FAQs

(1) What is an environmental economics ?

An Environmental economics deals with the use of natural resources for consumption and production and for the pursuit of rapid growth with technology. Consequently some residuals are realized in this process that damages the environment with serious effect on the economy. The application of economic concepts, theories and policies enable use to understand the relationship between nature and the economy and the inter-action between them and the solution of problems by means of economics. Precisely, it is a residuals from economic activity back to nature.

(2) What does circular flow Model explain ?

The circular flow model explains that how the economy as a whole works. It explains the linkages between the household and the firm through goods market and factor market. It is schematic representation of the organization of economy. It also explains how household and firm interact in markets, precisely if explain the flow of income and the flow of inputs and outputs.

(3) How do you explain Material Balance Model ?

The material balance model depicts the explicit relationship between economic activity and the natural environment. It is an extended version of circular flow model which incorporates the exploitation of natural resources by household and firms for consumption and production. The residuals are released from consumption and production which concern with environmental problems. It is affected by dynamic factors like growth in income, population growth, increased consumer recycling, increased industrial recycling and increased use of pollution prevention technologies.

(4) What are the laws of physics which explain material balance model ?

There are two laws of physics which explain material balance model. They are (1) The first law of thermodynamics assets that matter and energy can be neither created nor destroyed. (2) The second law of thermodynamics states that the conversion capacity of nature is limited. The first law states that the matter and energy cannot be destroyed implies that material flow can go for ever. The second law states that nature's capacity to convert matter and energy is finite.

(5) What do you mean by environmental damage ?

The prime and foremost damage of environment is pollution. The air, water and noise pollutions are standard forms. Loss of biodiversity is a serious damage. Depletion of natural resources, deforestation and massive distortions in natural set-up of planet, negative externalities of rapid urbanization and exponential growth of population. They mollify economic social and political problems. Pollution is associated with the flow of residuals and is defined as the presence of matter or energy whose nature, location or quality are resulted in to undesired effects on environment.

(6) What are the causes of environmental damage ?

There are mainly two causes of environmental damage namely; (1) natural pollutants and (2) anthropogenic pollutants. The former arise from non artificial processes in nature, such as particles from volcanic eruptions, salt spray from oceans, and pollen. The later are human induced and include all residuals associated with consumption and production, e.g. gases from combustion and chemical waste from certain manufacturing processes.

(7) What are the sources of environmental damage

There are mainly four sources of environmental damage ; (1) stationary sources, is a fixed site producer pollution, (2) mobile source is any non stationary polluting source, (3) point source is any single identifiable source from which pollutants are realized, and (4) non point source is one that cannot be identified accurately and degrades the environment is a diffuse, indirect way over a broad area.

(8) What are the types of pollution ?

There are three types of pollution. They are (1) Local pollution, is combined a single community and its negative effects are limited in scope, e.g. urban smog, seen the urban areas (2) regional pollution. It is specific to region and degradation of environment with a risk beyond the polluting source, e.g. acidic deposition which is commonly known as acid rain and lastly (3) Global pollution which has wide spread global implications, e.g. global warming climate change and ozone depletion.

(9) What are the environmental objectives ?

The Rio earth summit has fixed three main environmental objectives. These are ; (1) Environment quality, it emphasizes on cleanliness of air, water and land (2) sustainable development it stresses on pursuing economic development in present without welfare loss to future generation, aiming at intergenerational equity (3) biodiversity which is aiming at preserving biodiversity, refers to the variety of distinct species, their genetic variability and the variety of ecosystems they inhabit.

(10) What are the environmental policy evaluation criteria ?

There are mainly three policy evaluation criteria, namely (1) a locative efficiency (2) cost effectiveness and (3) Environmental justice. The first criterion requires that MSB = MSC. The second criterion requires that least amount of resources be used to achieve an objective and the third criterion requires that the environmental risk burden across segment of society or geographical region should be distributed fairly.

Initially when the environmental problems came to light, it was a sub-subject of economics, but as the advances in research and scientific inquiry proceed and the finding on it come to surface, it became a subject and it is reckoned as interdisciplinary and transonic plenary. In late seventies, Robert Solow, while explaining his thoughts on the subject he very thoughtfully titled his paper as 'Economics of environment and environment of economics.' John F. Kennedy as a great visionary leader said, " The Supreme reality of our times is...the vulnerability of our planet.

Scientists brought to the seriousness of the environmental problems and economists found in it that how economic concepts and theories would be useful in explaining and analyzing environmental issues. This it was coincidence that economists and ecologists came closer and started a common search for appropriate solution for environmental challenges.

The circular flow model is the bases for modeling the link between economic activity and nature. The relationship between economic activity and the natural environment is illustrated by the materials balance model. The first law of thermodynamics asserts that matter and energy can be neither created nor destroyed. The second law of thermodynamics states that the conversion capacity of nature is limited. Pollution refers to the presence of matter or energy whose nature location or quantity produces undesired environmental effects. Some pollutants are natural, others are anthropogenic.

The causes of environmental damages are exploitation of natural resources beyond limit for the pursuit of growth and wastes discharged by consumption and production. The sources of pollution are classified

as mobile, stationary, local regional and global among the most critical environmental objectives are environmental quality, sustainable development and biodiversity.

With regard to environment policy, planning, Risk Assessment and Risk Management are important while for policy evaluation criteria, allocation efficiency, cost-effectiveness and environmental justice are crucial. For environmental policy approach command and control approach and market approach are significant and government sometimes follows the approach of "polluter pays principles.