### **EXERCISE #1**

#### > VERY SHORT ANSWER TYPE QUESTIONS

- **Q.1** What are natural fibres ?
- Q.2 What are man made fibres ?
- Q.3 Name two natural fibres obtained from plants.
- Q.4 Name two natural fibres obtained from animals.
- Q.5 What is a polymer ?
- Q.6 Name a natural polymer ?
- Q.7 Name a synthetic fibre which resembles silk.
- **Q.8** How is rayon prepared ?
- **Q.9** Name the first fully synthetic fiber.
- Q.10 Name the raw material used in synthesis of nylon.
- Q.11 Name the repeating unit of polyester.
- Q.12 Name two common forms of polyester.
- Q.13 Name the raw materials used for making synthetic fibre.
- Q.14 What are thermoplastics ?
- Q.15 What are thermosetting plastics ?
- Q.16 Give two examples of thermoplastics.

- Q.17 Give two examples of thermosetting plastics.
- Q.18 Why Bakelite is used in making electrical switches ?
- Q.19 Name the chemicals which give fruits like characteristic smell.
- **Q.20** Name the different types of plastics.
- Q.21 Name the man made fiber made of wood pulp.
- Q.22 Name the fabric, which is used to imitate wool.
- **Q.23** Why nylon is used for making carpet, toothbrush bristles and tyre ?
- Q.24 Handles of frying pans are made of plastic. Why ?
- Q.25 Electrical wires have covering of plastic. Why?
- Q.26 How are clothes, fabrics are related to each other ?
- **Q.27 Define** (i) Fabric (ii) Cloth.
- **Q.28** Why scientists tried to discover a fabric like silk ?
- Q.29 Why nylon is used in making clothes ?

Power by: ViSioNet Info Solution Pvt. Ltd				
Website : www.edubull.com	Mob no. : +91-9350679141			

# > SHORT ANSWER TYPE QUESTIONS

- Q.1 Although rayon is obtained from a natural source, wood pulp, yet it is a man-made fibre. Give reasons.
- Q.2 Nylon is used in making many articles. Name four of them.
- **Q.3** Why polyester is suitable for making dress material ?
- Q.4 What is PET ? What is its use ?
- Q.5 What are acrylics ? What are its uses ?
- **Q.6** Why one should never wear polyester clothes while working in the kitchen or laboratory ?
- Q.7 Why synthetic fibers are preferred as clothing material ?
- **Q.8** Why melamine is used for making kitchenware and fabrics which resist fire ?
- Q.9 Why plastic containers are convenient to store different foods ?
- Q.10 Acrylic is considered cheap substitute of wool. Give reasons.
- Q.11 Write the properties and uses of rayon.
- Q.12 Write three characteristic of synthetic fibers.
- Q.13 Write three properties of plastics.
- Q.14 Write three disadvantages of synthetic fibers.

### LONG ANSWER TYPE QUESTIONS

Q.15 What are the advantages of using synthetic fiber ?

- Q.16 State True of False
  - (i) Nylon is a polymer.
  - (ii) All polymers are natural materials.
  - (iii) Polythene is thermosetting plastic.
  - (iv) Starch, cellulose, proteins, silk and rubber are natural polymers.
  - (v) Polyethylene terephthalate (PET) is used in making clothes.
- Q.17 (i) The process of formation of polymers is called .....
  - (ii) Cotton is a natural polymer made of

(iii) Another name of ..... is artificial silk.

- (iv) ..... has feel of wool.
- (v) Bakelite is an examples of .....
- Q.18 Match the column A and B

Column A	Column B
(i) Teflon	(a) Natural polymer
(ii) Terelene	(b) Artificial silk
(iii) Cellulose	(c) Acrylic
(iv) Rayon	(d) Non stick coating
(v) Synthetic fiber	(e) popular polyester

- Q.19 State True or False
  - (i) Plastic is also a polymer like the synthetic fibre.
  - (ii) Synthetic fabrics soak less water (sweat)
  - (iii) Rayon is modified glucose.
  - (iv) Polywood is mixture of polyster and wool.
  - (v) All plastics are biodegradable.
- Q.20 What are the problems related to use of plastics.

