Lesson No. 9
Environmental management - Extra Question

Q.1 _____ influences our basic needs like food, clothing and shelter, as well as our occupations.
Ans.- Climate.

Q.2 Which day is observed as ' World Meteorological Day.'
Ans.- 23rd March is observed as ' World Meteorological Day.'

Q.3 Which scientist in the decade 1930s, had underlined the relationship between various worldwide climatic factors and the Indian monsoon ?
Ans.- Sir Gilbert Walker.

Q.4 The wastes that can be easily degraded by microbes is called ____.
Ans.- Biodegradable waste.

Q.5 Mouth to mouth respiration and pressing the heart down performed alternately is called _____.
Ans.- Cardio - pulmonary resuscitation.

Q.6 Match the following -

Column A		Column B
1) Bio medical waste	-	Glass, rubber, carry bags etc.
2) Industrial waste	-	Radioactive Material
3) Urban waste	-	Chemicals, pigments, ash etc.
		Bandages, cotton, needles etc.

Answers -

Column A		Column B
1) Bio medical waste	-	Bandages, cotton, needles etc.
2) Industrial waste	-	Chemicals, pigments, ash etc.
3) Urban waste	-	Glass, rubber, carry bags etc.

Q.7 Prediction maps are prepared once in ____.
Ans.- Twice every 24 hours.

Q.8 The first prediction of monsoon on India was made by whom ?
Ans.- H.F.Blanford.

Q.9 What does a meteorological model depends upon ?
Ans.- The meteorological model depends upon the inter - relationships between parameters used in that model and the results expected from it.

Q.10 Describe the 3R Mantra.
Ans.- Reduce, Reuse, Recycle.

Q.11 Which method is used for transporting children and underweight victims ?
Ans.- Cradle method.

Q.12 What should be applied on injuries like sprains, twisting and contusion on the injured part ?
Ans.- Ice - pack, should be applied on injuries like sprains, twisting and contusion on the injured part.

Q.13 Define the term - Meteorology.
Ans.- The science that studies the inter - relationships between the various components of air, natural cycles, geological movements of earth and climate, is called Meteorology.

Q.14 Define the term - Urban waste.
Ans.- Waste generated through household industries, and large commercial and industrial establishments is called Urban waste.
Q.15 Write a note an Urban waste.
Ans.- 1) Urban waste includes the waste generated in household industries, large commercial and industrial establishments is called Urban waste. 2) The Urban waste includes metal pieces, metal rods, carry bags, glass, threads, rubber, paper, cans, vegetable market waste, meat markets waste, constructions waste etc.

Q.16 Why is it necessary to manage solid waste ?
Ans. Solid waste management helps to keep the surroundings clean, and prevent environmental pollution to generate energy, fertilizer production, Which creates work and employment opportunities. The stress on natural resources can be reduced, for maintaining the environmental balance to improve the health and quality of life.

Q.17 Describe the harmful effects of solid waste ?

Ans.- Following are the harmful effects of solid waste -
Effect on biodiversity, production of toxic gases, release of bad odour, leads to degradation of natural beauty, Lleads to pollution of air, water and soil, spread of diseases.

Q.18 Define Pyrolysis.
Ans.- Pyrolysis is the technique that is used to burn, the hazardous waste materials at source.

Q.19 Describe the methods of solid waste management.
Ans.- 1) Collection of household waste - The collection of household waste is done by the municipal corporation. They provide door to door service for collecting the waste material, vehicles carry this material. Wheel barrows are used to collect the garbage from every locality.
2) Landfill is the traditional technique for municipal and solid waste disposal. Land fill is practiced in all major cities of India.

Q.20 What are the household methods in solid waste management ?
Ans.- 1) The solid waste management is the process of controlled generation, proper collection, transportation, treatment and disposal of solid waste. 2) The wastes are separated as dry and wet solid wastes. 3) They are stored in separate containers. 4) The waste collectors pick these cans and empty them in garbage van, the waste is carried by the municipal transport to landfill sites. 5) The dry garbage collected at home can be sent to scrap dealers for recycling and reusing. 6) The wet garbage can be used for vermicomposting or composting, if there is a place to carry out these practices.

Q.21 Is their any relationship between the climate and biotic components ?
Ans.- Mutual support between the climate and the biotic components occurs in a habitat. Example, the presence of more trees in a region causes cooling of the place better soil conditions and water availability that enables the region to support more life forms.

Q.22 What are the air pollutants released by industries ?
Ans.- Industrial air pollutants are SO_2, CO_2, Oxides of nitrogen, H_2S , fumes of acids, dust, particles of unburnt carbon, lead, asbestos, and cement.

