Plastic Pollution Chemistry Questions with Solutions

Q1. What is the effect of plastic pollution on marine life?
(a) It poisons them
(b) It starves them to death
(c) It makes reproduction complex
(d) All of the above
Answer: (d) Plastic pollution makes reproduction complex, poisons the marine life and starves them to death.

Q2. How much is plastic waste recycled in the United Kingdom?
(a) 46 per cent
(b) 41 per cent
(c) 39 per cent
(d) None of the above
Answer: (a) About 46 per cent of plastic waste is recycled in the United Kingdom.

Q3. Which of the following country is the leading plastic polluter?
(a) United Kingdom
(b) United States of America
(c) China
(d) None of the above
Answer: (c) China is the leading plastic polluter.

Q4. How much time does a plastic bottle take to decompose?
(a) 150 years
(b) 300 years
(c) 450 years
(d) None of the above
Answer: (c) A plastic bottle takes 450 years to decompose.

Q5. Which of the following practice can help in reducing plastic pollution?
(a) Using steel, glass or bamboo straw
(b) Reusing shopping bags
(c) Picking up plastic litter
(d) All of the above
Answer: (d) Using steel, glass or bamboo straw, reusing shopping bags and picking up plastic litter can help in reducing plastic pollution.

Q6. What is plastic pollution?
Answer: Plastic pollution refers to the deposition of plastic entities in the environment that can severely affect human, wildlife and their habitat.

Q7. What is plastic?
Answer: Plastic is a high molecular organic polymer comprised of carbon, hydrogen, oxygen, sulphur, nitrogen and chlorine.

Q8. Why is plastic useful?
Answer: Plastic is a high molecular organic polymer comprised of carbon, hydrogen, oxygen, sulphur, nitrogen and chlorine. Plastic is useful because of the following reasons.
1. It is light in weight.
2. It is easy to process.
3. It is reasonable.
4. It is abundant.
5. It is durable and resistant to corrosion and moisture.
6. It is hygienic and recyclable.
7. It requires less maintenance.

Q9. Where does plastic come from?
Answer: Plastic is a high molecular organic polymer comprised of carbon, hydrogen, oxygen, sulphur, nitrogen and chlorine. It comprises natural materials like coal, salt, cellulose, crude oil and natural gas through a polymerisation or polycondensation method.

Q10. What are the different types of plastics?
Answer: Plastic is a high molecular organic polymer comprised of carbon, hydrogen, oxygen, sulphur, nitrogen and chlorine. There are primarily five types of plastics.
1. Acrylics
2. Polyesters
3. Silicones
4. Polyurethanes
5. Halogenated plastics

Q11. Why is plastic terrible for the environment?
Answer: Plastic is terrible for the environment because of the following reasons.
1. It takes a lot of time to degrade it.
2. Many harmful substances are released into the soil when plastic is buried inside the soil.
3. Many harmful substances are released into the air when plastic is burned.

Q12. What are the harmful effects of plastic pollution?

Answer: Plastic pollution refers to the deposition of plastic entities in the environment that can severely affect human, wildlife and their habitat. Some of the major long-term effects of pollution are mentioned below.
1. It can upset the food chain.
2. It can contribute to groundwater, land, and air pollution.
3. It can suffocate marine animals to death.

Q13. Enlist a few methods by which we can reduce plastic pollution.
Answer: Plastic pollution refers to the deposition of plastic entities in the environment that can severely affect human, wildlife and their habitat. We can reduce plastic pollution by the following ways.
1. Wean yourself off disposable plastics.
2. Recycling everything.
3. Shopping friendly,
4. Avoid bottled water.
5. Bring your garment bag to the shop.
6. Imposing a bag tax or banning plastic bags.
7. Boycotting microbeads
8. By using reusable containers instead of plastic containers.
9. Educating people.

Q14. What kind of environmental hazards are caused by plastic waste?
Answer: Plastic is made up of various chemical elements and is therefore regarded as a highly contagious material that does not degrade quickly in the natural environment after its usage or utility period. Plastic wastes result in the following environmental hazards.
1. Littering of plastic waste in water can block the sewage system, spreading waterborne diseases and increasing the cost of the sewage maintenance system.
2. It can affect soil fertility as plastic waste forms a part of manure that remains in the soil for years without natural degradation.
3. It can cause diseases related to the stomach and intestine.
4. It can suffocate marine animals to death.
3. Littering the landfills and other open spaces with plastic garbage leads to unhygienic and ugly scenes.

Q15. Match the following.

Column A	Column B
Plastic waste	**Eco-friendly material**
Waste separation	**Three R's**
Reduce, reuse, and recycle	**Biodegradable, recyclable and non-recyclable**

Stainless steel	Threat to environment

Answer:

Column A	Column B
Plastic waste	Threat to environment
Waste separation	Biodegradable, recyclable and non-recyclable
Reduce, reuse, and recycle	Three R's
Stainless steel	Eco-friendly material

Practise Questions on Plastic Pollution

Q1. Is plastic biodegradable?
Answer: The biodegradability of plastics depends mainly on the type of plastic and where it ends up. Many plastics do not biodegrade significantly, regardless of environmental conditions, while some do so very slowly if exposed to air, water and light. Both types are best recycled or used for their stored energy.

Q2. How does plastic affect the air?
Answer: Plastic pollution refers to the deposition of plastic entities in the environment that can severely affect human, wildlife and their habitat. The burning of plastics releases toxic gases like dioxins, furans, mercury and polychlorinated biphenyls (PCBs) into the atmosphere and threatens vegetation and human and animal health.

Q3. How does plastic pollute land?
Answer: Plastic pollution refers to the deposition of plastic entities in the environment that can severely affect human, wildlife and their habitat. Plastic waste can affect the land in the following ways.
1. When plastic bags are thrown on land, it makes the soil less fertile.
2. Plastic bags do not dissolve. They break into tiny pieces and remain for up to 1000 years, contaminating soil, waterways and oceans.
3. It also slowly releases toxic chemicals that certain animals use as a resource.

Q4. Where are plastics used the most?
Answer: Plastics are used across almost every sector. It is used in packaging, building and construction, textiles, consumer products, transportation, electrical and electronics and industrial machinery.

Q5. What are PCBs?
Answer: PCBs are highly carcinogenic chemical compounds formerly used in industrial and consumer products.