# (SOLUTION) Online Prelims TEST - 12 (SUBJECT WISE)

### 30 Correct Answer: A

### **Answer Justification:**

**Under** the The Environment (Protection) Act, 1986 "Rules for Manufactute, Use, Import, Export and Storage of Hazardous Microorganisms/Genetically Engineered Organisms or Cells 1989", **GEAC** is responsible for granting permits to conduct experimental and large-scale open field trials and also grant approval for commercial release of biotech crops.

Hence, option (a) is correct.

# 31 Correct Answer: B

### **Answer Justification:**

**Biomagnification refers to increase in concentration of the toxicant at successive trophic levels**. This happens because a toxic substance accumulated by an organism cannot be metabolised or excreted, and is thus passed on to the next higher trophic level. This phenomenon is well-known for mercury and DDT. **Hence, statement 3 is correct**.

High concentrations of DDT disturb calcium metabolism in birds, which causes **thinning of eggshell** and their premature breaking, eventually causing decline in bird populations. **Hence, statement 1 is incorrect**. Eutrophication is the natural aging of a lake by biological enrichment of its water. The prime contaminants are nitrates and phosphates, which act as plant nutrients. They over stimulate the growth of algae, causing unsightly scum and unpleasant odors, and **robbing the water of dissolved oxygen vital to other aquatic life.** At the same time, other pollutants flowing into a lake may poison whole populations of fish, whose **decomposing remains further deplete the water's dissolved oxygen content**. In such fashion, a lake can literally choke to death. **Hence, statement 2 is correct**.

### 32 Correct Answer: B

### **Answer Justification:**

The Buxa Tiger Reserve is a 760-square-kilometre (290 sq mi) tiger reserve located inside the Buxa National Park in West Bengal, India, in the Buxa Hills of the southern hilly area of Bhutan. Animals found in the park include, the Tiger, Civet, Elephant, Gaur (Indian bison), Indian Boar and Red jungle fowl.

Buxa Tiger Reserve (BTR) lies in Alipurduar district of West Bengal. Its northern boundary runs along the international border with Bhutan. The Sinchula hill range lies all along the northern side of BTR and the eastern boundary touches that of the Assam State. National Highway No.31 C roughly runs along its southern boundary. It is the eastern most extension of extreme bio-diverse North-East India & represents highly endemic Indo-Malayan region. The fragile "Terai Eco-System" constitutes a part of this Reserve. The Phipsu Wildlife Sanctuary of Bhutan is contiguous to North of BTR. Manas National Park lies on east of BTR. BTR, thus, serves as international corridor for Asian elephant migration between India and Bhutan.

Hence, option (c) is correct.

#### 33 Correct Answer : D

### **Answer Justification:**

Irreparable computers and other electronic goods are known as electronic wastes (e-wastes). Ewastes are buried in landfills or incinerated. Over half of the e-wastes generated in the developed world are exported to developing countries, mainly to China, India and Pakistan, where metals like copper, iron, silicon, nickel and gold are recovered.

**Barium** is a soft silvery-white metal that is used in computers in the front panel of a CRT to protect users from radiation.

Cadmium occurs in SMD chip resistors, infrared detectors, and semiconductor chips. Some older cathode ray tubes contain cadmium.

Lead is used in glass panels and gaskets in computer monitors, solder in printed circuit boards and other components

**Mercury** is used in thermostats, sensors, relays, switches, medical equipment, lamps, mobile phones, and batteries.

### 34 Correct Answer: C

# **Answer Justification:**

The Living Planet Report, WWF's flagship publication released every two years, is a comprehensive study of trends in global biodiversity and the health of the planet. Hence, option (c) is correct.