Dr. M.K.K. ARYA MODEL SCHOOL, MODEL TOWN, PANIPAT

CLASS VIII (2018-19)

ASSIGNMENT

Synthetic Fibres and Plastics

Q1. What is polymer?

Ans. Many small units are combined to form a large single unit called a polymer.

Q2. What is monomer?

Ans. A polymer is made up of many repeating units called monomer.

Q3. Distinguish between natural and synthetic fibre.

Natural fibre	synthetic fibre
1) They are obtained from natural sources Like plants and animals.	1) They are made from chemical called petrochemicals.
2) These are costly	2) These are cheaper
3) They are heavy in weight	3) They are light in weight

Q4. Why rayon is not completely a synthetic fibre?

Ans. Rayon is not completely synthetic because it is not completely made of synthetic materials. It is obtained by the chemical treatment of wood pulp.

Q5. Is nylon fibre really so strong that we can make nylon parachutes and ropes for rock climbing?

Ans. Yes, nylon fibres are very strong , elastic and light. It is scientifically tested that nylon wire is stronger than steel wire. That is why nylon fibre are used for making parachutes and ropes for rock climbing.

Q6. What is PET?

Ans. PET is very familiar form of polyester. It is used for making bottles, utensils, films, wires and many other useful products.

Q7. Imagine that it is rainy day. what kind of umbrella would you use and why?

Ans. I will use umbrella made up of synthetic clothes because it dries up soon, durable, less expensive, readily available and easy to maintain.

Q7. What is polyester?

Ans. polyester is the word coined by joining ‘poly’ and ‘ester’. This synthetic fibre is made by joining many ester units. Ester is a chemical which causes smell in fruits.

Q8. What makes acrylic more popular than pure wool?

Ans. Acrylic is a synthetic fibre. It resembles wool in looks and qualities. It is cheaper than natural wool and can be dyed in various colours. Thus acrylic has become very popular and gradually taking the place of wool today.

Q9. What are the characteristic properties of synthetic fibre due to which they are used abundantly?

Ans. Synthetic fibre possess the following characteristics;-

1) They dry up soon
2) They are durable.
3) They are less expensive.
4) They are readily available.
5) They are easy to maintain.

Q10. What is Melamine? What are its uses?

Ans. Melamine is a versatile material. It resists fire and can tolerate heat better than other plastics. It is used for making floor tiles, kitchenware and fabrics which resist fire.

Q11. How is cellulose made of?

Ans. Cellulose is made up of a large number of glucose units.

Q12. What is Teflon?

Ans. Teflon is a special plastic on which oil and water donot stick. It is used for non-stick coating on cookwares.

Q13.Disposal of plastic is a major problem. Why?

Ans. This is because plastic cannot be decomposed easily through natural process such as action of bacteria. Thus it causes pollution.

Q14. What is Bakelite? What are its uses?

Ans. Bakelite is a thermosetting plastic. It is a poor conductor of electricity and does not allow current to pass through it. Therefore it is used to make electric plugs and switches. It is resistant to heat so it is used to make handles of utensils.

Q15. Define petrochemicals.

Ans A chemical substance obtained from petroleum or natural gas such as kerosene, gasoline.

Q16. What do you mean by biodegradable and non-biodegradable substances?

Ans Biodegradable Substance-- These are the materials that decompose through natural process such as by the action of bacteria. Example- paper, wood, fruit etc.

Non-Biodegradable Substances-- These are the materials that are not easily decomposed by natural process. For example- plastic bags, metals etc

Q17. What is Terylene?

Ans.Terylene is an artificial fibre made from polyester. It is used to make shirts, bed linen etc.

Q18. Why are synthetic fibres more popular than natural fibres ?

Ans. Synthetic fibres dry up soon , durable, less expensive, readily available and easy to maintain which makes them more popular than natural fibres.

Q19. What is Nylon ? State important properties of nylon.

Ans. Nylon is a synthetic fibre. it is made without using natural material. It is prepared from coal,water and air.

Properties of nylon—

1) Nylon fibres are strong and elastic.
2) Nylon fibres absorb very little water
3) Nylon is wrinkle resistant

Q20. What is the monomer of polymers namely polythene, polyester, cellulose?

- Polythene monomer is ethene
- Polyester monomer is ester
- Cellulose monomer is glucose

Q21. What is polywool?

Ans. Polywool is a mixture of polyester and wool.

Q22. What is polycot?

Ans It is a mixture of polyester and cotton.

Q23. What is acrylic? State important properties of acrylic.

Ans. Acrylic is a synthetic fibre. It is cheaper than natural wool.

Properties of acrylic—

1) It can be dyed very well
2) Acrylic absorbs very little water