TEMPLATE FOR ASSESSMENTS

1. **Read Guidelines – in case of any doubt check with your mentor.**
2. **The final submission will have to be in soft copy in MS word as per template shared below.**
3. **Use Calibri font size 9**
4. **Keep Questions short and crisp. Word count should not exceed 20 words for questions and 8 words for options.**
5. **In the last row – mention the correct option as a) or b)**
6. **The Blooms level has been fixed – so please design question accordingly.**
7. **The rows heights have been fixed, so that the table size is not changed. If you have any problem, use this link to learn how to fix it** [**YouTube**](https://www.youtube.com/watch?v=sP3fDIUO_YY)

*Insert the exact details within the <>*

Course Code**CE**: Subject Code**22447**: Subject Name: **Environmental studies**: Topic Name : **Ecosystem and biodiversity**: **UO 3a,3b, 3c, 3f**: Assessments: Formative

Course expert Name - **Anant Fulzele and Mrs Swati Ingale**

**Assessment Type: Formative Assessments: Embedded questions in video**

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| Set 1-  No1: Which one of the following is not a gaseous biogeochemical cycle in an ecosystem? | Set 1-  No2: Transfer of energy from source of plants through a series of organism is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Set 1-  No3: The type of ecosystem with the highest mean plant productivity is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Recall/ Remembering | Understanding | Application |
| 1. Carbon cycle | 1. Food web | a) Tundra |
| 1. Phosphorous cycle | b) Energy cycle | b) Temperate grassland |
| 1. Sulphur cycle | c) Food chain | c) Desert |
| 1. Nitrogen cycle | d) Biological system | d) Tropical rain forest |
| Ans: b | Ans: c | Ans: d |

| Set 2: Question No 1 | Set 2: Question No 2 | Set 2: Question No 3 |
| --- | --- | --- |
| In ecosystem standing crop refers to\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | An ecosystem which can be easily damaged but can be recovered after some time if damaging effect stops will be having \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Which ecosystem produce the highest annual net primary productivity? |
| Recall/ Remembering | Understanding | Application |
| 1. All the green plants | a) High stability and high resilience | a) Tropical evergreen forest |
| 1. All the non living materials | b) High stability and low resilience | b)Tropical rain forest |
| 1. All living and dead animals | c) Low stability and low resilience | c) Tropical deciduous forest |
| 1. All the living materials both animals and plants | d) Low stability and high resilience | d) Temperate evergreen forest |
| Ans: d | Ans: d | Ans: b |

| Set 3: Question No 1 | Set 3: Question No 2 | Set 3: Question No 3 |
| --- | --- | --- |
| \_\_\_\_\_\_\_\_\_\_\_\_is the term used to describe the variety of life found on Earth and all of the natural processes. | Which of the following is not the value of biodiversity? | The biodiversity contained in the ecosystem provides forest dwellers with all their daily needs is\_\_\_\_\_\_use value. |
| Recall/ Remembering | Understanding | Application |
| a) Biodiversity | a) Social use | a) Ethical and Moral |
| b) Ecosystem | b) Aesthetical use | b) Consumptive |
| c) Biosphere | c) Environmental use | c) Aesthetical |
| d) Ecology | d) Moral | d) Social |
| Ans: a | Ans: c | Ans: b |

| Set 4: Question No 1 | Set 4: Question No 2 | Set 4: Question No 3 |
| --- | --- | --- |
| The initiative of biodiversity assessment focuses on which ecosystem types: | Which of the following is not a Causes of biodiversity losses? | marketable products such as animal skins, ivory, medicinal plants, honey, etc comes under\_\_\_\_\_\_\_. |
| Recall/ Remembering | Understanding | Application |
| a) Forest | a) Over exploitation | a) Productive value |
| b) wetland | b) Eco-friendly | b) Consumptive value |
| c) Marine | c) Co-extinction | c) Aesthetic value |
| d) All of the above | d) Habitat loss and fragmentation | d) Social value |
| Ans: d | Ans: b | Ans: a |

| Set 5: Question No 1 | Set 5: Question No 2 | Set 5: Question No 3 |
| --- | --- | --- |
| \_\_\_\_\_\_\_called the ‘lungs of the planet’. | Which leads to over- exploitation of natural resources? | Which of the following is not an Important hot spots in India? |
| Recall/ Remembering | Understanding | Application |
| a) Sahyadry rain forest | a) Greed | a) Himalayan |
| b) Kankan rain forest | b) Eco-friendly | b)Western ghat |
| c) Amazon rain forest | c) Need | c) Indo-Berma |
| d) South Africa rain forest | d) All of the above | d) Central ghat |
| Ans: c | Ans: a | Ans: d |

