

OPEN STUDENT FOUNDATION

CHAPTER : ECOSYSTEM

STD 12TH Biology

Date : 27/02/24

Total Marks: 30

PRACTICE SHEET DAY 10

Time: 1 hr

Section A

- Choose correct answer from the given options. [Each carries 1 Mark] [10]
- Decomposers like fungi and bacteria are :
(i) autotrophs (ii) heterotrophs
(iii) saprotrophs (iv) chemo-autotrophs
Choose the correct answer :
(A) i and iii (B) i and iv (C) ii and iii (D) i and ii
 - The process of mineralisation by micro organisms helps in the release of
(A) inorganic nutrients from humus
(B) both organic and inorganic nutrients from detritus
(C) organic nutrients from humus
(D) inorganic nutrients from detritus and formation of humus.
 - Productivity is the rate of production of biomass expressed in terms of :
(i) $(\text{kcal m}^{-3}) \text{ yr}^{-1}$
(ii) $\text{g}^{-2} \text{ yr}^{-1}$
(iii) $\text{g}^{-1} \text{ yr}^{-1}$
(iv) $(\text{kcal m}^{-2}) \text{ yr}^{-1}$
(A) ii (B) iii (C) ii and iv (D) i and iii
 - An inverted pyramid of biomass can be found in which ecosystem ?
(A) Forest (B) Marine (C) Grass land (D) Tundra
 - Which of the following is not a producer ?
(A) Spirogyra (B) Agaricus (C) Volvox (D) Nostoc
 - Pyramid of numbers is :
(A) Always upright (B) Always inverted
(C) Either upright or inverted (D) Neither upright nor inverted
 - Approximately how much of the solar energy that falls on the leaves of a plant is converted to chemical energy by photosynthesis ?
(A) Less than 1% (B) 2-10% (C) 30% (D) 50%
 - The sequence of communities of primary succession in water is :
(A) phytoplankton, sedges, free-floating hydrophytes, rooted hydrophytes, grasses and trees.
(B) phytoplankton, free-floating hydrophytes, rooted hydrophytes, sedges, grasses and trees.
(C) free-floating hydrophytes, sedges, phytoplankton, rooted hydrophytes, grasses and trees.
(D) phytoplankton, rooted submerged hydrophytes, floating hydrophytes, reed swamp, sedges, meadow and trees.
 - If the carbon atoms fixed by producers already have passed through three species, the trophic level of the last species would be.
(A) scavenger (B) tertiary producer
(C) tertiary consumer (D) secondary consumer
 - Which of the following type of ecosystem is expected in an area where evaporation exceeds precipitation, and mean annual rainfall is below 100 mm ?
(A) Grassland (B) Shrubby forest (C) Desert (D) Mangrove

Section B

- Write the answer of the following questions. [Each carries 2 Marks] [6]
1. Give Difference : Grazing food chain and Detritus chain
 2. Give Difference : Upright Pyramid and Inverted Pyramid
 3. Give Scientific Reason : Energy pyramids are never inverted.

Section C

- Write the answer of the following questions. [Each carries 3 Marks] [6]
4. What will happen to an ecosystem if :
 - (a) All producers are removed;
 - (b) All organisms of herbivore level are eliminated; and
 - (c) All top carnivore population is removed
 5. The biodiversity increases when one moves from the pioneer to the climax stage. What could be the explanation ?

Section D

- Write the answer of the following questions. [Each carries 4 Marks] [8]
6. Explain various types of ecological pyramids.
 7. Mention various steps included in the process of decomposition.

OSF

OPEN STUDENT FOUNDATION

CHAPTER : ECOSYSTEM

STD 12TH Biology

Date : 27/02/24

Total Marks: 30

PRACTICE SHEET DAY 10

Time: 1 hr

Section [A] : 1 Mark MCQ

No	Ans	Chap	Sec	Que	Universal_Queld
1.	C	Chap 12	S5	1	QP23P11B1214_P1C12S5Q1
2.	A	Chap 12	S5	2	QP23P11B1214_P1C12S5Q2
3.	C	Chap 12	S5	3	QP23P11B1214_P1C12S5Q3
4.	B	Chap 12	S5	4	QP23P11B1214_P1C12S5Q4
5.	B	Chap 12	S5	5	QP23P11B1214_P1C12S5Q5
6.	C	Chap 12	S5	7	QP23P11B1214_P1C12S5Q7
7.	B	Chap 12	S5	8	QP23P11B1214_P1C12S5Q8
8.	D	Chap 12	S5	14	QP23P11B1214_P1C12S5Q14
9.	C	Chap 12	S5	16	QP23P11B1214_P1C12S5Q16
10.	C	Chap 12	S5	17	QP23P11B1214_P1C12S5Q17

Section [B] : 2 Marks Questions

No	Ans	Chap	Sec	Que	Universal_Queld
1.	-	Chap 12	S2	1	QP23P11B1214_P1C12S2Q1
2.	-	Chap 12	S2	3	QP23P11B1214_P1C12S2Q3
3.	-	Chap 12	S2	6	QP23P11B1214_P1C12S2Q6

Section [C] : 3 Marks Questions

No	Ans	Chap	Sec	Que	Universal_Queld
4.	-	Chap 12	S8	8	QP23P11B1214_P1C12S8Q8
5.	-	Chap 12	S8	10	QP23P11B1214_P1C12S8Q10

Section [D] : 4 Marks Questions

No	Ans	Chap	Sec	Que	Universal_Queld
6.	-	Chap 12	S1	7	QP23P11B1214_P1C12S1Q7
7.	-	Chap 12	S1	5	QP23P11B1214_P1C12S1Q5