HOTS (Higher Order Thinking Skills)

Q.1. Why there is a sharp decline in the quality of coastal pollution?

Ans. 1. Coastal land-based activities

2. Intensive human settlement in coastal zones.

Q.2. Why have fishing industries been destroyed in the Aral sea?

Ans. Around the Aral sea, toxic water have completely destroyed the fishing industry.

Q.3. What was the point of concern of Northern States in 'Rio Summit'?

Ans. Northern states were concerned with Ozone depletion and global warming.

Q.4. Why is it said that history of petroleum is also the history of war and struggles?

[CBSE (AI) 2016]

Ans. It is true because World Economy is based on petroleum and immense wealth is associated with oil. It generates political struggles and wars to have control over it.

Q.5. What was the cause of worry of Southern states?

Ans. Southern states were anxious to address the relationship between economic development and environmental management.

Q.6. What is way of 'Sustainable development'?

Ans. 'Sustainable development' is an approach of economic development without harming the environment.

Q.7. What is the role of Antarctica continent with respect to world atmosphere?

Ans. Antarctica maintains climate equilibrium in the world.

Q.8. How is marine ecosystem of Antarctica?

Ans. Antarctica has a highly productive marine ecosystem, comprising of few plants (e.g., microscopic algae, fungi and lichen) marine mammal, fish and hoards of birds adapted to harsh conditions.

Q.9. What are the reasons for increase in pollution in Antarctica?

Ans. Globally, coastal pollution is increasing. Although the open sea is relatively clean, the coastal waters are becoming increasingly polluted largely due to land-based activities.

Q.10. Why has land environment been an issue?

Ans. Land environment is an issue because throughout the world, cultivable area is barely expanding anymore and a substantial portion of existing agricultural land is losing futility, grasslands have been overgrazed and fisheries over harvested. Water bodies have suffered extensive depletion.

Q.11. Why did thousands of people have to leave their homes around the Aral sea?

Ans. Around the Aral sea, thousands of people had to leave their homes as the toxic water has completely destroyed the fishing industry. The shipping industry and all related activities have collapsed. Rising concentration of salt has caused low crop yields. Numerous studies have been conducted but no solution to the problems has been found.

Q.12. Identify the most important outcome of the Rio Summit.

[CBSE (AI) 2015]

Ans. Outcomes of Rio Summit:

- (i) The Rio Summit produced conventions dealing with climate change, biodiversity, forestry, etc.
- (ii) It recommended a list of developmental practices called 'Agenda 21.'
- (iii) There was consensus on sustainable development.

(Any one)

Q.13. What changes can be seen in the outer atmosphere of the Earth?

Ans. Amount of Ozone gas is decreasing due to the hole in the ozone layer of atmosphere. A steady decline in the total amount of ozone in the Earth's stratosphere poses a real danger to the ecosystems and human health.

Q.14. What is the importance of 'Antarctica Region'?

Ans. Antarctic plays an important role in maintaining climatic equilibrium and deep ice cores provide an important source of information about greenhouse gas concentrations and atmospheric temperatures of hundred and thousands of years ago. It comprises 90 per cent of all terrestrial ice and 70 per cent of planetary fresh water.

Q.15. Why have issues related to global environmental protection become a priority concern of states since the 1990s?

[NCERT]

Ans. The consequences on environment due to economic development were felt by various countries from 1960. In 1990s, issues related to global environmental protection became the priority concerns. The growing focus on environmental issues within the arena of global politics was firmly consolidated at the United Nations conference on Environment and Development held in Rio de Janeiro, Brazil, in June 1992. This was also called the Earth Summit. The Summit

was attended by 170 states, thousands of NGOs and many multinational corporations. Thus, Environment became the priority issue for countries.

Q.16. 'The global economy relied on oil for much of the 20th century.' Explain.

Ans. The global economy relied on oil for much of the 20th century as a portable and imperative fuel. The immense wealth associated with oil generates political struggles to control it, and the history of petroleum is also the history of war and struggle. Nowhere is this more obviously the case than in West Asia and Central Asia. West Asia, specifically the Gulf region, accounts for about 30 per cent of global oil production. But it has about 64 percent of the planet's known reserve, and is therefore the only region able to satisfy any substantial raise in oil demand. Saudi Arabia has a quarter of the world's total reserve and is the single target producer. Iraq's known reserve are second only to Saudi Arabia's. And since substantial portions of Iraqi territory are yet to be fully explored, there is a fair chance that actual reserve might be far larger. The United States, Europe, Japan, and increasingly India and China, which consume this petroleum, are located at a considerable distance from the region.

