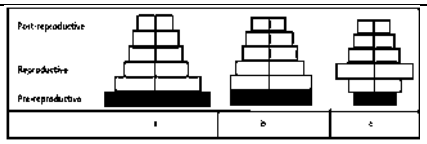
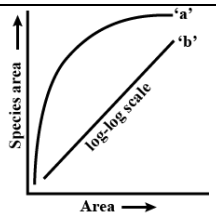
UNIT- X

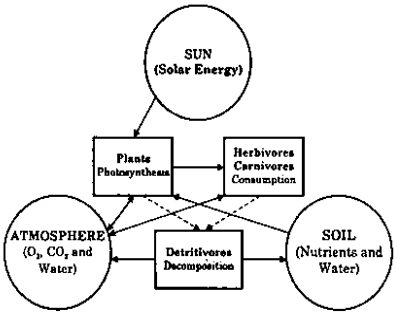
(Chapters: Organisms and Populations, Ecosystem, Biodiversity and its Conservation)

Subject: Biology **Class: XII**

TIME: 1:00 Hr. **Max. Marks: 20**

Note: Question no. one to four is of **01** mark each, question no five and six is of **02** marks each, question number three is of **03** marks, question no five is a case study based and is of **04** marks and question number six is of **05** marks.

SN	Question	Marks
1	In a zoo, there are 10 tigers in august 2022. In September 2022 two more were added by birth. What will be the birth rate of tigers in that zoo? a- 2 b- 0.2 c- 20 d- 200	1
2	What are r and N in the given equation? $\frac{dN}{dt}=rN\left(\frac{K-N}{K}\right)$ a- r- intrinsic rate of natural increase, N- population density b- r- carrying capacity, N- population frequency c- r- intrinsic rate of natural increase, N- Natality d- r- carrying capacity, N- Natality	1
3	In India, there are 28 wetland sites of international importance. These are- a- Mangrove lands b- Biosphere hot spots c- Ramsar sites d- Sacred groves	1
4	Find the correct match – a- Western ghat- species diversity b- Eastern ghat – ecological diversity c- Coral reefs and mangroves- species diversity d- Rauwolfia- Genetic diversity	1
5	Find out the correct type of population interaction for the following examples- i- Mycorrhizal association ii- Cuckoo lays their eggs in the nest of a crow iii- Pollination by a species of bee for the plant Ophrys, a Mediterranean orchid. iv- Balanus and Chathamalus	2
6	i- Based on the diagram identify the types of age pyramids. ii- Which one helps in population decrease and why? 	2
7	i- what does the diagram represent? ii- Label ‘a’ and ‘b’. iii- Write the correct equation for the log-log scale. 	3

8	An ecosystem is a complex in which habitat, plants, and animals are considered as one interesting unit, the materials, and energy of one passing in and out of the others. The concept of the ecosystem was first put forth by A.G. Tansley (1935). An ecosystem is the major ecological unit. It has both structure and function. The structure is related to species diversity. Generally, ecosystems consist of two basic components- abiotic and biotic. The decomposers play a very important role in maintaining the dynamic nature of the ecosystem. Ecosystems may be Terrestrial or aquatic types. The primary function of any ecosystem is the exchange of energy from one life form to another, which eventually runs in a circle and sustains the entire life of the planet.  Relationship within an Ecosystem. i- Which one of the following is not a component of the ecosystem- a- Productivity b- Decomposition c- Energy flow d- All are components of the ecosystem ii- Earthworm is an example of- a- Parasite b- Detrtivore c- Secondary consumer d- All are incorrect iii- Some microbes degrade humus and release inorganic nutrients in the soil. This process is known as- a- Mineralization b- Humification c- Fragmentation d- Leaching iv- Assertion: Food web is natural interaction of the food chain. Reason: more stable food web represents a more stable ecosystem. Both assertion and reason are correct and the reason is the correct explanation of assertion. b- Both assertion and reason are correct and the reason is not a correct explanation of assertion. c- Assertion is true but the reason is false. d-Assertion is false but the reason is true.	4
9	Explain the followings- i- Differentiate between In-Situ and Ex-Situ conservations. Give one example of each. ii- Explain alien species invasion by citing two exaples. iii- Give one exapmle of coextiction.	5