

4th Sem General (Arts and Science)
BOTANY
Paper: ENVIRONMENTAL STUDIES

Write any one assignment of the following

ASSIGNMENT: 1. Role of an individual in prevention of pollution.

Marks-10

ASSIGNMENT: 2. Role of Information Technology in Environment and human health.

XX

INTERNAL ASSESSMENT-10 MARKS

Answer any ten of the following.

Marks -1 each

1. Minamata disease is occur due to presence of
 2. Who wrote the book Silent Spring?
 3. Which year Air Pollution Control Act in India was passed?
 4. Which year Methyl isocyanide gas was released ?
 5. What is the percentage of nitrogen in air?
 6. What is CFCs.?
 7. Which year India has signed the Montreal Protocol?
 8. What percentage total water available on earth is found in oceans?
 9. Melanosis is occur due to toxicity of
 10. Rio Conference was held in
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ONLY QUESTION ANSWERS SEND TO : (write very very shortly)

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(WITH NAME AND EXAM ROLL NUMBER WITHIN 15 DAYS FROM DATE OF UPLOADING)

(Keep your hard copy of answer carefully. You have to prepare assignment and your projects and must be ready to submit at any moment.)

HINTS:

ROLE OF AN INDIVIDUAL IN PREVENTION OF POLLUTION

Introduction

Environment protection has been burning issue in last half century. In order to tackle the menace of pollution, urgent steps have to be taken at not only global or country level, but also at local level. In fact, the role of individuals in prevention of pollution is of critical importance, because it is the individuals that make a community or country. Effort by each individual at his or her level can have a significant effect on global level. It has been aptly said “charity begins at home”.

Aware and inspired individuals are strongest tool to tackle pollution. This is because an aware individual not only lessens the burden on state but also he/she can tackle problem of pollution more effectively as he/she is more familiar with problems persisting at local level and he himself/herself deals with them in his/her day to day life. It is better and more viable to prevent pollution by educating individuals than controlling pollution. Individuals should encourage to modify their lifestyle and living habits if that are not healthy for environment.

Ways in Which a Individual can Help in Prevention of Pollution

- Individuals should minimize wastage of resources such as electricity. Every unit of electricity saved is equivalent unit of electricity produced as it not only saves the fuel that would be used to produce that electricity, but also help to prevent pollution that is accompanied by burning of that fuel. Therefore, person should always switch off appliances when not in use.
- Individuals should prefer walking or use cycles instead of using motor vehicles, especially when distances to be travelled are small.
- Individuals can make considerable contribution by using mass transport (buses, trains, etc) instead of using personal vehicles.
- When going to workplace, colleagues from nearby localities should pool vehicles instead of going in individual personal vehicles.
- Taking personal vehicles for periodic pollution checks at centres approved by authorities.
- Individuals should reuse items whenever possible.
- Products that are made of recycled material should be given preference.
- Use gunny bags made of jute instead of plastic bags.
- Take part in environment conservation drives such as tree planting drives.
- Use water resources efficiently.
- Use renewable resources by installing equipment such as solar heaters and using solar cookers.
- Dispose potentially harmful products such as cells, batteries, pesticide containers, etc properly.

- Use of refrigerators should be minimised wherever possible as they are main source of CFC, which is responsible for Ozone layer depletion.
- Follow and promote family planning, as more population means more resources utilized and more resources utilized imply more pollution.
- Avoid making noise producing activities such as listening to loud music.
- Use handkerchiefs instead of paper tissues.
- Organize drives to clean streets and clean drains with help of other people of locality.
- Spread awareness and inspire other people to prevent pollution. Individuals should be encouraged to acquire information and innovations from world over and implement them locally.

ROLE OF INFORMATION TECHNOLOGY IN ENVIRONMENT AND HUMAN HEALTH.

It has a significant hand in improving the status in the fields of environmental education and human health as compared to that of the other respective areas such as business, economics, and culture or politics. The emerging growth of the internet services and facilities, geographic information system or GIS, and the data that gets transmitted through satellites, etc. have generated a higher affluence of the updated information on several aspects of the environment as well as health.

1. **National Management Information System (Nmis)**

According to NMIS of the department of science and technology, it can understand that it has a database compilation that base on research and development projects, as well as information that is related to research scientists and personnel, are included.

2. **Environmental Information System (Envis)**

According to the ministry of environment and forests, the government of India has developed an information system known as ecological information system or ENVIS. It has its headquarters based in Delhi and has its branches all over India. ENVIS established back in 1982, and since then, its main aim is to provide environmental information to all the decision makers, engineers, scientists, and policy planners that reside in all over the country. The centers of ENVIS implement the work hours in generating a new network for databases in areas such as clean technologies, pollution control, biodiversity, wildlife, environmental management, remote sensing, and renewable energy.

3. **Remote Sensing And Geographical Information System (Gis)**

The process of remote sensing that accesses through satellites can be used to get through the ongoing alterations in the environment as well as to predict the natural hazards before time such as floods, droughts, volcanic eruptions, starvation, etc. It is one of the most useful techniques in exploring the availability of mineral deposits, crude oil, and locating other geothermal powerhouses.

4. Geographical Information System (GIS)

GIS or geographic information system consider as one of the most effective tools in the entire environmental management topic. It is a process of superimposing different thematic maps with the help of digital data on a large scale of interconnected aspects. The different thematic maps that contain digital information and database on various elements such as forest land, water resources, soil type, cropland, industrial growth, human settlement, and industrial growth, etc. are placed in a layered prospectus in the computer with the help of software.

GIS also helps in identifying some deadly and chronic diseases that come from the infested areas which are very much prone to vector-borne diseases such as schistosomiasis, malaria, etc. based on the geographical map of that area. There are some distribution information centers (DICs) in India that are interrelated with each other and with the central information network getting its access to the international database.

They are also capable of availing information and facts about the atmospheric phenomena such as the upcoming monsoon, inversion phenomena, the depletion of the ozone layer, smog, etc. It is the reason why remote sensing and GIS play a significant role in resource mapping, management, planning, environmental conservation, and environmental impact assessment as well.

5. The World Wide Web (WWW)

With the availability of resources on every aspect, things like classroom activities, digital files of photos, web-exercises, animations, PowerPoint lecture presentations, and quiz competitions have proved to be more helpful for both the students as well as the teachers who pursue environmental studies.

Conclusion

The field of information technology has been increasing rapidly with an explosion of some applications and new avenues that are opening along with an active role in the field of education, planning, and management of health and environment. Information technology has been playing a significant role in the areas of biometrics, genome sequencing, gene engineering, online medical transcription, maintaining the DTA database for the betterment of human health, biotechnology, etc. The field also helps in identifying some deadly and chronic diseases that come from the infested areas which are very much prone to vector-borne diseases such as schistosomiasis, malaria, etc. based on the geographical map of that area.