

F.Y.B. Com Semester II Environmental Studies April 2019 Synopsis

Question Paper Code 32365

Q. 2 A) What is meant by waste? Elaborate different sources of waste generation

Meaning of waste (2 marks) – includes all items that people no longer have use of, which they either intend to get rid of or have already discarded. Example of different wastes.

Different sources of waste generation (8 marks) –

- Household – refused biodegradable and non-biodegradable material, sewage
- Industries– residual material, ash, sludge, packaging waste, effluent, smoke and gaseous emissions,
- Agricultural processes – farm refuse, agricultural runoff
- Mining – refused ore and excavated rock material
- Construction and demolition – rubble and refused construction waste
- Hospital & laboratories- anatomical waste and infectious material, laboratory waste
- Nuclear Power Plant and Nuclear Research Centre – radioactive waste

Q. 2 B) Describe different methods of waste management with specific reference to domestic waste?

Meaning of domestic waste (2 marks)- includes waste like spoiled food, old newspapers, waste papers, plastic bags, plastic and cardboard wrapping, tins, broken glasses, stationery, bulbs and tubes, unused medicines, cloth pieces and rags, sewage, kitchen smoke, vegetable waste, old or left insecticides, pesticides and cleaning chemicals phenyl, discarded vehicles, furniture and fixtures, discarded and dried up paints

Methods of domestic waste management (8 marks)- Avoid and reduce, reuse and recycle, composting, combustion, open dumping and landfill

Q. 2 C) Explain the present solid waste management methods practiced in Mumbai.

Solid waste management methods practiced in Mumbai – – (10 Marks)

Stages of waste management through waste segregation by citizens, storage and collection of waste by MCGM, transfer and transport and processing which includes recycling, open dumping, landfill, palletisation, composting.

Q. 2 D) State the role of citizens in controlling solid waste generation in rural environment. (10 marks)

Self-awareness and acceptance of clean village concept, reuse of kitchen refuse and waste as animal feed, avoiding and reduction in waste generation at home and public places, collection and processing of biodegradable waste into bio-gas and bio-fertilizers, separation and storage of non-biodegradable waste and handing over for further processing

Q. 3 A) What is meant by land desertification? Explain different causes and effects of desertification.

Meaning of desertification (2 marks)- The process of land degradation through which a region becomes progressively drier and becomes waste land.

Causes of desertification are; (4 marks)

- extension of deserts into neighbouring fertile areas due to shifting of sand
- removal of grass-cover due to overgrazing and exposure to wind
- excessive application of chemical fertilizers and insecticides leading to destruction of natural fertility of soil
- Excessive cultivation leading to poor fertility
- Unskilled irrigation leading to salinization

Impact of desertification (4 marks)-

Soil pollution, loss of biological diversity, loss of biomass and bio-productivity, increase in air temperature and addition of dust, reduction in food grain production and food insecurity, increase in number of environmental refugees, starvation and undernourishment

Q. 3 B) Define hunger. State different factors of food security in developing region.

Definition of hunger (2 marks) – Olson and Helber defines hunger as, “uneasy or painful sensation caused by lack of food and the recurrent and involuntary lack of access of food”

Hunger is a state/sensation of body arising due to non-availability or inadequate amount of food.

Factors of food security in developing region (8 marks) – Food security in developing region is a result of following factors; certainty in harvest, reducing the impact of climate change with appropriate options, cost regulation of inputs like seeds, fertilizers, machinery etc., generation of alternate sources of food, Control over population, understanding the concept of diet, restriction over movement of refugee and immigration, generation of new calorie food with the help of biotechnology, maintenance of soil fertility, intensification and sustained agriculture activity in the region

Q. 3 C) What is meant by global warming? Explain different causes and impacts of global warming?

Meaning of global warming (2 marks) – Rise in the average temperature of the earth’s atmosphere due to natural/anthropogenic factors, refers to change in the thermal balance of the earth

Causes of global warming (4 marks) – imbalance in insolation and terrestrial radiation, increase in the proportion of greenhouse gases due to increase in fossil fuel combustion and other hydrocarbons, increase in emission of CFCs, ozone depletion, rapid depletion of forest cover.

