

Value Based Questions

Q. 1. Mrs. Anita Pandey observed that her cooking utensils are becoming black in colour and the flame of her gas stove is yellowish in colour. She complains about it in the gas company and got the gas stove repaired.

Answer the following questions based on the above situation:

- (i) What can be the reason for this sooty flame?**
- (ii) How is this problem harmful for our environment?**
- (ii) What steps should be taken to stop this process?**
- (v) What values are promoted by Mrs. Pandey?**

Ans. (i) The inlets for air in stove get blocked which leads to yellow flame.

(ii) This problem is harmful for our environment as incomplete combustion results in the formation of oxides which are major pollutants of our environment.

(iii) For preventing this situation, gas or stove burners should be cleaned time to time.

(iv) Prudency, careful observation, decision making.

Q. 2. Ethanol, commonly called as alcohol is an excellent solvent, is used in medicines and is an important chemical compound involved in synthesis of many chemical compounds.

However, in spite of its benefits to man its impact on social behaviour has always been questioned. Media has often shown abnormal behaviour of people while drunk. It is considered as a curse in the lives of those who are addicted to alcohol. 'Alcoholic, people are not only lowering their metabolism and affecting Central Nervous System, they are also a threat to the lives of others. Anger and rude behaviour are some of its ill effects.

Answer the following questions based on the above information:

- (i) Comment on the statement-'should production of alcohol be banned?' Give three valid reasons to justify.**
- (ii) As a student what initiative would you take in the common concern of Save Life, Do Not Drink'? Give two suggestions.**

Ans. (i) In favour of negative response:

- (a)** It is used as a solvent in the manufacture of varnishes, etc.
- (b)** It is used in so many ways for medicines.
- (c)** It is used as a disinfectant.

In favour of positive response:

- (a)** Cause of death of many people.
- (b)** Many adolescents get affected out of it and become addicts, which affects their physical as well as mental health.

(c) Is being misused even where it is of important use (for example, painting shops, industries)

(ii) Initiatives:

(a) Drive to spread awareness.

(b) Skit/street plays/drama.

(c) Organising exhibitions.

(d) Organising debate.

Q. 3. A chemical bond is an attractive force that holds the atoms together in a molecule or a compound. The element carbon is known to have the unique ability to form bonds with other similar atoms or atoms of other elements. This property of carbon has resulted in its having very large number of compounds. The carbon-carbon bond is also known to be very strong and hence stable.

Answer the following questions based on above information:

(i) Name the chemical bond formed between carbon-carbon atoms. How is this bond formed?

(ii) Which two values are reflected in the nature of carbon resulting in its ability to form maximum number of compounds?

(iii) How can these values be helpful in strengthening relationship in a family, organisation or even people of a nation?

Ans. (i) Covalent bond is formed between carbon-carbon atoms by the sharing of electrons.

(ii) Sharing (ability to share); nature to share and bonding with others.

(iii) Sharing of one's possessions, jobs, resources, moments with others enable an individual, an organisation or even a society to live happily and comfortably.