

**1. Why is a plant called *Prosopis juliflora* often mentioned in news ?**

- Its extract is widely used in cosmetics.
- It tends to reduce the biodiversity in the area in which it grows.**
- Its extract is used in the synthesis of pesticides.
- None of the above

**Answer:** (b) This plant is a native of Mexico, and spread throughout India. It's an aggressive colonizer, common weed of wastelands, scrublands and degraded forests. Since it's mention under the head of invasive alien species so it'd reduce biodiversity in the area, Hence Option B.

**2. Consider the following statements**

- Most of the world's coral reefs are in tropical waters.
- More than one-third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.
- Coral reefs host **far more number** of animal phyla than those hosted by tropical rainforests.

Which of the statements given above is/are correct ?

- 1 and 2 only
- 3 only (c) 1 and 3 only
- 1, 2 and 3**

**Answer (c)**

- all mention that Coral reefs are found in tropical and subtropical regions. However, people likely to engage in hairsplittery over whether tropical waters OR the subtropical waters have the “MOST” coral reefs?
- Same also mentions that France, though located much outside the tropical belt, comes in fourth (after Indonesia, Australia and Philippines). So, collectively first three ought to occupy a large share. Still, just to be sure:
- This gives % of world area covered by each region: Indonesia 18%, Australia: 17% and Philippines: 9% so collectively that'll be more than 33%. Hence #2 is right.
- Coral reefs include a wide range of diversity with 32 of the 34 animal phyla present, in contrast to only 9 phyla represented in tropical rainforest. So, #3 is also right.

**3. With reference to solar power production in India, consider the following statements:**

- India is the third largest in the world in the manufacture of silicon wafers used in photovoltaic units.
- The solar power tariffs are determined **by the Solar Energy Corporation of India.**

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2**

**Answer (d)**

- There is no significant production of silicon wafers in India (as of 2011). So unlikely that it became 3rd largest by 2017-18. So, #1 is wrong.
- Tariffs are determined under the Electricity Act. Any entity with “Corporation” word is irrelevant. so, #2 is wrong.

**4. Which of the following statements best describes “carbon fertilization”?**

- Increased plant growth due to increased concentration of carbon dioxide in the atmosphere**
- Increased temperature of Earth due to increased concentration of carbon dioxide in the atmosphere
- Increased acidity of oceans as a result of increased concentration of carbon dioxide in the atmosphere
- Adaptation of all living beings on Earth to the climate change brought about by the increased concentration of carbon dioxide in the atmosphere

**Answer (a):** Studies have shown that increased concentrations of carbon dioxide increase photosynthesis, spurring plant growth... Results showed that carbon dioxide fertilization explains 70 percent of the greening effect.

**5. The term “sixth mass extinction/sixth extinction” is often mentioned in the news in the context of the discussion of**

- Widespread monoculture practices in agriculture and large-scale commercial farming with indiscriminate use of chemicals in many parts of the world that may result in the loss of good native ecosystems.
- Fears of a possible collision of a meteorite with the Earth in the near future in the manner it happened 65 million years ago that caused the mass extinction of many species including those of dinosaurs. .
- Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world which may cause the disappearance of good native crop plants and the loss of food biodiversity.
- Mankind's over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution and global climate change.**

## UNIQUE IAS STUDY CIRCLE

## Environment UPSC

**Answer (d):** Scientists are, in fact, even suggesting that the sixth mass extinction is underway as there is a species loss of 100–1000 every year....The normal background extinction rate is about 10–25 species per year. Habitat loss, overpopulation of humans, pollution, over-harvesting and invasive species invasion are cited as the main reasons.

**6. Which of the following is/are the possible consequence/s of heavy sand mining in riverbeds ?**

1. Decreased salinity in the river
2. Pollution of groundwater
3. Lowering of the water-table

Select the correct answer using the code given below :

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

**Answer (b)** “It wrecks the intertidal area and creates the imminent danger of saline water ingress into fresh water.” Meaning salinity will increase, so statement #1 is wrong, by elimination we’ve answer “B” 2 and 3 only.

