

1. Government recently released a national policy on Biofuels-2018. Which of the following statements is/are correct regarding Biofuels?

- I. 1st generation bio-fuels use food crops like wheat to make ethanol etc
 - II. 2nd generation bio-fuels use nonfood crops as feed-stocks- wood grass, seed- crops
 - III. 3rd generation bio-fuel aims to not only produce fuel but also capture and store CO₂
- a) I only
 - b) I and II only
 - c) I, II and III
 - d) II and III only

Answer- b) I and II only

The statement three defines 4th Generation Biofuels

Explanation- Biofuel is any hydrocarbon fuel that is produced from organic matter in a short period of time. This is in contrast with fossil fuels, which take millions of years to form. Biofuels are considered renewable form of energy as it emits less than fossil fuels. Different generation biofuels:

- First Generation Biofuels: It uses the food crops like wheat and sugar for making ethanol and oil seeds for bio diesel by conventional method of fermentation.
- Second Generation Biofuels: It uses non-food crops and feedstock such as Wood, grass, seed crops, organic waste are used in fuel preparation.
- Third Generation Biofuels: It uses specially engineered Algae whose biomass is used to convert into biofuels. The greenhouse gas emission here will be low in comparison to others.
- Fourth Generation biofuel: It aimed at not only producing sustainable energy but also a way of capturing and storing CO₂

2. Haboob is a word for

- a) Cold desert
- b) Dust Storm
- c) Cyclone
- d) High Tide

Answer- b) dust storm

What is a Dust storm?

- A dust storm, or sandstorm, is a phenomenon common in hot and dry climates.
- Dust storms are also known as Haboob, which is Arabic for violent wind.
- The strong storms can develop in many parts of the world and can travel for thousands of miles or even across oceans.
- A dust storm requires a large availability of dust, and enough sustained wind to lift the particles.
- Dust storms also commonly occur with thunderstorms before it is about to rain.
- The rain water does not manage to reach the ground as it is evaporated by the heat

- This causes the air to cool down, meaning there is an area of cold air sitting above the warm air on the ground.
- The cold air comes down in a down-burst which splashes against the surface which kicks the dust upwards.

3. Suva Expert Dialogue, in news, is in context of?

- a) UNFCC
- b) UN convention to combat desertification (UNCCD)
- c) UNEP
- d) None of the above

Answer- a) UNFCC

Suva expert Dialogue

- It is an expert dialogue decided at COP23 in Bonn due to demands of developing nations for a separate agenda item on loss and damage.
- The dialogue aims for facilitating the mobilization and securing of expertise, and enhancement of support, including finance, technology and capacity-building, for addressing loss and damage associated with the adverse effects of climate change.

4. Clean Air-India initiative is supported by?

- a) World Bank
- b) United states
- c) Green Climate Fund
- d) None of the above

Answer- d) None of the above

It is supported by Netherlands.

The Clean Air India Initiative is a collaborative project between Get in the Ring (a platform for start-ups by the government of the Netherlands), Start-up India and INDUS Forum (an online matchmaking platform of Indian and Dutch businesses).

- The campaign aims to curb air pollution in Indian cities by promoting partnerships between Indian start-ups and Dutch companies and build a network of entrepreneurs working on business solutions for cleaner air.
- Under the initiative, an 'INDUS impact' projects is also present which aims to halt the hazardous burning of paddy stubble by promoting business partnerships that "up cycle" it. This entails using paddy straw as feedstock to make materials that would find use in construction and packaging

5. Which of the following substances are major pollutants found in the Indian rivers?

- I. Arsenic
- II. Cadmium
- III. Copper
- IV. Titanium
- V. Strontium

VI. Manganese

- a) I, II and III only
- b) I, II, III, IV and V only
- c) I, II, III and VI only
- d) I, II, III, IV, V and VI

Answer- c) I, II, III and VI. Arsenic, Cadmium, Copper and Manganese

A recent report titled Status of trace and toxic metals in Indian rivers 2018 by Central Water Commission.

