Polymer

SET Self Evaluation Test -30

1. Nylon-6 is made from **[MP PMT 2002; BHU 2002]**

(a) Butadiene (b) Chloroprene

(c) Adipic acid (d) Caprolactum

2. A polymer containing nitrogen is **[UPSEAT 2004; MP PET 2003]**

(a) Bakelite (b) Dacron

(c) Rubber (d) Nylon-66

3. Cellulose acetate is a **[JIPMER 2002]**

(a) Natural polymer

(b) Semisynthetic polymer

(c) Synthetic polymer

(d) Plasticiser

4. Ethylene-propylene rubber can be

(a) Vulcanized by sulphur

(b) Vulcanized by peroxides

(c) Both (a) and (b)

(d) Non-vulcanizable

5. Buna-S is a polymer of **[CPMT 1987; JIPMER 1999]**

(a) Butadiene and styrene

(b) Butadiene

(c) Styrene

(d) Butadiene and chloroprene

6. Nylon is generic name for all synthetic fibre forming

(a) Polyesters (b) Polymeric amides

(c) Polystyrene (d) Polyethylene

7. Polymerisation in which two or more chemically different monomers take part is called **[MP PMT 1991, 93]**

(a) Addition polymerisation

(b) Copolymerisation

(c) Chain polymerisation

(d) Homopolymerisation

8. Whether small molecules liberate in addition polymerisation

(a) Yes (b) No

(c) Sometimes (d) Only H_2O

9. Orlon has a unit **[AFMC 2004]**

(a) Vinyl cyanide (b) Acrolein

(c) Glycol (d) Isoprene

10. The common acid used in the manufacture of rayon and plastics is **[Kerala (Eng**

(a) Methanoic acid (b) Ethanoic acid

(c) Propanoic acid (d) Butanoic acid

11. Buna-s rubber is which of the following of 1-3-butadiene and styrene

(a) Polymers (b) Copolymer

(c) Addition (d) Condensation polymer

12. Which one of the following polymers will not catch fire **[MP PET 1994]**

(a) $(-CF_2-CF_2-)_n$ (b) $(-CH_2-CH_2-)_n$

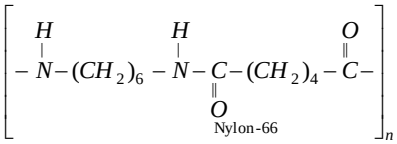
(c) $(-\underset{Cl}{CH}-\underset{Cl}{CH}-)_n$ (d) $(-CH_2-\underset{Cl}{CH}-)_n$

AS Answers and Solutions

(SET -30)

1. (d) Caprolactun is the monomer of nylon –6.

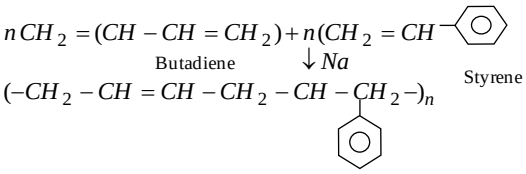
2. (d) Nylon-66- It is a polymer containing alitrogen



Nylon-66

3. (b) Because cellulose is a natural polymer.

4. (b) It is vulcanized by peroxide because it requires the more electronegative element to form cross - link structure.

5. (a) 

Butadiene Styrene

It is also called SBR (styrene butadiene rubber).

6. (b) Nylon is a polyamide fibre representing the polyamide linkage.

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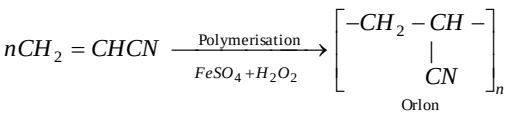
7. (b) *e.g.* Adipic acid + Hexamethyl ene diamine $\rightarrow$

Nylon - 6 6

8. (b) In addition polymerization simple addition of monomer unit takes place without any loss of small molecules.

9. (a) Orlon is prepared by polymerization of vinyl cyanide in presence of ferrous sulphate & hydrogen peroxide



Orlon

10. (b) Ethanoic acid is used in the manufacture of regin and plastics.

11. (b) Buna-*S* is a coplymer of 1, 3- butadiene and styrene.

12. (a) Teflon $(-CF_2 - CF_2-)_n$ is stable upto 598 *K*.