Long Answer Questions

Q. 1. What is Pollution? Highlight some of its impacts.

Ans. Environmental pollution is in the form of air, water or soil pollution which is caused by the smoke from vehicles or from the waste or garbage from industries and households.

The various effects are:

- **i.** Effects on our nervous system.
- **ii.** Emotional effects: It produces discomfort, decreased work efficiency, lowered interest in the job and increase in the anxiety level.
- **iii.** Presence of dust particles may produce suffocation, respiratory disorders and problems in focussing of attention.
- iv. People in industrial areas report greater tension and anxiety than in rural areas.
- **v.** The presence of sulphur-dioxide in the air decreases the ability to concentrate on a task lowering performance efficiency.
- **vi.** Pollution caused by leaks of dangerous chemical substances cause harm. For example, Bhopal gas tragedy in 1984 caused disturbances in memory, attention and alertness.
- **vii.** Tobacco intake can cause lung cancer to smokers or passive smokers and other serious psychological effects such as increase the aggression level in individuals.
- viii. Polluting substances in water and soil are hazardous for physical health and may even cause mental retardation by affecting brain development.
- ix. Non-biodegradable garbage or industrial waste such as tin, plastics affects us in a negative manner. It should be burned by special techniques and smoke should not be allowed to escape into the air.

Q. 2. How humans influence environment?

Ans. Human beings influence environment by the following ways:

- i. They have started building houses by changing natural environment for shelter.
- **ii.** Use of appliances such as refrigerators and ACs generate gases that pollute air which might cause deadly diseases such as cancer.
- iii. Smoking, burning of plastics and metal articles have disastarous polluting effects.
- **iv.** Deforestation disrupt the carbon and water cycle which affect the pattern of rainfall and increase soil erosion.
- v. Industrial wastes have negative physical and psychological consequences
- **vi.** Noise pollution, crowding and natural disasters are examples of environmental stressors that create stress in human beings.

Q. 3. What are the effects of noise on human behaviour?

Ans. Any annoying or irritating sound or exposure to noise can create unpleasant mood, hearing loss, negative effects on mental activity due to lack of concentration. The effects of noise on human behaviour are:

- i. Simple task: When the task being performed is a simple mental task such as addition of numbers, noise does not affect overall performance whether it is loud or soft. In such situations, people adapt or 'get used' to noise.
- **ii. Interesting task:** If the task being performed is very interesting, the presence of noise does not affect performance.
- **iii. Predictability of noise:** When the noise comes at intervals and in an unpredictable way, it is experienced more disturbing than if the noise is continuously present.
- iv. **Difficulty of task:** When the task being performed is difficult, or requires full concentration, then intense, unpredictable, and uncontrollable noise reduces the level of task performance.
- v. Controllability of noise: When tolerating or switching off the noise is within the control of the person, the number of errors in task performance decreases.
- vi. Intensity of noise: Above a certain level noise can lead to annoyance or even sleep disturbances.
- vii. Emotional effects of loud noise: Noise above a certain level causes annoyance, and can also lead to sleep disturbance.
- Q. 4. Give the effects of crowding on human behaviour.

OR

Explain the major consequences of crowding. 2015]

[CBSE (AI)

Ans.

- i. Crowding and high density may lead to abnormal behavior and aggression. For example, rats in a highly populated enclosed space show aggressive behaviour such as biting the tails of other rats.
- **ii.** Crowding leads to lowered performance on different tasks that involve cognitive processes and has adverse effects on memory and emotional state.
- **iii.** Children growing up in very crowded households show lower academic performance and experience greater conflict with their parents.
- **iv.** The nature of social interaction determines the degree to which an individual will react to crowding. For example, if the interaction is a party, the presence of large number of people does not cause stress.
- v. In cultures that emphasize the importance of the group or collectivity over the individual, the presence of large number of people is not considered undesirable while in cultures where individualism is given more importance, crowding is experienced as stressful.

Q. 5. What are the effects of natural disasters?

Ans. The effects of natural disasters such as tsunamis, floods, cyclones and volcanic eruptions are:

- i. They leave people poverty-stricken, homeless, without any resources, usually with a loss of everything they owned.
- **ii.** The sudden loss of all their belongingness as well as their dear ones leaves people shocked and stunned.

This causes a disorder called Post Traumatic Stress Disorder (PTSD). The features of PTSD are:

- i. People become disoriented by denying to themselves that something terrible has happened.
- **ii.** Physical reactions such as difficulty in sleeping, change in the eating pattern, increased heart-beat and blood pressure and getting startled easily is found among the victims.
- **iii.** Emotional reactions such as grief and fear, irritability, anger, helplessness, depression, sometimes absolute lack of emotion, guilt feelings for having survived while someone else in the family died, blaming oneself, and lack of interest in even routine activities.
- **iv.** Cognitive reactions such as worry, difficulty in concentration, reduced span of attention, confusion, loss of memory, unwanted vivid memories or nightmares of the event.
- v. Social reactions, such as withdrawal from others, getting into conflict with others, having frequent arguments with even loved ones and feeling rejected or left out

Intensity of reaction in PTSD is affected by:

- i. Severity of the disorder and loss incurred both in terms of property and life.
- ii. Individual's general coping ability.
- **iii.** Stressful experiences before the disaster. For example people who have experienced stress before may find it more difficult to deal with yet another difficult and stressful situation.