In this question, first statement is wrong, and you’ve to identify right statements. So in real exam stress, some students may have made error of reading / ticking, and they’d have ticked the wrong option A: only

**7. Which of the following has/have shrunk immensely/dried up in the recent past due to human activities ?**

1. Aral Sea
2. Black Sea
3. Lake Baikal

Select the correct answer using the code given below :

- a. **1 only**
- b. 2 and 3
- c. 2 only
- d. 1 and 3

**Answer:(a)**

- The Aral Sea, in Central Asia, used to be the fourth largest lake in the world, after the Caspian Sea, and Lakes Superior and Victoria. Now barely 10% of it is left. This eliminates B and C, because they don’t contain #1. And we also need not find about Black Sea, because neither A nor D have option #2.
- So, it all boils down to whether Lake Baikal has shrunk immensely or not?
- Baikal **might** share the destiny of the Aral Sea, ‘it stated. ’Construction of three hydro power stations on the Selenga River and its tributaries **can cause** the unique lake to dry out.’ But the words used are “might” and “can”, so it doesn’t mean “has immensely dried already”
- Lake Baikal’s has been crippled by a series of detrimental phenomena....They include the disappearance of the omul fish, rapid growth of putrid algae and the death of endemic species of sponges across its vast 3.2 million-hectare area. but there is no mention of immensely drying up.
- China wants water from Russia’s Lake Baikal to irrigate drought-hit regions . Water taken from Baikal will be a fraction for the lake, which contains 23,000 cubic kilometers or roughly 20 percent of the world’s unfrozen surface fresh water. Russian government has not commented on the issue, but environmentalists have expressed concerns that Lake Baikal has been drying up at an alarming pace. Also in 2015, Baikal’s water level hit a record low – five centimeters below the critical level of 456 meters. But this description is not ‘grave’ enough to say “has shrunk immensely / dried up in recent past”. So #3 is close but not relevant yet, until it actually happens.

Hence answer A: 1 only.

**8. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)**

1. The NGT has been established by an Act whereas the CPCB has been created by an executive order of the Government.
2. The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air 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

**Answer (b)**

- Central Pollution Control Board (CPCB), is statutory organization, was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. So #1 is wrong.
- Principal functions of the CPCB, as spelt out in the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, (i) to promote cleanliness of streams and wells in different areas. So last part of sentence #2 is right.
- iyb ch. 12 on Environment: National Green Tribunal (NGT) was set up in 2010 under the NGT Act, 2010, for the purpose of effective and expeditious disposal of cases relating to environmental protection. The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles

of natural justice. The Tribunal is mandated to make an endeavor for disposal of applications or appeals finally within 6 months of filing. So first part of sentence #2 is right.

**9. Consider the following statements:**

1. The definition of “Critical Wildlife Habitat” is incorporated in the Forest Rights Act, 2006.
2. For the **first time** in India, Baigas have been given Habitat Rights.
3. **Union Ministry of Environment, Forest and Climate Change** officially decides and declares Habitat Rights for Primitive and Vulnerable Tribal Groups in **any part** of India.

Which of the statements given above is/are correct ?

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

**Answer (a)**

- Baigas are considered as a particularly vulnerable tribal group (PVTG) in the Indian Constitution and rely mostly on shifting cultivation, forest produce and fishing for sustenance, spread over forested areas of Madhya Pradesh and Chhattisgarh. In 2016, they became India’s first community to get habitat rights. So, #2 is right.
- The government of Madhya Pradesh / district collector has recognised the habitat rights so #3 is wrong. Another source is , which says district level Committees have to adjudicate the rights, whereas Tribal ministry only issues guidelines. That makes #3 wrong / irrelevant.
- By elimination, we are left with answer A: only 1 and 2.

