

Chapter Polymers

Question1 : Two shopkeepers are using LDP (Low Density Polythene) and HDP (High density Polythene) polymers for packing of materials.

- (i) Name the ploythene preferred for packaging.
- (ii) Name the catalyst used in the synthesis of HDP.
- (iii) Mention the values associated with the use of a specific polymer.

Question2 :PHBV (Poly-B-Hydroxybutyrate-Co- -hydroxy valerate) is a biodegradable polymer. It is a copolymer of 3-hydroxy valerate acid and 3-hydroxy pentanoic acid.

- (a) How PHBV has found utility in medicines as Capsule?
- (b) Write the name of polymer used in artificial limb popularly known as Jaipur foot
- (c) Mention the values associated with the use of such polymers.

Question 3 :In a school, lot of emphasis is given to the 3R principle of Reduce, refuse and Recycle. The students observe their teachers following it and they are made to follow it in school. Rita also follows at home and always tries to save paper. She also keeps waste paper and waste items separately so that they be sent for recycling. She does not use plastic bags and takes a jute bag with her while going to the market.

- (i) Mention the values shown by Rita.
- (ii) If the jute bag is made of cellulose polymer, and name the monomer.
- (iii) Name the chemical substance used in cotton, Jute and Rayon fibre.

Question 4 :Recently a blanket ban is imposed on use of any kind of ploythene bags in Delhi. Polythene is supposed to be non-

biodegradable and creates an environmental garbage but some polythene manufacturing units opposed this decision.

(i) Which value is missing in the polythene manufacturing traders?

(ii) Name one important catalyst used in the manufacturing of polythene.

(iii) Write the chemical formula of polythene, polypropylene and PVC.

Question 5 :It is a general belief that we should not come out of the house to see “Solar Eclipse” because it can have evil impact on life but nowadays educated people allow their children to see solar eclipse, treating it as a natural science phenomenon, but children are advised to see them by U.V. protected sun glasses (crooke’s lenses) to avoid harmful impact of UV light on eyes.

(i) Write the name of transition metal oxide used in making U.V protected lens.

(ii) By allowing the children to see solar eclipse using U.V. protected lens which

value the educated people trying to inculcate in the children.

(iii) Which rays are present in the light which can damage the eye while viewing

solar eclipse with naked eye.