Q.17. What distinguishes the forest movements of the South from those of the North?

Ans. Forest movements of the South and those of the North vary largely. Countries of eastern are believed to be deprived of forests. Human are not seen as part of nature and try to protect environment from human. While most environmental issues in the South are based on the assumption that people live in the forests. Wilderness-oriented perspectives have been predominant in Australia, Scandinavia, North America and New Zealand. In these regions, there are still large tracts of relatively underdeveloped wilderness. Wilderness campaigns are active in the South. In the Phillippines, green organisations fought to protect eagles and other birds of prey from extinctions. In India, a battle goes on to protect the alarmingly low number of Bengal tigers. In Africa, a long campaign has been waged against the ivory trade and the savage slaughter of elephants. All of these campaigns focus on individual species as well as the conservation of the wild habitats, which support them. Many of these campaigns have been initiated and funded by NGOs such as the world wide wildlife fund (WWF), in association with local people.

Q.18. What was the 'Earth Summit'? How far did the summit prove to be useful? Explain.

[CBSE (AI) 2016

Ans. Earth Summit was a conference on environment and development held in Rio de Janeiro (Brazil) in June 1992.

- (i) This Summit produced conventions dealing with climate change, biodiversity and forestry.
- (ii) It recommended a list of development practices called 'Agenda 21'.
- Q.19. The most serious challenge before the states is pursuing economic development without causing further damage to the global environment. How could we achieve this? Explain with a few examples.

Ans. It has become essential to adopt some ways of environment conservation because of environment degradation due to economic development. But this poses a great threat to pace of economic development. It is a serious challenge in front of world to adopt such approach which neither affect or degrade the environment nor slows down the pace of economic development. From state level to international level steps and initiatives have been taken in this direction. Most significant responses to this challenge have come not from the governments but rather from groups of environmentally conscious volunteers working in different part of the world. It is within social movements that new forms of political action are born on reinvented. These movements raise new ideas and long-term visions of what we should do and what we should not do in our individual and collective lives. Here are just a few examples to show that diversity is an important trait of contemporary environmental movements.

- 1. Movement in Favour of forest: Forest clearing in the Third world countries at an alarming rate, despite three decades of environmental activism. The destruction of the world's last remaining grand forests has actually increased in last decade. The forest movement of the South, in Mexico, Chile, Brazil, Malaysia, Indonesia, Continental Africa and India, etc. are faced with enormous pressures.
- 2. Mines Related Movements: The minerals industry is one of the most powerful forms of industry on the planet. A large number of economies of the South are now being reopened to MNCs through the liberalisation of the global economy. The mineral industry's extraction of earth, its use of chemicals, its pollution of waterways and land, its clearance of native vegetation, its displacements of community, amongst other factors, continue to invite criticism and resistance in various parts of the world. One example is that of the Philippines, where a vast network of groups and organisations campaigned against the Western Mining Corporation (WMC), an Australia-based multinational company. Much opposition to the company in its own country.
- **3. Dam Opposing Movements:** Another groups of movements are those involved in struggles against mega dams. In every country where a mega dam is being built, one is likely to find an environmental movement opposing it. Increasingly antidam movements are pro-river movements for more sustainable and equitablemanagement of river systems and valleys. The early 1980s saw the first anti-dam movement launched in the North, namely, the campaign to save the Franklin River and its surrounding forests in Australia. At present, there has been a spurt in mega- dam building in the South, from Turkey to Thailand to South Africa, from Indonesia to China. India has had some of the leading anti-dam pro river movements. Narmada Bachao Andolan and Tehri movement are examples of such movements. It is significant note that, in anti-dam and other environmental movements in India, the most important shared idea is non-violence.
- Q.20. Explain the arguments in favour of India on environment related issues.

Explain arguments in favour of India on any three issues of environment.

