

**PSBB LEARNING LEADERSHIP ACADEMY**

**2020-2021**

**CLASSWORK ASSIGNMENT**

**GRADE- VIII      SUBJECT –SCIENCE**

**MAN MADE MATERIALS**

**1. Define the following :-**

- a) Annealing -The process of cooling the finished glass to make it tougher
- b) Polymerisation – The process by which smaller molecules (monomers) link together and form larger molecules (polymers).

**2. Give examples for each of the following:**

Blended fibres: Polycot, terry cot

Polyester fibres which are manufactured from petroleum products: Dacron, Terene

**3. Find the odd one out and give reason for your choice**

Cotton, Jute, polyester, wool, silk

Ans: Polyester. Polyester is a synthetic fibre whereas rests are natural.

**4. Differentiate between thermoplastic and thermosetting plastic**

<u>THERMOPLASTIC</u>	<u>THERMOSETTING PLASTIC</u>
<ul style="list-style-type: none"><li>1. These can be heated and cooled repeatedly.</li><li>2. Can be shaped in a number of ways on heating.</li><li>3. They are flexible and can be bent easily.</li></ul> <p>Eg:- plastic bags, plastic films</p>	<ul style="list-style-type: none"><li>1. These plastics can be heated only once .</li><li>2. Cannot be reshaped once moulded.</li><li>3. They break if they are forced to bend.</li></ul> <p>Eg:- PVC, Teflon</p>

**5. Give scientific reason for the following:**

Plastics are used to make heart valves, prosthetics and other body parts.

Ans: Plastics are used to make heart valves, prosthetics and other body parts as they are highly flexible and do not rot.

**6. Answer the following:**

**a) Write the composition of “glass”.**

Ans: Composition of glass

70% Silica,  $\text{SiO}_2$

15% Soda ash,  $\text{Na}_2\text{CO}_3$

10% lime stone,  $\text{CaCO}_3$

5% Impurities

**b) List any two uses of “optical fibres”.**

Ans: The two uses of optical fibres are:

- In the medical field, they are used in endoscopy to detect any abnormality in the patient's body.
- In the modern communication, optical fibres are used to transmit messages.

**c) “Plastics have properties which make them very useful” comment.**

Ans: The properties of plastics which make them useful are:

- They are light, strong and durable.
- Non-reactive and non-corrosive.
- Can be coloured and moulded to any desired shape.

**d) What problems can be caused by the overuse of plastic? HW**