

1. Consider the following statements regarding the Indian Tsunami Early Warning System (ITEWS)
 1. ITEWS was established by Ministry of Science and Technology.
 2. ITEWS also provides tsunami advisories to the Indian Ocean Rim Countries.
 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
2. Which of the following statements is/are NOT CORRECT regarding National Disaster Management Authority (NDMA)?
 1. NDMA logo consists of the Map of India, embossed in gold.
 2. NDMA is headed by the Director General of National Disaster Response Force.
 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
3. With reference to Sendai Framework for Disaster Risk Reduction, Consider the following statements:
 1. Sendai Framework was adopted at the First UN World Conference on Disaster Risk Reduction in Sendai, Japan.
 2. United Nations Office for Disaster Risk Reduction is tasked to support the implementation, follow-up and review of the Sendai Framework.
 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 with respect to the International Search and Rescue Advisory Group (INSARAG):
 1. INSARAG is a network of disaster-prone and disaster-responding countries and organizations.
 2. INSARAG deals with urban search and rescue (USAR) related issues.
 3. Membership to the INSARAG is open only for the OECD Countries.
 Which of the statements given above is/are correct?
 - a) 1 only
 - b) 1 and 2 only**
 - c) 2 and 3 only
 - d) 1, 2 and 3
5. Consider the following statements:
 1. Carbon sequestration can be defined as the capture and secure storage of carbon that would otherwise be emitted to or remain in the atmosphere.
 2. Geological sequestration refers to the storage of CO₂ underground in depleted oil and gas reservoirs, saline formations, or deep, un-minable coal beds.
 3. Fertilizing the ocean with Urea to encourage Phytoplankton growth will help in removing Carbon Dioxide from the atmosphere.
 Which of the statements given above is/are correct?
 - a) 1 only
 - b) 1 and 2 only
 - c) 2 and 3 only
 - d) 1, 2 and 3**
6. If a large amount of organic waste is dumped in a lake, its Biochemical oxygen demand will:
 - a) Decrease
 - b) Increase**
 - c) Remains unchanged
 - d) Can increase or decrease
7. Consider the following statements regarding World Sustainable Development Summit (WSDS):
 1. It is organized by The Energy and Resources Institute (TERI).

2. The Sustainable Development Leadership Award felicitates the efforts of global leaders in the field of sustainable development.

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

8. Global Environment Facility provides grants for projects related to:

- 1. Climate change
- 2. Ozone layer
- 3. International waters
- 4. Land degradation
- 5. Persistent Organic Pollutants

Select the correct answer using the codes given below:

- a) 1, 3, 4 and 5 only
- b) 1, 4 and 5 only
- c) 1, 2, 4 and 5 only
- d) 1, 2, 3, 4 and 5**

9. With respect to Sustainable Development Goals (SDGs), Consider the following statements.

- 1. These are also known as “Transforming our World: the 2030 Agenda for Sustainable Development”.
- 2. At the Central Government level, NITI Aayog has been assigned the role of overseeing the implementation of SDGs in the country.

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

10. ‘State of World’s Forests’ Report is published by

- a) World Wildlife Fund (WWF)
- b) United Nations Environment Programme (UNEP)
- c) Food and Agricultural Organization (FAO)**
- d) World Bank

11. Consider the following statements:

- 1. The loudness of sound depends on its amplitude and the frequency determines the pitch of a sound.
- 2. Sounds of frequencies less than about 20,000 vibrations per second cannot be detected by the human ear

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

12. Consider the following:

- 1. Total Internal Reflection
- 2. Refraction
- 3. Dispersion

Which of the above mentioned phenomena plays a role in the formation of Rainbow?

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

13. Which of the following statements is/are correct regarding diffused reflection?

- 1. When all the parallel rays reflected from a plane surface are not parallel, the reflection is known as diffused reflection.
- 2. The diffused reflection is due to the failure of the laws of reflection.
- 3. The diffused reflection is caused by the irregularities in the reflecting surface.