**10. In which one of the following States is Pakhui Wildlife Sanctuary located?**

- a. **Arunachal Pradesh**
- b. Manipur
- c. Meghalaya
- d. Nagaland

**Answer: (a)**

**11. The Partnership for Action on Green Economy (PAGE), a UN mechanism to assist countries transition towards greener and more inclusive economies, emerged at**

- a. The Earth Summit on Sustainable Development 2002, Johannesburg
- b. **The United Nations Conference on Sustainable Development 2012, Rio de Janeiro**
- c. The United Nations Framework Convention on Climate Change 2015, Paris
- d. The World Sustainable Development Summit 2016, New Delhi

**Answer (b)** In 2012, Rio+20 (the United Nations Conference on Sustainable Development) was held in Brazil....Partnership for Action on Green Economy (PAGE) was launched in 2013 as a response to the call at Rio+20 to support those countries wishing to embark on greener and more inclusive growth trajectories.

**12. “Momentum for Change : Climate Neutral Now” is an initiative launched by**

- a. The Intergovernmental Panel on Climate Change
- b. The UNEP Secretariat
- c. **The UNFCCC Secretariat**
- d. The World Meteorological Organisation

**Answer: (c)** UNFCCC secretariat launched its Climate Neutral Now initiative in 2015. The following year, the secretariat launched a new pillar under its Momentum for Change initiative focused on Climate Neutral Now, as part of larger efforts to showcase successful climate action around the world.

**13. With reference to the ‘Global Alliance for Climate Smart Agriculture (GACSA)’, which of the following statements is/are correct?**

GACSA is an outcome of the Climate Summit held in Paris in 2015.

1. Membership of GACSA does not create **any binding obligations**.
2. India was **instrumental** in the creation of GACSA.

Select the correct answer using the code given

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

**Answer (b)**

- GACSA is an inclusive, voluntary and action-oriented multi-stakeholder platform on Climate-Smart Agriculture (CSA). “Voluntary” means doesn’t create any binding obligation. #2 is right.
- India is neither in memberlist nor in observer list of this entity. So #3 is wrong. By elimination we get answer B: only 2.

**14. With reference to the circumstances in Indian agriculture, the concept of “Conservation Agriculture” assumes significance. Which of the following fall under the Conservation Agriculture?**

1. Avoiding the monoculture practices
2. Adopting minimum tillage

3. Avoiding the cultivation of plantation crops
4. Using crop residues to cover soil surface
5. Adopting spatial and temporal crop sequencing/crop rotations

Select the correct answer using the code given below:

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

**Answer:** (c) Kurukshetra February 2018 Issue on Agriculture, page 43 has given three key features of conservation agriculture viz:

- i. minimum soil disturbance by adopting no-tillage or minimum tillage and reduced traffic for agricultural operations. So, #2 is right. This eliminates Option-A.
- ii. maximum soil cover by leaving crop residues on the soil surface. So, #4 is right. This eliminates Option-D.
- iii. adopt spatial and temporal crop sequencing/crop rotation. So, #5 is verbatim right.
- iv. There are two options- B and C where 2, 4 and 5 are together. So it all boils down to validity of #3. Same magazine, page 31 even says Conservation Agriculture approach also involves Diversified Crop Rotation involving cereal-pulse system. Then we can infer that if we've to do avoid monoculture and plantation crop. Then #1 and #3 are also right 'indirectly'. But there is no option where all five statements are together. Considering this unique situation, I'll lend more weight to page 43 over page 31, and go for Answer C: 2, 4 and 5.

**15. With reference to agricultural soils, consider the following statements :**

1. A high content of organic matter in soil **drastically** reduces its water holding capacity.
2. Soil does not play **any role** in the Sulphur cycle.
3. Irrigation over a period of time can contribute to the salinization of some agricultural lands.

Which of the statements given above is/are correct ?

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

**Answer (b)**

**16. With reference to organic farming in India, consider the following statements:**

1. The National Programme for Organic Production' (NPOP) is operated **under the guidelines and directions of the Union Ministry of Rural Development.**
2. The Agricultural and Processed Food Products Export Development Authority' (APEDA) **functions as the Secretariat** for the implementation of NPOP.
3. Sikkim has become India's **first fully** organic State.

Which of the statements given above is/are correct?

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

**Answer: (b)**

- This scheme is under Commerce ministry, but Secretariat assistance by APEDA so #1 is wrong, #2 is right.
- Sikkim indeed India's first fully organic state: My 2016's So, #3 is right.