Impact of global warming (4 marks) – massive melting of ice cover resulting into flow water to tropical areas and rise in sea level, submergence of fertile land, extinction of plants and animals, on animal and human health, insecurity of raw material to industry, loss of plankton and fish draught, change in cropping pattern

Q. 3 D) State different causes of water pollution. How can we reduce pollution of water?

Causes of water pollution (5 marks) – Sewage, industrial effluents, discharge of warm water, synthetic detergents from washing and cleaning processes, agro-chemicals, nutrients pollution/eutrophication, suspended particle matter, concentration of toxins, oil spills

Impact of water pollution (5 marks) – death of marine animals and plants, disruption of food chains, poor availability of good water to industries, less availability fresh water, increase in water-borne diseases.

Q. 4 A) State the importance of tourism, with special reference to developing region. (10 marks)

Q. 4 B) Elaborate the challenges faced by India in tourism section. (10 marks)

Q. 4 C) What are the advantages of ecotourism in India?

Q. 4 D) State in brief different economic, socio-cultural advantages and disadvantages of tourism. (10 marks)

Q. 5 A) 'Chipko Movement' is one of the earliest environmental movement in India – elaborate (10 marks)

Chipko movement is one of the most important **feminist movement** in the world. Took place in the remote hill town of Gopeshwar village in Chamoli district of then U.P. On April 24th, 1973 villagers staged protest against cutting of ash trees for setting up sports good manufacturing industry and saved trees from cutting. Similar protest to save trees took place in Rampur Phata and Reni village. The movement in Reni village was led by women. The movement **well known for its Gandhian principles of non-violence** was advocated by Chandi Prasad Bhatt through the Dasholi Gram Swarajy Sangh. The movement was appreciated from India to the United States and received wide publicity.

Q. 5 B) Explain any five environmental protection laws in India (10 marks - 2 marks for each law)

Brief explanation of any five environmental protection laws in India given below;

- a The Wildlife (protection) Act, 1972
- b The Water (prevention and control of pollution) Act, 1974, amended in 1978 and 1988
- c The Water (prevention and control of pollution) Cess Act, 1977 amended in 1991
- d Forest Conservation Act, 1980
- e The Air (prevention and control of pollution) Act, 1981 amended in 1987
- f The Environment (protection) Act, 1986
- g The Public Liability Insurance Act, 1992
- h Ozone Depleting Substances (Regulation and Control) Rules, 2000
- i The Biological Diversity Act, 2002

j Hazardous Wastes (Management and Handling) Amendment Rules, 2003

Q.5 C) State the relevance of environmental management towards sustainable development.
(10 marks)

Environment management is a **decision-making process** which regulates the impact of human activities on the environment in such a manner that the capacity of the environment to sustain human development will not be impaired. Environmental protection is possible through effective environmental management in every field like agriculture, forestry, mining and construction, industries, waste water management, fuel storage, management of livestock etc.

Sustainable development is the development that meets the needs of the present without compromising the ability of the future generation to meet their own needs. Environment management help in achieving balance in social, economic, technological and ecological forces in the development and allocation of resources in order to satisfy the needs and aspirations of the present and future generations.

Q.5 D) How do the principles of International Standards Organisation (ISO) help in maintaining quality of environment?

The ISO 14001 is a standard for environmental management systems to be implemented in any business, regardless of size, location or income. The aim of the standard is to reduce the environmental footprint of a business and to decrease the pollution and waste a business produces. The most recent version of ISO 14001 was released in 2004.

The ISO 14000 family addresses various aspects of environmental management. The very first two standards, ISO 14000:2004 and ISO 14004:2004 deal with the Environmental Management Systems (EMS) ISO 14001:2004 provides the requirements for an EMS and ISO 14004:2004 gives general EMS guidelines. The other standards in the family address specific environmental aspects, including labelling, performance evaluation, life cycle analysis, communication and auditing.

An EMS meeting the requirements of ISO 14001:2004 is a management tool enabling an organisation of any size or type to:

- Identify and control the environmental impact of its activities, products or services.
- Improve its environmental performance continually, and to,
- Implement a systematic approach to setting environmental objectives and targets to achieving these and to demonstrating that they have been achieved.