Q.23 Write a note on climate factors.
Ans.- The climate factors include direction and speed of mind, temperature, atmospheric, pressure, rainfall, humidity, visibility, sunlight, clouds etc. The climate of a region is the average of daily readings of various climate factors recorded for several years. These climatic factors are taken into account while constructing runways, seaports, skyscrapers, bridges, sea - links etc.

Q.24 Match the following -

Column A		Column B
1) Electronic waste	-	Infectious material
2) Industrial waste	-	cell phones
3) Hazardous waste	-	Threads
4) Urban waste	-	Sludge

Answers -

Column A		Column B
1) Electronic waste	-	Cell phones
2) Industrial waste	-	Sludge
3) Hazardous waste	-	Infectious material
4) Urban waste	-	Threads

Q.25 Why do we recycle the non - biodegradable waste ?
Ans.- 1) The non - bio degradable waste are not easily degraded and requires a very long time period of time, and the use of various techniques. They accumulate in surroundings for thousands of years. 2) Some non - degradable waste that accumulate on land affect the plants life in that region.
3) Non degradable wastes in water bodies can harm fishes and other aquatic organisms. 4) In general, non - degradable wastes pollute the atmosphere largely posing hazards to the environment and hence must be recycled.

Q.26 Human progress is related to a conducive climate and geography.

Ans.- 1) Climate plays an important role in the formation and enrichment of soil, formation of oceanic currents, water cycle etc. 2) Geographical aspects like better transportation, easy access to daily commodities, plentiful natural resources, hygienic environment etc. help in enhancing the quality of life and develop the economy of the region. 3) The agricultural practices and industrial development are inter related. It is useful for climate and geography. 4) A mutual symbiosis between nature, that is useful for climate and geography and human beings is necessary for a viable development and human progress.

Q.27 What is the main objective of first aid ?

Ans.- The goal of first aid is prevention of death, preventing languish of health and starting the process of rehabilitation.

Q.28 Write a note on ' RICE ' remedy.

Ans.- 1) The RICE acronym consist of four words Rest, Ice, Compression, Elevate. It is useful in injuries like sprains, twists or contusions. 2) Rest - means - relaxing the victim by making him/her to sit in a relaxed position. 3) Ice - An ice pack should be applied on the injured part of the person who is suffering. 4) Elevate - The injured part should be kept in a raised position.

When any disaster takes place the RICE, type of first aid can be used.

Q.29 Write a note on monsoon model.

Ans.- 1) In 1990s, Dr. Vasantrao Govarikar developed a monsoon model based on 16 worldwide climate parameters. This model was in use from 1990 to 2002.

2) The monsoon models are used to predict very accurate forecasts of rainfall during monsoon season in India.

3) The Indian Meteorological Department - IMD and Indian Institute of Tropical Meteorology - IITM works towards designing and development of monsoon models.

The types of monsoon models are -

1) Mathematical Dynamic model - As the name indicates the mathematical analysis is performed. In this method, forecasts are made with mathematical models. Supercomputers are used in this technology the current climatic conditions are mathematically analysed. The model considers the current

weather related events and ongoing physical interactions between them.
2) Holistic model - The predictions are declared as the result of different parame ters in different models. The IMD uses holistic models to perform monsoon predictions.
3) Statistical models - The statistical model performs the study based on comparative analysis of current climatic observations of a region and the earlier parameters such as oceanic temperatures, atmospheric pressure and nature of the monsoon rainfall of several years. Hence comparison of both of the data is done by comparing the predictions and statistical models are used.

Q.30 Write a note on plastic wastes.
Ans.- 1) Large amount of plastic waste is collected through domestic waste. The domestic and urban waste such as carry bags, disposable plates and cups, bottles, cans etc is the plastic waste. 2) Plastic is non - biodegradable it remains in environment for many years. It contains harmful chemicals and is hazardous, hence if burnt emits toxic gases. 3) It kills the useful micro - organisms in the soil, and affect the natural decomposition process. The grazing cattle choke and dies if the consumption of plastic is done. 4) When the plastic wastes are thrown in water, it is consumed by aquatic animals, that endangers their life. 5) The use of hazardous plastic waste should be stopped, and the proper management of plastic waste should be done.

Q.31 It is necessary to manage solid waste.
Ans.- 1) If solid wastes are managed the surrounding will remain clean, hygienic, as the solid waste will not be dumped anywhere. 2) The environmental pollution, will be prevented.
3) Household solid waste is a good fertilizer, it can be used for agricultural purpose. 4) If solid waste is properly managed, then it reduces strain on natural resources. 5) Lifestyle of people will be improved as their will be no pollution and healthy and quality life can be lived. 6) Environmental balance will be maintained.

