

1. The Tamil Nadu coast remains dry during the South-west Monsoon season. The reason
 1. The Tamil Nadu coast is situated parallel to the Bay of Bengal branch of Southwest monsoon
 2. It doesn't lie in the rain shadow region of the Arabian Sea branch of the South-west monsoon
 3. Monsoon winds strike the coast and reroute due to the very high summits of the Eastern GhatsWhich of the statements given above is/are correct?
 - a) **1 only**
 - b) 1 and 2 only
 - c) 1, 2 and 3
 - d) 1 and 3 only
2. The Winter Monsoons, that are also known as the North-East Monsoons blow from
 - a) Sea to the Land
 - b) **Land to Sea**
 - c) Upper air circulation
 - d) None
3. Consider the following statements
 1. High pressure systems usually bring wind and precipitation.
 2. Low pressure systems are usually characterized by dry and settled weather.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**
4. Consider the following statements regarding Katabatic winds:
 1. They are also called Gravity winds or Downslope winds
 2. They occurs due to density differences in wind at different altitudesWhich of the statements given above is/are correct?
 - a) 1 only
 - b) 2 only
 - c) **Both 1 and 2**
 - d) Neither 1 nor 2
5. Why does not the cyclones form at the Equator
 - a) **The Coriolis force is zero at the Equator**
 - b) The Coriolis force is maximum at the Equator
 - c) The wind blows parallel to the isobars at the Equator
 - d) None
6. Consider the below statements with regard 'dew':
 1. The ideal conditions for formation of dew are clear sky, calm air, high relative humidity, and cold and long nights.
 2. For the formation of dew, it is necessary that the dew point is above the freezing point.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
7. Which of the following statement is NOT CORRECT regarding Chinook/Fohn winds?
 - a) They are strong, dry and warm winds
 - b) **These winds are formed when ascending air becomes compressed with increased pressure**
 - c) These winds develops on the leeward side of the mountains
 - d) The winds helps animal grazing by melting snow and fastens the ripening of grapes
8. Select the appropriate climatic zone/type having the below given characteristics:
 1. Precipitation level: 35-75cm
 2. Warm, dry summer and cool, wet winter
 3. Shifting of wind belts

Choose the correct answer from the code given below:

- a) Laurentian type
 - b) Mediterranean climate**
 - c) Steppe/Temperate grasslands
 - d) Coniferous forest Siberian climate
9. Consider the following statements:
- 1. The centre of Tropical cyclone is characterized by extremely low pressure..
 - 2. Normally Tropical cyclones move from east to west under the influence of trade winds and they mainly occur in summer.
 - 3. Temperate Cyclones always travel from west to east and are produced predominantly in winter.
- Which of the statements given above is/are correct?
- a) 2 only
 - b) 1 and 2 only
 - c) 1 and 3 only
 - d) 1, 2 and 3**
10. Which of the following are the favourite breeding grounds for temperate cyclone?
- 1. South-east Caribbean region
 - 2. Mexican Gulf
 - 3. Mediterranean basin extending up to Russia
 - 4. North-west Australia
- Choose the correct answer from the code given below:
- a) 1, 2 and 3
 - b) 2 and 3 only**
 - c) 3 and 4 only
 - d) 1, 3 and 4
11. Consider the following statements:
- 1. Endonucleases remove nucleotides from the ends of the DNA.
 - 2. Exonucleases make cuts at specific positions within the DNA.
- Which of the statements given above is/are NOT CORRECT?
- a) 1 only
 - b) 2 only
 - c) Both 1 and 2**
 - d) Neither 1 nor 2
12. Consider the following statements:
- 1. A plasmid can be used as vector to deliver an alien piece of DNA into the host organism.
 - 2. The cutting of DNA at specific locations is not possible.
- 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
13. Consider the following statements regarding introduction of alien DNA into host cells:
- 1. In a method known as biolistics, recombinant DNA is directly injected into the nucleus of an animal cell.
 - 2. In another method, suitable for plants, cells are bombarded with high velocity micro particles of gold or tungsten coated with DNA in a method known as gene gun.
- 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
14. Consider the following statements:
- 1. Asexual reproduction preserves the genetic information, while sexual reproduction permits variation.

2. Traditional hybridisation procedures used in plant and animal breeding, very often lead to inclusion and multiplication of undesirable genes along with the desired genes.

Which of the statements given above is/are NOT CORRECT?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2**

15. Consider the following statements:

1. In a chromosome there is a specific DNA sequence called the origin of replication, which is responsible for initiating replication.

2. An alien DNA is linked with the origin of replication, so that, this alien piece of DNA can replicate and multiply itself in the host organism.

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

16. In which of the parts of a cell, DNA is found?

- a) Nucleus**
- b) Endoplasmic reticulum
- c) Golgi Apparatus
- d) None of the above

17. Consider the following statements regarding IndiGen initiative:

1. The initiative was undertaken by Indian Council of Medical Research.

2. Under the initiative the whole genome sequencing of the whole population of Kerala, Bihar was conducted.

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**

18. Consider the following statements.

1. Cloning of organisms is not possible through asexual reproduction.

2. Cloning does not occur naturally.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2**

19. Which among the following are examples of biotechnology?

- 1. Beer brewing
- 2. Cloning
- 3. Gene Therapy

Select the correct answer using the code given below:

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

20. Which of the following statements are correct about DNA and RNA?

1. All four Bases present in DNA and RNA are same, but their combination is different.

2. Both DNA and RNA are double stranded.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only

- c) Both 1 and 2
d) **Neither 1 nor 2**
21. With reference to Zombie Fire, consider the following statements:
1. It is a peat fire which persists from year to year inside the Arctic Circle.
2. It occurs only in the regions with Tundra vegetation.
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. With reference to Index of Industrial Production (IIP), Consider the following statements:
1. It is compiled and published quarterly by the National Statistical Office (NSO).
2. It is a composite indicator of three broad sectors, namely Mining, Manufacturing, and Electricity.
3. Base Year for IIP calculation is 2014-2015.
Which of the statements given above is/are correct?
a) 1 and 2 only
b) **2 only**
c) 2 and 3 only
d) 1, 2 and 3
23. With reference to National Crime Records Bureau (NCRB), consider the following statements:
1. It was set-up after the aftermath of the terrorist attacks on Mumbai in 2008.
2. The 'Crime in India' report is released by NCRB annually.
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. Article 41 of the Constitution mentions the welfare of old age persons.
2. Vayoshreshtha Samman is a national award given to eminent senior citizens & institutions working for the welfare of senior citizens.
Which of the following statements is/are correct?
a) 1 only
b) 2 only
c) **Both 1 and 2**
d) Neither 1 nor 2
25. With reference to the 'Ambedkar Social Innovation and Incubation Mission (ASIIM)', consider the following statements:
1. It is launched under Venture Capital Fund for Scheduled Castes (SCs).
2. It aims to promote entrepreneurship among the SC Youth with special preference to Divyangs.
Which of the following statements is/ are correct?
a) 1 only
b) 2 only
c) **Both 1 and 2**
d) Neither 1 nor 2