Which of the statements given above is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3**
- d) None of the above

14. Consider the following statements:

- 1. The image formed by a concave mirror will be always larger in size than the object.
- 2. Convex mirrors can form images of objects spread over a large area.
- 3. The image formed by convex mirror may be real or virtual.

Which of the statements given above is/are correct?

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

15. Which of the following statements is/are correct regarding Nobel Prize?

- 1. The Nobel Prize in Physics is awarded by The Royal Swedish Academy of Sciences, Stockholm, Sweden.
- 2. One can nominate himself or herself to be eligible for the Physics Prize.
- 3. The statutes of the Nobel Foundation restrict disclosure of information about the nominations, whether publicly or privately, for 50 years.

Select the correct answer using the code given below:

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

16. Which of the following are illustrations of total internal reflection?

- 1. Shining of air bubble in water
- 2. Sparkling of diamond
- 3. Increase in duration of sun's visibility
- 4. Mirage and looming
- 5. Ophthalmoscope

Choose the appropriate code:

- a) 1, 2, 3 and 4 only
- b) 1, 2 and 5 only
- c) 1, 2, 3 and 5 only
- d) All of the above**

17. A fuel cell is a device that generates electricity by a chemical reaction. Consider the following

- 1. Molten carbonate fuel cells
- 2. Phosphoric Acid fuel cells
- 3. Hydrogen fuel cells
- 4. Solid oxide fuel cells

Which of the above is/are types of fuel cells?

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

18. Which of the following forces are not the example of contact forces?

- 1. Friction force
- 2. Electrostatic force
- 3. Magnetic force
- 4. Gravitational force
- 5. Air resistance force

Select the code from the following:

- a) 1 only
- b) 1, 3, 4 and 5
- c) 2, 3 and 4**
- d) 2, 4 and 5

19. Consider the following situation:
If an object is released from a moving train, the object will go:
- In the opposite direction of the moving train.
 - In the same direction of the moving train.**
 - It will fall straight downwards.
 - None of the above
20. Steam burns are more severe than the burns caused by boiling water because:
- The temperature of steam is higher than the boiling water.
 - Steam contains more heat in the form of latent heat.**
 - Steam hits the body with a pressure while water does not.
 - The given statement is false.
21. Which of the following is not correct regarding "DigiLocker"?
- It was launched by Ministry of Electronics and Information Technology.
 - Users need to possess an Aadhar number to use DigiLocker.
 - DigiLocker also provide free cloud storage of 5 GB to account holder.**
 - DigiLocker issued documents are at par with original documents as IT Act, 2000.
22. Which of the following are part of abiotic method of pollination in plants?
- Wind
 - Rain
 - Water
 - Insects
- Choose the correct option:
- 1, 2 and 3 only**
 - 1, 3 and 4 only
 - 2, 3 and 4 only
 - All of the above
23. Consider the following statements regarding "Sounding Rockets":
- These are four stage solid propellant rockets used for probing upper atmospheric region.
 - The first launching of sounding rocket from Thumba launching station started India's space programme.
 - Rohini Series is consolidated group of all sounding rockets made by ISRO.
- Which of the above statements are correct?
- 1 and 2 only
 - 1 and 3 only
 - 2 and 3 only**
 - All of the above
24. Consider the following statements regarding "Shola Forest" and identify the incorrect statement:
- It is a type of Tropical Rain forest.**
 - These forests are found in the valley above height of 1500 meter or more.
 - Red-coloured young leaves turning into different colours on maturity is a prominent characteristic of the Shola forests
 - Alien species have been one of the threats to the shola forest and grasslands.
25. Which of the following is not a feature of UDAAN scheme?
- For the first time, helipads were connected to the scheme.
 - Inclusion of Tourism Routes under UDAN in coordination with the Ministry of Tourism.
 - Inclusion of Tier 4 cities in Regional connectivity service.**
 - Inclusion of Seaplanes for connecting Water Aerodromes.