Q.32 Write a note on Meteorology.
Ans.- 1) Meteorology is the science that studies the inter - relationships between the various components of air, natural

cycles, geological movements of the earth and climate. 2) It includes the study of storms, clouds, rainfall, thunder, lighting etc. 3) The weather forecasts are made, based on these studies. 4) These weather forecasts are helpful to common people, farmers, fishing industries, aviation services, water transport etc.

Q.33 Write a note on Industrial waste.

Ans.- 1) Industrial waste is generated from Industrial waste. 2) Industrial waste include chemicals, oil, ash, sludge, pigments, metals etc.

3) The industrial waste is large in volume. It causes lot of pollution of air, water and soil.

4) The water bodies get polluted when the industrial waste is released in water.

5) Industrial waste leads to air pollution, as toxic gases are released in air.

6) Industrial waste needs to be managed properly as it affects the environment and biotic factors like plants, microbes, animals etc.

Q.34 Why is it necessary to classify garbage ?

Ans.- 1) Garbage is classified as - biodegradable and non - biodegradable.

2) This waste should be segregated to separate the bio degradable materials and non-biodegradable materials.

3) The non degradable wastes if not managed properly then, they pollute the environment. An appropriate method of solid waste management should be implemented.

Q.35 Define Non - bio degradable waste.

Ans.- The Non - bio degradable waste is the type of waste which is not easily degraded because it requires, a very long period of time and the use of various techniques.

Q.36 Write a note on climate factors.

Ans.- 1) Atmospheric pressure, sunlight, clouds, humidity, rainfall, visibility, temperature etc. are important climatic factors.

2) All these climatic factors decide the atmospheric conditions of a particular region at a specific time.

3) The climatic factors are dependent upon the geographical conditions of a particular region.
4) The climate of a particular region is decided by the average of daily readings of the weather related parameters for several years.

Q.37 Give reason for the following.
Human beings have decided a time table for their living, based on centuries of climatic experiences.

Ans.- a) The regular and natural events that occur in nature are cycle of seasons. Man has experienced this natural phenomenon for last thousands of years.
b) The records of these events are recorded or documented.
c) Human beings have planned farming, festivals and other activities according to the climatic conditions. E.g. A farmer sows the seeds in monsoon and taking the harvest in winter. The farming activity is completely dependent on climate. different festivals in India, are celebrated according to the agricultural practices.

Q.38 Waste management should be done properly.

Ans.- 1) Waste is used for material recovery. 2) Pyrolysis, gas and electricity can be generated through processing the waste.
3) Organic waste can be used to produce, biogas that supplied fuel and electricity. 4) Bio degradable waste can be converted into manures and biogas. 5) Variety of wasted, especially, non bio degradable wastes can be recycled and reused in different from. 6) Waste is an important resource, only it should be managed properly.

Q.39 What is the function of Indian Meteorological Department?

Ans.- The Indian Meteorological Department provides information regarding weather and climatic conditions as prediction of calamities like dust, storms, sand storms, heavy rainfall, hot and cold waves, tsunami to different departments as aviation, shipping, agriculture and all types of mass communication media etc.

Q.40 What are weather related factors ?

Ans.- Weather related factors are atmospheric pressure, temperature, visibility, rainfall, humidity, clouds, sunlight etc.