Power by: ViSioNet Info Solution Pvt. LtdWebsite : www.edubull.comMob no. : +91-9350679141

### **ANSWER KEY**

### EXERCISE # 1

- **Sol.1** Fibers which are obtained from either plants or animals are called natural fibers.
- **Sol.2** The fibers which are made by human being are called synthetic fibres.
- **Sol.3** Cotton and jute are natural fibers obtained from plants.
- **Sol.4** Wool and silk are natural fibers obtained from animals.
- **Sol.5** Many small units combine to form single large unit called as polymer. They are building blocks of many synthetic fibers.
- Sol.6 Cotton is a natural polymer.
- **Sol.7** Rayon is a synthetic fibre which resembles silk.
- **Sol.8** Rayon is prepared by chemical treatment of wood pulp.
- Sol.9 Nylon is first fully synthetic fiber.
- **Sol.10** Nylon is prepared from coal, water and air.
- Sol.11 The repeating units of polyester are ester.
- Sol.12 Two common forms of polyester are terylene and PET.
- **Sol.13** The raw materials used for making synthetic fibers are of petroleum origin and are called petrochemicals.
- **Sol.14** A plastic which becomes soft on heating and can be repeatedly remolded into desired shape is called thermoplastic.
- **Sol.15** A plastic which once molded cannot be softened and molded into other shape on heating is called thermosetting plastic.
- **Sol.16** PVC(Poly Vinyl Chloride) and Polythene are examples of thermoplastics.
- Sol.17 Bakelite and melamine are examples of thermosetting plastics.

- **Sol.18** Bakelite is used in making electrical switches because it is poor conductor of electricity.
- Sol.19 Esters are the chemicals which give characteristic smell to fruits.
- **Sol.20** Two different types of plastic are-Thermoplastics and Thermosetting plastics.
- Sol.21 Rayon is man made fiber made of wood pulp.
- Sol.22 Acrylic is a fibre used to imitate wools.
- **Sol.23** It is used for making carpet, toothbrush bristles and tyre because it is a strong fiber.
- **Sol.24** Handles of frying pans are made of plastic because plastic is a bad conductor of heat.
- **Sol.25** Electrical wires have covering of plastic because plastic is bad conductor of electricity.
- **Sol.26** The clothes are made of fabrics. Fabrics are made from fibres which are obtained from either natural or artificial sources.
- **Sol.27** (i) Fabric is any material made by weaving, knitting, crocheting, or bonding. It is thermal insulation and prevents excessive heat-loss from the body.

(ii) Cloth is a finished piece of fabric that can be used for various a purposes like wearing over body or covering a surface.

- **Sol.28** The scientists tried to discover a fabric like silk because the fabric obtained from silk fibre was very costly. At the same its beautiful texture fascinated everybody and all wanted to wear it.
- **Sol.29** Nylon fibre was strong, elastic and light. It was lustrous and easy to wash. Therefore, it is used for making clothes.

Power by: ViSioNet Info Solution Pvt. LtdWebsite : www.edubull.comMob no. : +91-9350679141

