

1. The presence of which of the following can be considered as 'signs of life' on distant planets?
1. Methane
 2. Nitrous oxide
 3. Ozone

Select the correct answer using the code given below:

- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) All of the above
2. The environmental Kuznets curve (EKC) hypothesis suggests that:
- (a) As per capita income grows, the increase in environmental impact hits the maximum and thereafter declines.
 - (b) Higher the per capita income, more will be the level of pollution as people consume more resources.
 - (c) Less per capita income stands for low environmental pollution as people consume less resources.
 - (d) Per capita has no significant relation with the environmental pollution.
3. Which of the following Buddhist heritage sites have been correctly matched with the States where they are located?
1. Sanghon: Punjab
 2. Assan: Haryana
 3. Rumtek: Sikkim
 4. Bomdila: Arunachal Pradesh

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
 - (b) 2 and 3 only
 - (c) 1 and 4 only
 - (d) All of the above
4. A technique called the Short Tandem Repeat (STR) analysis is most widely used in:
- (a) Finding presence of radio-active wastes in metal garbage.
 - (b) Forensic analysis.
 - (c) In vitro fertilisation.
 - (d) Extraction of rare earth metals from their ore.
5. 'Nemrana Dialogue', which was recently in news, is concerned with:
- (a) India-Pakistan Track II diplomacy
 - (b) U.S.-Iran Nuclear Deal
 - (c) Climate change talks in Paris
 - (d) None of these

6. Which of the following statements are true about 'light year'?
1. It is the distances the light will travel in one year.
 2. It is a measure of both distance and time.
 3. The mean distance between the sun and the earth, in terms of light years, is 8.311 minutes.

Select the correct answer using the code given below:

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

17. The key difference between a Geosynchronous Orbit and a Geostationary Orbit is:
- (a) A geosynchronous orbit is located at a greater height than a geostationary orbit.
 - (b) A geosynchronous orbit is used for communication while a geostationary orbit is used for weather forecasting.
 - (c) Unlike a geostationary orbit, satellites in a geosynchronous orbit rotate at a speed exactly at the speed of rotation of the Earth on its axis.
 - (d) While the geostationary orbit lies on the same plane as the equator, the geosynchronous orbit has a different inclination.
18. Which of the following have been correctly matched?
- Greenhouse Gas: Major Source**
- 1. Sulfur Hexafluoride - Semiconductor manufacturing
 - 2. Nitrogen Trifluoride - Electricity transmission
 - 3. Chlorofluorocarbon-12 — Refrigerants
- Select the correct answer using the code given below:
- (a) 1 and 2 only
 - (b) 2 only
 - (c) 3 only
 - (d) 2 and 3 only
19. The Holocene — the most recent epoch of time spanning from 11,700 years ago to the present — is divided into which of the following Ages?
- 1. Greenlandian
 - 2. Northgrippian
 - 3. Meghalayan
- Select the correct answer using the code given below:
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) All of the above
20. A reverse bidding mechanism is a process in which:
- (a) A buyer can sell the tender/contract to other registered bidder at a profit only.
 - (b) A buyer can sell the tender/contract to other registered bidder at a loss only.
 - (c) A bidder who offers the least bid wins.
 - (d) The government can cancel the tender/contract at any time without giving any notice.

ANSWER KEYS

01 d 02 a 03 d 04 b 05 a 06 c 07 c 08 a 09 d 10 a
11 d 12 d 13 a 14 d 15 a 16 d 17 d 18 c 19 d 20 c