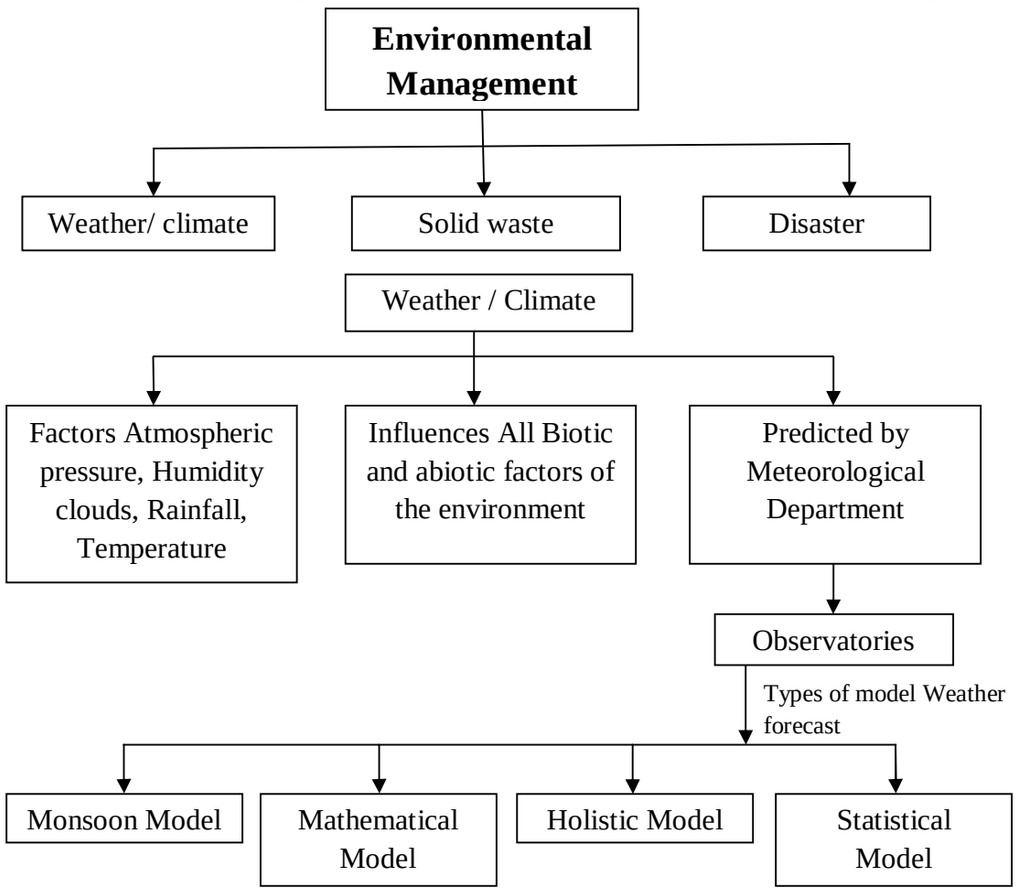
Q.41 What is disaster management ? Explain the factors included in it ?

Ans.- Disaster management is action implemented through proper planning, organized activity and co - ordination.
It includes factors -
1) Prevention of losses and danger.
2) Improving tolerance.
3) Taking preventive measures for the disaster.
4) Immediate measures to be implemented in the disaster situation.
5) Estimation of the damages and intensity of the disaster.

Q.42 Describe the waste management processes that are in your city ?

Ans.- Different waste management processes used in the city as -
1) Door to door collection of household waste - The household waste is collected by the municipal corporation. The waste is collected door to door. Vehicles carry the waste, wheel barrows are also used to collect the garbage from each locality.
2) Landfill - The collected solid waste is dumped in an outside area.
3) Disposal in the sea - Certain waste sewage or industrial effluents are disposed in the sea after treating the waste.
4) Incineration - Bio medical waste is burnt in an incinerator to kill the pathogens.

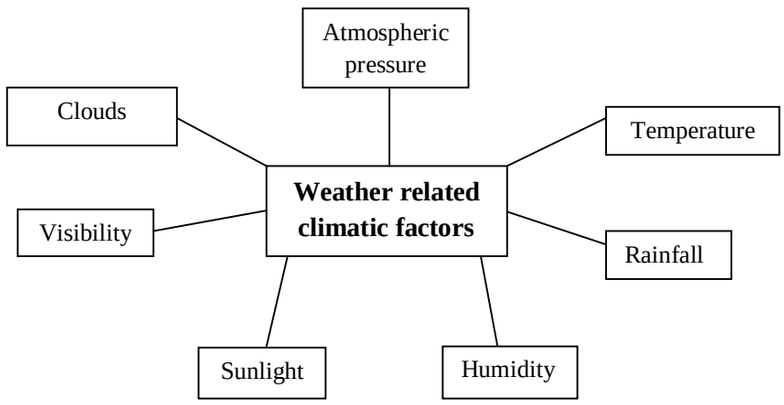
Q.43 Draw a concept map for the Environmental management.



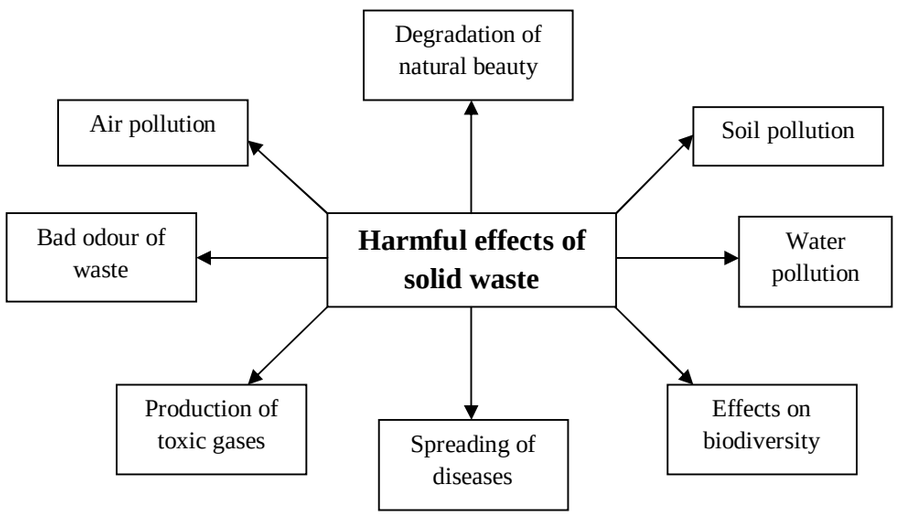
Q.44 Define pollution.