**Assessment Type: Summative: End of CO: in LMS**

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| What flows through the ecosystem while matter cycles within them? | The process in which green plants and few organisms use sunlight to synthesize nutrients is known\_\_\_\_\_\_\_\_\_\_ | Which type of ecosystem accounts for most of the net primary productivity on earth even though it has a low average net primary productivity? | What makes plant producers? | Into how many areas the energy that is received by organisms during energy transfer is converted? |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)Energy | a) Chemosynthesis | a) Tropical rain forest | a) Plants produce their own food | a) One |
| b) Force | b) Photosynthesis | b) desert | b) Plants depend on other organisms for food | b) Two |
| c) Pressure | c) Food chain | c) Tropical evergreen forest | c) Plants are decomposers | c) Three |
| d) wind | d) Food web | d) Ocean | d) Plants do not require any energy | d) Four |
| Ans: a | Ans: b | Ans: d | Ans: a | Ans:c |

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| The area to which a species is biologically adapted to live is known  as-------------- | A set of organisms that resemble one another in appearance and  behaviour is  called a -------------- | Habitat of Dog Fish is | The destruction of habitat of plants and animals is called | Each organism in an ecosystem is at a specific feeding stage called as  the ---- |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a) Niche | a) Exons | a) River | a) endemism | a) Climax level |
| b) Habitat | b) Prions | b) Pond | b) endangered species | b) Producer level |
| c) Succession | c) Species | c) Lake | c) habitant loss | c) Trophic level |
| d) All of the above | d) None of the above | d) Sea | d) flood | d) Consumptive level |
| Ans: b | Ans: c | Ans: d | Ans: c | Ans:c |

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| Zoos are examples for | Study of inter-relationship between organisms and their environment  is | How is the atmosphere, hydrosphere and lithosphere connected ? | An ecosystem consist of | An ecosystem gradually merges with an adjoining one through a  transitional  zone called the --------- |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a) insitu conservation | a) Ecology | a) Hydrological cycle | a) Green plants and animals | a) ecological niche |
| b) in vivo conservation | b) Ecosystem | b) Nitrogen cycle | b) Green plants and decomposers | b) ecological footprint |
| c) exsitu conservation | c) Phytogeography | c) Oxygen cycle | c) Producers and consumers | c) ecotone |
| d) exvivo conservation | d) Ethology | d) Carbon cycle | d) Green plants, animals, decomposers and abiotic environment | d) Biodiversity loss |
| Ans: c | Ans: a | Ans: d | Ans: d | Ans:c |

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| Driving force in an ecosystem is | Which of the following is a possible producer in an ecosystem? | A trophic level refers to: | Levels of biodiversity include all but one: | Which ecological pyramid is always upright? |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)Plants | a) Plants | a) Area in the tropics | a) Genetics | a) Pyramid of number |
| b) Producers | b) Animals | b) An organism’s portion in a food chain | b) Species | b) Pyramid of biomass |
| c) Solar energy | c) Human | c) An organism’s position in an ecosystem | c) Population | c) Pyramid of energy |
| d) Biomass energy | d) Fish | d) An organism’s position in a biome | d) Ecosystem | d) Pyramid of number and biomass |
| Ans: c | Ans: a | Ans: c | Ans: c | Ans:c |

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| The type of diversity including all the different kinds of living things found in a certain  habitat is called as: | Conservation of biodiversity outside the natural habitat is called as: | An ecosystem may not undergo changes because: | The primary producers in a forest ecosystem are: | Energy flow in an ecosystem is always: |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a) Species diversity | a) Ex-situ | a) It is in a state of homeostasis | a) Chlorophyll containing trees and plants | a) Unidirectional |
| b) Genetic diversity | b) In-situ | b) It has plants and animals both | b) Herbivores | b) Cyclic |
| c) Ecosystem diversity | c) Conservation | c) It gets solar energy continuously | c) Carnivores | c) Reversible |
| d) Population diversity | d) In-vivo | d) The decomposers are present in it | d) Bacteria and other micro-organism | d) Multi-directional |
| Ans: a | Ans: a | Ans: a | Ans: a | Ans: a |

**Assessment Type: Practice Worksheets: End of CO: in LMS/ downloadable PDF**

*If students have access to laptop/ desktop – they can answer it on LMS, else download it and answer it and file it for later use. They can also copy the question in their notebook in case the space provided is insufficient.*

1. Best suited for subjective questions.
2. Numerical problems
3. Short answer questions

| 1. **Question Space**   Define ecosystem? | 1. **Question Space**   Describe various aspects of ecosystem? |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |
| 1. **Question Space**   State the divisions of ecosystem? | 1. **Question Space**   Describe the general characteristics of ecosystem? |
| 1. **Answer Space** | 1. **Answer Space** |
| 1. **Question Space**   State different functions of ecosystem? | 1. **Question Space**   Define biodiversity? |
| 1. **Answer Space** | 1. **Answer Space** |
| 1. **Question Space**   List different levels of biodiversity with examples? | 1. **Question Space**   Describe theconservation of biodiversity? |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **State causes of biodiversity losses**. | 1. **Question Space**   **Describe threats to biodiversity.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe hotspots of biodiversity.** | 1. **Question Space**   **List out endangered species in India.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |
| 1. **Question Space**   **Describe Conservation of biodiversity.** | 1. **Question Space**   **State various laws of biodiversity conservation.** |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe values of biodiversity.** | 1. **Question Space**   **Describe the biodiversity assessment.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |