

Duration : 2 ½ hrs.

Total Marks :-75

Note Figures to the right indicate full marks.
Draw diagrams wherever necessary.

- 1.a Explain complex food web 7
- 1.b Define Ecology . Explain the dependency levels of various consumers on each other. 8
- OR
- 1.c What is Environment ? State the structure of Environment 15
- Q.2.a What do you understand by degradation of Land . State the Environment plans in order to safeguard the Environment. 7
- Q.2.b Define Air pollution . State its causes 8
- OR
- Q.2.c What is waste management. State and discuss hospital waste categories. 7
- Q.2.d What is soil /land pollution . State its causes and effects. 8
- Q.3.a Define water pollution. State its effects and preventive methods 7
- Q.3.b Define Disaster management . Explain discuss management cycle. 8
- OR
- Q.3.c What is noise pollution . State its sources, effects and preventive methods. 15
- Q.4.a Define Environmental Audit . State various types of Audit and its benefits with a live case study. 7
- Q.4.b What is KYOTO PROTOLOL and function of UNFCCC. State the goals observed on raising price of carbon. 8
- OR
- Q.4.c Define Green Marketing and its marketing mix . Explain organic farming an its methods. 7
- Q.4.d Define non – conventional energy . Explain any two forms in detail 8
- Q.5.a Case - study (AnyOne) 15

CASE STUDY OF NESTLE COMPANY

Nestle Environmental Management System (NEMS) is an organizational tool at the heart of Nestles Program for the environment. Nestle has 8000 brands, with a wide range of products across number of markets. Nestle, India has achieved the 27th World Environment Centre (WEC) award as a gold medalist on 27th July, 2011 for their contribution in saving the environment.

Some important objectives of NEMS were, to provide a systematic approach that ensures compliance with Nestlé's Environmental policy in order to ensure the continuous improvement towards the Nestlé's environmental performance. World Government increasingly realized their responsibilities to develop and implement shared solutions to Global environment issues. At the same time Nestle took up a responsibility in performing a leadership role.

Nestle took a major step for the betterment of environment like Removal of inner plastic sleeve from Kit Kat bumper pack which saved 160 tons of plastic per year. It also observed reduction in the 200g Nescafe's jars saving 1041 tons of glass per year. There was a reduction in thickness of base material for chilled dessert pots saving 150 tons of plastic over two years. They also used heavy motor vehicles to transport more products at a time which even helped to save fuel. Nestle (NEMS) believed in cost-effectiveness, productivity & working conditions which helped to contribute for

the long run of industry. Nestle took steps to prevent the emissions to not let out of their industry which harmed the environment.

NEMS contributed a huge amount for the Corporate Social Responsibility (CSR). Any industry is always uplifted and highlighted if it contributes towards CSR which in turn increases the sales. Nestle was one of this company to believe in this policy as well as follows it.

QUESTIONS

1. State the steps taken by NEMS for the contribution of better environment 7
2. Prove Nestle has been adopting an Innovative Business Strategy and Style 8

OR

CASE STUDY OF BIJOLIA MINING AREA IN RAJASTHAN, INDIA

India is rich in mineral deposits and Rajasthan ranks second only to Bihar. Bijolia is one of the largest mining areas of Rajasthan where mining on large scale commenced nearly three decades ago. Since then, environment has been adversely affected, but no systematic evaluation has been carried out to assess its impact on the nature and socio-economic system of the people working in and around the mines.

The mining activity in Bijolia has progressively increased up to 30.839 km² in 1991. With the increase in mining activity the forest wealth was indiscriminately destroyed as the fire wood requirement increased. Mining and its activities of drilling, blasting and transportation increase the suspended particulate matter in the air which is harmful to the health of the workers exposed to the mine environment. Fine dust inhaled by workers leads to diseases related to lungs and liver such as "silicosis", "bronchitis", "asthma" and "tuberculosis". Most of the mine workers live around these stored stagnant waters on which breeds mosquitoes. Water borne malarial disease is quite common among mine workers constitute a major hazard to man and environment Mining. Though it generates employment, workers become disabled at the age of 40 due to mining related diseases. In the families surveyed, more than 70 per cent workers suffer from some disease. Number of workers reported that mine workers after working for few years become physically handicapped and invalid to work at the age of 40 to 45 years.

Environmental damages by mining are enormous as brought out by this study in Bijolia mining area of Rajasthan. In spite of ban on any mining activity in forest land envisaged in Forest Act, 1980, Government of Rajasthan granted nearly 400 leases of marble mines in and around Sariska Tiger Reserve. This mining activity caused havoc to the environment by way of deforestation, degradation of agricultural land, pastures and hydrology of the area resulting in loss of conventional employment and hence income of the local people. Air and noise pollution due to mining activity affected the health of the mine workers. Noise due to blasting accompanied by deforestation affected the habitat of the tiger and other wild animals in the Sariska Tiger Reserve. The mining lobby is still active to get the stay vacated and carry out mining illegally at some place. Political leadership of Rajasthan is also keen on reopening of the mines.

QUESTIONS

1. State the environmental pollution impacts in Bijolia and its after effects 7
2. Suggest the measures which were required to be implemented in Bijolia mines 8