More about the news

- The report has highlighted that 42 rivers in India have at least two toxic heavy metals in quantities beyond the permissible limit.
- Ganga, the national river, was found to be polluted with five heavy metals—chromium, copper, nickel, lead and iron.
- It is an issue because a majority of Indians still use water directly from rivers for their domestic use. With an increase in population, the pressure on these rivers will only increase.
- According to the report, mining, milling, plating and surface finishing industries are the main sources of heavy metal pollution and the concentration of such toxic metals has increased rapidly over the past few decades

Arsenic (As)	Pesticides, fungicides, metal smelters
Cadmium (Cd)	Welding, electroplating, pesticides, fertilizer, batteries, nuclear fission plant
Chromium (Cr)	Mining, electroplating, textile, tannery industries
Copper (Cu)	Electroplating, pesticides, mining
Lead (Pb)	Paint, pesticides, batteries, automobile emission, mining, burning of coal
Manganese (Mn)	Welding, fuel addition, ferro manganese production
Mercury (Hg)	Pesticides, batteries, paper industries
Nickel (Ni)	Electroplating, zinc base casting, battery industries
Zinc (Zn)	Refineries, brass manufacture, metal plating, immersion of painted idols

6. Which of the following statements is/are correct regarding the International Maritime Organization (IMO)?

- I. It is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships
 - II. It is headquartered in Geneva, Switzerland.
- a) I only
 - b) II only
 - c) Both I and II
 - d) None of the above

Answer- a) I only

Its headquarters are at London, UK. Members of the International Maritime Organisation (IMO) have reached an agreement on reducing their greenhouse gas emissions from shipping by at least 50% of 2008 levels by 2050.

7. Which of the following statements are correct regarding Bugun Liocichla?

- I. It is the only new bird species discovered in India after 1947
 - II. It is an endangered bird (IUCN) found in Nagaland.
- a) I only
 - b) II only
 - c) Both I and II
 - d) None of the above

Answer- a) I only

They are found only in Singchung valley of Arunachal Pradesh. They are critically endangered.

8. Which of the following statements is/are correct regarding the Indus Dolphin?

- I. It is a freshwater critically endangered Dolphin which is functionally blind.
 - II. It is also known as “susu” due the sound it makes
- a) I only
 - b) II only
 - c) Both I and II
 - d) None of the above

Answer- d) none of the above

It is endangered and not critically endangered. Hence, statement 1 is false. Further, it is not called susu, while it is called Bhulan. Susu is the name of the Gangetic Dolphin which is different from the Indus dolphin. Both are freshwater, endangered and blind. The Punjab government along with WWF-India is conducting the first organised census on population of Indus Dolphin.

9. In which of the following states in India, black panthers can be found?

- I. Chattisgarh
 - II. Odisha
 - III. Maharashtra
 - IV. Tamil Nadu
- a) I and III only
 - b) I, II, III and IV only
 - c) II only
 - d) II and IV only

Answer- b) All of the above states host black panthers' habitat.

Odisha is the only state in the country to have melanistic tigers, white tigers and black panthers

Conservation Status of Black Panther

- Vulnerable: IUCN (International Union for Conservation of Nature).
- Schedule I: Indian Wildlife (Protection) Act, 1972,
- Appendix I: CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

10. Nansen initiative, recently in news, is in context of

- a) Mercury pollution
- b) Climate refugees
- c) Biodiversity conservation
- d) Desertification

Answer-b) climate refugees

Explanation-

Nansen Initiative (2012) • It's a state-led consultative process to build consensus on a protection agenda addressing the needs of people displaced across borders in the context of disasters and the effects of climate change.

Nansen Initiative Protection Agenda for Cross-Border Displaced Persons (2015) • Aim: To enhance understanding, provide a conceptual framework, and identify effective practices for strengthening the protection of cross-border disaster-displaced persons