- **Sol.1** The wood pulp contains cellulose. It is treated with chemicals and transformed in different form. Them rayon fibre is made from it. Therefore, rayon is man-made fiber.
- **Sol.2** Nylon is used in many articles, such as socks, ropes, tents, toothbrushes, car seat belts, sleeping bags, curtains and parachute ropes.
- **Sol.3** The fabric made from this fibre does not get wrinkled easily. It remains crisp and is easy to wash. Therefore, it is quite suitable for making dress material.
- **Sol.4** PET is a familiar form of polyester. It is used for making bottles, utensils, films, wires and many other useful products. PET bottles and PET jars for storing rice, sugar and other eatable things.
- Sol.5 Acrylics are type of synthetic fibre. They resemble wool. They are available in a variety of colours. They are used for making sweaters, shawls and blankets. Many of these are actually not made from natural wool, through they appear to resemble wool. The clothes made from acrylic are relatively cheap.
- **Sol.6** Polyester is synthetic fiber. These fabric melts and sticks to the body of the person wearing it when they catch fire. Therefore, we should, not wear synthetic clothes while working in the kitchen or in a laboratory.
- **Sol.7** Synthetic fibres possess unique characteristics. They dry up quickly, are durable, less expensive, readily available and easy to maintain. So they are preferred as clothing material.
- **Sol.8** Melamine is resists to fire and can tolerate heat better than other plastics. Therefore, it

is used for making kitchenware and fabrics which resist fire.

- **Sol.9** Plastic containers are convenient to store because of their light weight, lower price, good strength and easy handling.
- **Sol.10** Acrylic is warm, soft, lightweight fiber having wool like appearance. It is easy to wash and dries up quickly. It retains the shape. It can be dyed easily to different colours. Therefore, acrylic is considered cheap substitute of wool.
- Sol.11 (i) Rayon is cheaper than silk and can be woven like fibres.
  - (ii) It can be dyed in a wide variety of colours.
  - (iii) Rayon is mixed with cotton to make bed sheets or mixed with wool to make carpets.
- **Sol.12** (i) Synthetic fibers are usually stronger than either natural fiber.
  - (ii) Synthetic fibers are lighter than natural fibers.
  - (iii) Synthetic fibers are cheaper.
- **Sol.13** (i) Plastic is non reactive.
  - (ii) Plastic is light, strong and durable.
  - (iii) Plastics are poor conductors of heat and electricity.
- **Sol.14** (i) Synthetic fibers are non-biodegradable.
  - (ii) Synthetic fibers do not absorb sweat (water). So they are not comfortable to wear on humid day.
  - (iii) The main source of synthetic fibers is petroleum. With increase in use of synthetic fibers this natural resource is depleting quickly.
- Sol.15 (i) Synthetic fibers are cheap and affordable.
  - (ii) Synthetic fibers are wrinkle free. So they do not need ironing. They do not need maintenance like natural fibers.
  - (iii) Synthetic fibers dry quickly.

Power by: ViSioNet Info Solution Pvt. Ltd				
Website : www.edubull.com	Mob no. : +91-9350679141			

- (iv) Synthetic fibers are more elastic as compared to natural fibers.
- (v) Synthetic fibers are more durable as compared to natural fibers.
- (vi) Synthetic fibers do not shrink.

### Sol.16 (i) True

- (ii) Flase
- (iii) False
- (iv) True
- (v) False
- Sol.17 (i) Polymerization
  - (ii) cellulose
  - (iii) rayon
  - (iv) acrylic
  - (v) thermosetting plastic
- **Sol.18** (i) (d)
  - (ii) (e)
  - (iii) (a)
  - (iv) (b)
  - (v) (c)
- Sol.19 (i) True
  - (ii) True
  - (iii) False
  - (iv) True
  - (v) False
- **Sol.20** (i) Most of the plastics are nonbiodegradable as result garbage is increasing at very fast rate and it is threat to environment.
  - (ii) The plastic/polythene bags thrown in garbage are consumed by cows along with the garbage thrown in dumps. The plastic gradually accumulates inside the cow's intestine and blocks them and the cows die.
  - (iii) Plastics are also carcinogenic.
  - (iv) Plastic is made from the conventional source of energy, petroleum, which is fast depleting resource.
  - (v) On burning plastic produces poisonous gases.

Power by: ViSioNet Info Solution Pvt. LtdWebsite : www.edubull.comMob no. : +91-9350679141