

SECTION-4

Q2

Ans Properties of Plastic:-

A Mechanical Properties:

- (i) strength:- They have low tensile strength. Their strength in compression is better than in tension. Tensile strength of thermoplasts generally ranges between 15 to 90 MPa.
2. High Temperature Suitability:- They have low melting point therefore are unsuitable for high temperature usage, generally above 100°C .
3. Dimensional stability: It is poor to creep effect at room temperature. At higher temperature, this is poorer due to softening in them.
4. Weather Effect: They are susceptible to weather condition. They suffer from distortions in moist conditions, and are highly affected by chemical ~~env~~ environment.

B. Physical Property:

1. Colour:- Some plastic are completely transparent. Using pigment plastic of any attractive colour can be produced.

2. **Durability** :- Plastic offers great resistance to moisture and chemicals and hence are more durable.
3. **Fire Resistance** :- The phenol-formaldehyde and urea-formaldehyde plastic resist fire to a great extent.
4. **Ductility** :- The plastic are not ductile and hence they fall without giving warning.
5. **Fixing** :- Plastic can be bolted, drilled, glued, clamped or simply push fitted in position.