[CBSE (AI) 2014]

Ans. Arguments in favour of India on issues related to environment are as follows:

- 1. India signed and ratified the 1997 Kyoto Protocol in August 2002. India, China and other developing countries were exempted from the requirement of the Kyoto Protocol because their contribution to the emission of greenhouse gases during the industrialisation period was not significant. However, at the G-8 meeting in June2005, India pointed out that the per capita emission rates of developing countries are a tiny fraction of those in the developed world. Following the principle of common but differentiated responsibilities. India is of the view that the major responsibility of curbing emission rests with the developed countries, which have accumulated emissions over a long period of time.
- 2. India's international negotiating position relies heavily on principles of historical responsibility, as enshrined in UNFCCC. This acknowledges that developed countries are responsible for most historical and current greenhouse gas emissions, and emphasizes that economic and socio development are the first and overriding priorities of the developing country parties', so India is wary of recent discussions within UNFCCC about introducing binding commitments on speedily industrialising countries to reduce their greenhouse gas emissions. India feels the controversies that very spirit of UNFCCC. Neither does it seem fair to impose restrictions on India when the country's rise in per capita carbon emission by 2030 is likely to still represent less than half the world average of 3.8 tonnes in 2000. Indian emissions are predicted to rise from 0.9 tonnes per capita in 2000 to 1.6 tonnes per capita in 2030.
- **3.** The Indian government is already participating in global efforts through a number of programmes. For example, India's National Auto-fuel Policy mandates cleaner fuels for vehicles. The Energy Conservation Act, passed in 2001, outlines initiatives to improve energy efficiency. Similarly, the Electricity Act of 2003 advocates and promotes the use of renewable energy. Recent trends in importing natural gas and encouraging the adoption of clean coal technologies show that India has been making true efforts. The government also intended to launch a National Mission on Biodiesel, using about 11 million hectares of land to produce bio diesel by 2011-12. And India has one of the largest renewable energy programmes in the world.
- **4.** A review of the implementation of the agreements at the Earth Summit in Rio was undertaken by India at 1997. One of the key conclusions was that there had been no meaningful progress with respect to transfer of new and additional financial resources and environmentally sound technology on concessional terms to developing nations. India encourage SAARC countries to adopt a common position on major global environmental issues, so that the region's voice carries greater weight.
- Q.21. Compromise and accommodation are the two essential policies required by states to save planet Earth. Substantiate the statement in the light of the ongoing negotiations between the North and South on environmental issues.

Ans. Issues of environment is not just related to any individual or country, rather it is related to all those people of countries living on Earth. Thus, in order to save it, mutual and cooperative efforts are required instead of individual efforts. It is important that every country adopts the policy of resolvement and cooperation. There is difference in the approach to environment between the countries of the North and the South. The developed countries of the North want to discuss the environmental issue as it stands now and wants everyone to be equally responsible for ecological conservation. The developing countries of the south feel that much of the ecological degradation in the world is the result of industrial development undertaken by the developed countries. If they have caused more degradation, they must also take more responsibility for undoing the damage now. Moreover, the developing countries are in the process of industrialisation and they must not be subjected to the same restrictions, which apply to the developed countries. Thus, the special needs of the developing countries must be taken into consideration in the development, application, and interpretation of rules of international environmental law. This argument was accepted in the Rio Declaration at the Earth Summit in 1992 and is called the principle of Common but differentiated responsibilities. The 1992 United Nations Framework Convention on Climate Change (UNFCCC) also provides that the parties should act to protect the climate system on the basis of equity and in accordance with their common but differentiated responsibilities. The parties to the Convention, agreed that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries. It was also acknowledged that per capita emissions in developing countries are still relatively low. China, India, and other developing countries were, therefore, exempted from the requirements of the Kyoto Protocol.

Q.22. What are 'global commons'? Why is it said that international cooperation over the global commons is not easy?

[CBSE Delhi 2016]

Ans. Global commons are the resources which are not owned by any one country but rather owned by international community such as earth's atmosphere, Antarctica, the ocean floor and the outer space. It is difficult to achieve consensus on common environmental agenda.

History of outer space as global common shows that the management of these areas is influenced by North East inequalities.

Like Earth's atmosphere and the ocean floor, the crucial issue here is technology and development.

The benefits of exploitative activities in outer space are far from being equal either for the present or the future.