Q. 6. What are the measures taken to avoid devastating consequences of traumatic events?

Ans. The measures taken to avoid devastating consequences of traumatic events are

- i. Warnings: When some natural disaster such as a flood is likely or cyclones or high tide is predicted, fishermen are asked not to venture into the sea.
- **ii. Safety measures:** Tips are given beforehand. For example, what to do when there is an earthquake.
- iii. Treatment of psychological disorders

- **a.** This involves providing material relief in the form of food, clothing, medical help, shelter and financial help.
- **b.** The next step involves counselling by encouraging the victims to talk about their experiences and emotional state. This can be done by providing psychiatric help to those showing extreme stress reactions.
- **c.** Rehabilitation in the form of employment and a gradual return to normal routine should be undertaken.
- **d.** Last but not the least, follow-up of the victims and survivors is needed to ensure that they have indeed recovered sufficiently from their traumatic experience.

Q. 7. Suggest the ways to promote pro-environmental behaviour. [CBSE (AI) 2015]

OR

How can the environment be protected from pollution? Suggest some strategies.

OR

State promotive actions to protect environment from pollution. [CBSE (AI) 2014]

Ans. Ways to promote pro-environmental behavior are:

- **i.** Reducing air pollution by keeping vehicles in good condition, or changing to nonfuel driven vehicles, stopping the practice of smoking.
- **ii.** Reducing noise pollution by discouraging needless honking on the road, making rules regarding noisy music at certain hours.
- **iii.** Managing disposal of garbage by encouraging separation of biodegradable waste or composting of kitchen waste. Special attention to be paid to the management of industrial and hospital waste.
- iv. Planting trees and ensuring their care.
- **v.** Saying 'no' to plastics in order to reduce toxic wastes that pollute water, air and soil.
- vi. Reducing non-biodegradable packaging of consumer goods.

Q. 8. Mention the areas where poverty and deprivation have an adverse effect.

Ans. The effects of poverty and deprivation are:

- i. The poor have low aspirations and low achievement motivation and high need for dependence. They explain their successes in terms of luck or fate rather than anxiety or hard work.
- ii. The poor and deprived have low self-esteem, are high on anxiety and introversion, dwell on the immediate present rather than the future. They prefer smaller immediate rewards rather than larger ones. They live with a sense of hopelessness, powerlessness, feel injustice and experience a loss of identity.
- **iii.** The poor and deprived exhibit an attitude of resentment towards the rest of the society.

- iv. Intellectual functioning and performance on cognitive tasks is low.
- v. The poor are more likely to suffer from mental illness due to constant worries about basic necessities, feelings of insecurity and inability to get medical facilities. The poor suffer from emotional and adjustment problems due to their experience of a sense of hopelessness and loss of identity as though they do not belong to society.

Q. 9. What are the causes of poverty?

Opinions of masses regarding the people suffering from poverty are:

- i. **Poor themselves are responsible** for their poverty. Poor lack the ability and motivation to put in effort and make use of available opportunities.
- **ii.** The belief system called **'the culture of poverty'** convinces the person that she/he will continue to remain poor and the belief is carried from one generation of the poor to the next.
- **iii. Economic, social and political factors** account for poverty. Because of discrimination, certain sectors of society are denied the opportunities needed for getting even the basic necessities of life. The poor being the socially disadvantaged group experience social injustice, deprivation and exclusion.
- **iv.** The **geographic region** is a cause of poverty. People living in deserts that have shortage of natural resources or in regions where there is harsh climate such as extreme heat or cold end up being poor.
- v. Poverty cycle in which poverty begets poverty explains why poverty continues among the same sections of society. Due to low income and lack of resources, the poor go through low health and nutrition, lack of education and lack of skills. This leads to low employment opportunities, which, in turn, continue their low income condition, and low health and nutrition status. The resulting lowered motivational level only makes the situation worse; the cycle starts and continues again.

Q. 10. What are the causes of aggression?

Ans. The following are the causes of aggression:

- i. **Inborn tendency**: Aggression is an inborn tendency which may be meant for selfdefense.
- **ii. Physiological mechanisms:** A general physiological state of arousal or feeling activated might be expressed in the form of aggression.
- **iii. Child-rearing:** Children whose parents use physical punishment may become angry and show resentment and hence more aggressive than children whose parents use other disciplinary techniques.
- **iv. Frustration:** People in frustrated situations show more aggression than those who are not frustrated. In an experiment children are frustrated by preventing them from getting attractive toys that are visible through a screen. These children

are found to be more destructive than those children who are allowed to access the toys.

Q. 11. Explain the situational factors leading to aggression.

[CBSE Delhi 2016; (AI) 2016]

Some of the situational factors causing aggression are

- i. Learning: Individuals exhibit aggression when such behavior is rewarded. For example, hostile aggression allows aggressive person to get what she wants. Also, aggression is learned through reinforcement or by observing others.
- **ii. Observing an aggressive model:** Observing a model especially on television may make a person aggressive.
- **iii.** Anger-provoking action by others: A person who is made to feel angry through insults or threats, physical aggression or dishonesty is likely to show aggression than who is not made to feel angry.
- iv. Availability of weapons: Aggression is more likely if weapons such as stick, pistol or knife are easily available.
- v. **Personality factors:** People with low self-esteem and those who feel insecure are more likely to show aggression.
- vi. Cultural factors: Individuals are more aggressive in cultures where aggressive behaviour is encouraged and praised rather than discouraged or criticised.