

1. Consider the following statements:

Assertion (A): Ecological productivity decreases from the equator towards the poles.

Reason (R): Insolation rapidly decreases from the equator towards the poles.

Select the correct answer from the codes given below:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

2. Which one of the following statements is correct?

- (a) The relative loss of energy due to respiration is lower from higher trophic levels.
- (b) Species at higher trophic levels appear to be less efficient in using their available food supply.
- (c) Higher trophic levels tend to be less discrete than the lower ones.
- (d) Food chains tend to be reasonably long.

3. Consider the following protected areas:

- |             |                 |
|-------------|-----------------|
| 1. Bandipur | 2. Bhitarkanika |
| 3. Manas    | 4. Sunderbans   |

Which of the above are declared Tiger Reserves?

- (a) 1 and 2 only
- (b) 1, 3 and 4 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

4. Which of the following regions of India have been designated as biodiversity hotspots?

Select the correct answer from the codes given below:

- |                     |                 |
|---------------------|-----------------|
| 1. Eastern Himalaya | 2. Eastern Ghat |
|---------------------|-----------------|

3. Western Ghat

4. Western Himalaya

Codes:

(a) 1 and 2 only

(b) 1 and 3 only

(c) 2 and 4 only

(d) 3 and 4 only

5. Which of the following are the incorrect statements about 'Keystone species'.

1. Keystone species are the small-sized plants and organisms which have large effect on the environment.

2. Keystone species play critical role in maintaining the structure of an ecological community.

3. Keystone species do not generally affect other organisms.

(a) 1 and 2

(b) 2 and 3

(c) 1 and 3

(d) All are correct

6. The International Union for Conservation of Nature (IUCN) red list version 2013 of the birds indicates 15 species of birds from India as critically endangered. The reason for the decline in the number of these birds are:

1. Loss, modification, fragmentation and degradation of habitat

2. Environmental contaminants

3. Poaching

4. Use changes mainly conversion of large areas to intensive crop cultivation

Select the answer from the codes given below-

(a) 1, 2, and 3

(b) 2, 3, and 4

(c) 1, 3, and 4

(d) All of the above

7. The Ministry of Environment and Forest declared India's first marine eco-sensitive zone in –

- (a) Gulf of Kutch
- (b) Palk Strait
- (c) Gulf of Khambhat
- (d) Gulf of Mannar

8. Consider following statements about the Ozone Hole

- (1) Ozone formation and destruction keep on happening
- (2) Ozone destruction rate is higher than its formation rate
- (3) Ozone destruction rate is equal to the its formation rate

Which of above statement is/ are true?

- (a) (1) only
- (b) (1) and (2) Only
- (c) (1) and (3)
- (d) (3) Only

9. Measuring BOD (biological oxygen demand) is primarily used for

- (a) Estimating the types of microbes
- (b) Determine the level of dissolved oxygen
- (c) Estimating the quantity of organic matter in sewage water
- (d) None of the above

10. Which of following statement is true about the Ecotone?

- (a) It is meeting place of two different eco systems
- (b) It is meeting place of two same eco systems
- (c) Density of species is very low here
- (d) All of the above.

11. The earth's satellite is kept moving in its orbit. It is due to the phenomenon of centripetal force provided by

- (a) the rocket engine propelling the satellite
- (b) the gravitational attraction of the earth on the satellite
- (c) the gravitational attraction of the sun on the satellite
- (d) the gravitational attraction of satellite on earth

12. Radar is used for

- (a) detecting objects by using light waves
- (b) reflecting sound waves to detect objects
- (c) determining the presence and location of objects with radiowaves.
- (d) tracking rain bearing clouds.

13. ISRO space vision 2025 includes:

1. Satellite based communication and navigation systems mainly for rural connectivity.
2. Space science mission for better understanding of solar system and universe.
3. Reusable Launch Vehicles Technology demonstrator mission leading to Two-stage- To-orbit-(TSTO).
4. Planetary explorations to Mars and Venus. Which of the above statements is/are correct?

- (a) 1 and 2
- (b) 2 and 4
- (c) 1, 2 and 3
- (d) 2, 3 and 4

14. Consider the following statements about Ethernet and select the correct answers:

1. Ethernet is a family of computer networking technologies for wide area networks (WANs)
2. Data rates over Ethernet can be upto 100 gigabits per second.
3. Ethernet has a good degree of compatibility.

Codes:

- (a) 1 and 2
- (b) 2 and 3

(c) 1 and 3

(d) all the above

15. What are the rings of Saturn made from?

(a) Gases and clouds

(b) Large pieces of ice and rock

(c) Wind and storms

(d) Satellites

16. Enriched uranium is one in which?

(a) Percentage of  $^{235}\text{U}$  has been artificially increased

(b) Percentage of U has been artificially increased

(c) Percentage of  $^{234}\text{U}$  has been artificially increased

(d) Extra energy is pumped from outside

17. High Altitude Warfare School of the Indian Army is located at

(a) Gulmarg

(b) Siachin

(c) Leh

(d) Manali

18. What is Kessler Syndrome ?

(a) A disease where human talk while sleeping.

(b) A rare viral disease causing respiratory problems.

(c) A problem found in space launch vehicles.

(d) Proliferation of space debris in low earth orbit.

19. What is Nuclear transmutation?

(a) Conversion of one chemical element or isotope into another.

(b) Conversion of solid directly into gas

(c) Conversion of gas directly into solid

(d) Conversion of a nucleated human nerve cell into a non-nucleated one

20. Consider the following statements about Dhanush missile and select the correct answer:

1. Dhanush missile is an indigenously developed naval version of the Prithvi short range ballistic missile.

2. It is a single stage missile and was developed by the DRDO and it uses liquid propellant.

3. It has a strike range of up to 350 km and can carry 500 kg of conventional warheads only.

Codes:

(a) 1 and 2 only

(b) 1 and 3 only

(c) 2 and 3 only

(d) all the above

21- Consider the following statements:

1. National Youth Day is celebrated to commemorate the birth anniversary of Swami Vivekanand.

2. The National Youth Festival is organised by the Ministry of Youth Affairs and Sports.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

22. Consider the following statements about United Nations Security Council (UNSC):

1. The UNSC consists of 5 permanent and 10 nonpermanent members.

2. Five non-permanent members are elected every year by the General Assembly for a two-year term.

3. India has entered as a non-permanent member of UNSC for the first time during 2011-12.

Which of the statements given above is/are not correct?

(a) 1 and 2 only

(b) 2 only

(c) 3 only

(d) 2 and 3 only

23. Consider the following statements:

1. Asian houbara bustards are endemic to the Indian Subcontinent.

2. Asian houbara bustards are listed as critically endangered under IUCN Red List.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

24. Consider the following statements:

1. The Dzukou valley is located at the border of Nagaland and Manipur.

2. The Dzukou valley is located adjacent to the Pulie Badze Wildlife Sanctuary.

3. The Pulie Badze Wildlife Sanctuary is located in Manipur.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 only

(c) 3 only

(d) 1, 2 and 3

25. With reference to Pradhan Mantri Fasal Bima Yojana (PMFBY), consider the following statements:

1. It covers all food & oilseed crops and annual commercial/horticultural crops for which past yield data is available.

2. Premium cost over and above the farmer share is subsidized by the Union Government only.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer Sheet

1	A	10	A	19	A
2	C	11	B	20	A
3	B	12	C	21	C
4	B	13	C	22	C
5	C	14	B	23	D
6	D	15	B	24	A
7	A	16	A	25	A
8	B	17	A		
9	C	18	D		