Ans.- Contamination of natural environment that can harmfully affect, the ecosystem is called as pollution.

Q.45 Draw the concept map of weather related climatic factors.



Q.46 Draw the concept map of harmful effects of solid waste.



Q.47 What are the principles of solid waste management ?

Ans.- Following are the principles of solid waste management-

1) Reuse - Each material or item that is used should be reused for any other purpose.

2) Refuse - The articles that are made of plastic and thermocol should be used. These materials are non - degradable.

3) Recycle - Production of useful articles by recycling the solid wastes. For example - Paper, glass etc.

4) Rethink - Rethinking our habits, activities and consequences in connection with the use of various articles of daily use.

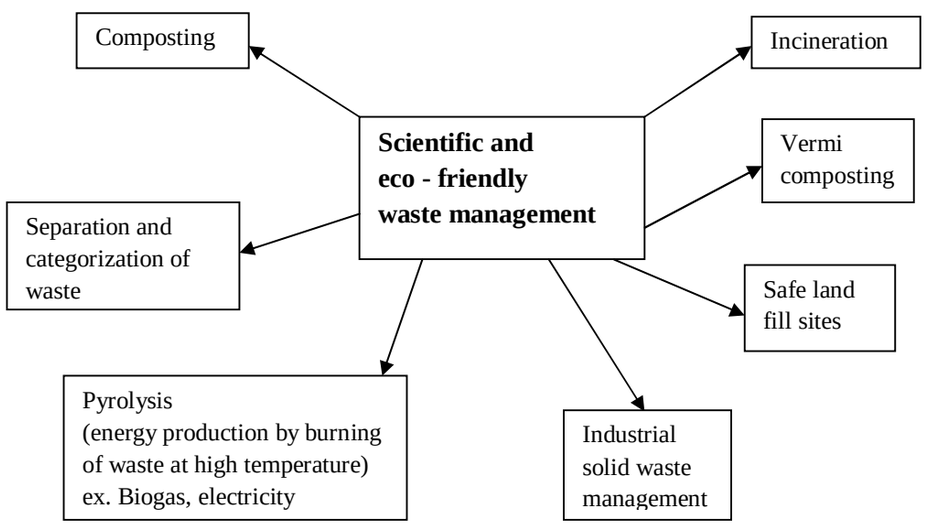
5) Reduce - The use of resources should be done at minimum, so that they do not waste. Items should be reused. One item should be used by many people, use and throw type of objects should not be used.

6) Research - Conducting research related to reuse of materials that are temporarily out of use.
7) Regulation and Public awareness - Following the laws and rules related to waste management and motivating others to do the same.

Q.48 Establishments where various climatic factors are recorded are called ____.
Ans.- Observatories.

Meteorological departments are established in many departments for studying the climatic factors. These departments have observatories which are equipped with modern instruments and technology.

Q.49 Complete the concept chart of scientific and eco. friendly waste management.



Q.50 Write a note on Indian Meteorological Department.
Ans.- 1) The Indian Meteorological Department was found by British in 1875, at Shimla.
2) Its head office is located at Pune, and the regional offices are at Mumbai, Kolkata, Chennai, Nagpur and Delhi.
3) Maps are prepared every day, which indicate the daily predictions about the weather. Such maps are prepared and published twice in every 24 hours.
4) The Institute studies different aspects like, instruments for climatic readings, predictions made about climate related to seismology, predictions, regarding rainfall by satellites, air pollution etc.

5) The Indian Meteorological Department provides information regarding weather and climatic conditions to other departments like aviation, shipping, agriculture, irrigation, marine oil exploration and production etc.
6) Predictions regarding calamities like dust storms, sand storms, heavy rainfall, hot and cold waves, tsunami etc. are communicated to various departments, all types of mass communication media and all citizens.
7) India has launched several satellites equipped with high class technology.
8) Observatories at different locations are doing excellent work in the analysis of the information received from these satellites.