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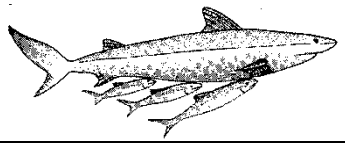
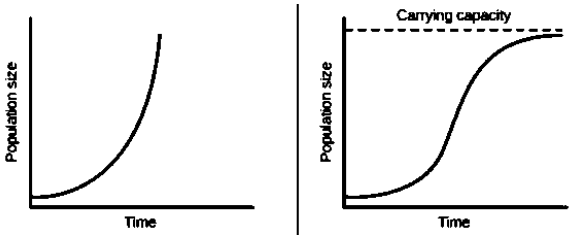
ZIET, CHANDIGARH
REVISION PAPER, SET- I
UNIT- X
(Chapters: Organisms and Populations, Ecosystem, Biodiversity and its Conservation)

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	Kangaroo rat is capable of filling their water requirements by – a- Changing its feeding habit b- Internal fat oxidation c- Storage of water d- By all the means	1
2	The diagram represents- a- Commensalism c- Predation b- Competition d- Scavenging 	1
3	Identify the incorrect pair- a- Rivet popper hypothesis----------Paul Ehrlich b- David Tilman---------- increased diversity is related to high productivity c- Alexander von Humboldt----------exponential and sigmoid growth curve d- Allen's rule----------polar area animals have short ear and limbs	1
4	Which one belongs to the sacred grooves- a- Khasi and Jaintia hills in Sikkim b- Khasi and Jaintia hills in Meghalaya c- Aravali hills of Karnataka d- Baster area of Jharkhand	1
5	i- What are pioneer species? Give an example of pioneer species. ii- Draw a pyramid of biomass if the number of primary producers and primary consumers are 10 and 100 respectively.	2
6	i- Mathematically express the relation between GPP and NPP. ii- How leaching and humification is different?	2
7	Mention the type of population interaction in the followings- i- Cuckoo and Crow ii- Orchid growing on mango tree iii- Mycorrhiza iv- Human and seed of groundnut v- Sea anemone and clown fish	3
8	Exponential growth and logistic growth are two types of growth of populations. Exponential growth is the increase in population size when plenty of resources are available. Logistic growth occurs when the increase in the size of the population is influenced by the resources in the environment. Most populations do not live under ideal conditions. Therefore, most do not grow exponentially. Certainly, no population can keep growing 	4

	exponentially for very long. Many factors may limit growth. The carrying capacity (K) plays a very important role in determining the size of the population in any habitat. i- the largest population size that can be supported in an area without harming the environment. a- K b- N c- C d- dN / dT ii- dN/dt= Rn (K-N/K) is used for a- exponential growth b- logistic growth c- intermediate growth d- both logistic and exponential growth iii- The exponential growth is not occurring in population due to- a- Competition for food and space b- Unlimited resources c- High reproduction capacity d- All are correct iv- Assertion: In dN/ dt= rN, N is the intrinsic rate of natural increase. Reason: N is a very important parameter to assess the impact of biotic and abiotic factors on population growth. a- Both assertion and reason are correct and the reason is the correct explanation of assertion. b- Both assertion and reason are correct and reason is not a correct explanation of assertion. c- Assertion is true but the reason is false e- Assertion is false but the reason is true.	
9	i- With a suitable example explain how alien species invasion causes harm to biodiversity. ii- Explain any two modern methods of ex situ preservation of biodiversity. iii- Represent global biodiversity of invertebrates with the help of pie chart.	5