

## DPP

DAILY PRACTICE PROBLEMS

CLASS : XII<sup>th</sup>  
DATE :

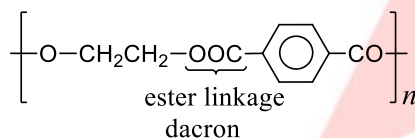
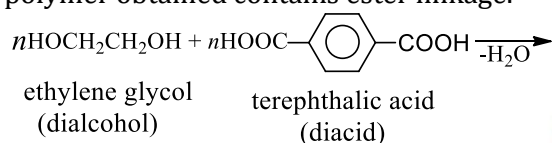
**SOLUTION**

SUBJECT : CHEMISTRY  
DPP NO. : 1

### Topic :-POLYMERS

- 1 (b) Lexan is a polymer of  
2 (b) When a diacid is  
polymer obtained contains ester linkage.

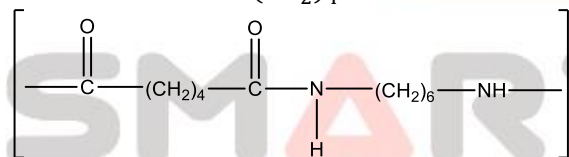
diethyl carbonate and bisphenol-A.  
condensed with dialcohol, the



- 3 (d) Rayon, an artificial silk, contains long fibres of purified cellulose  
4 (d) These are characteristics of thermoplastics.  
5 (a) PCTFE is polymer of chlorotrifluoro ethane.  
6 (d)

Nylon is not homopolymer as it is a copolymer. The monomers of nylon-66 are adipic acid and hexamethylenediamine. Nylon contain

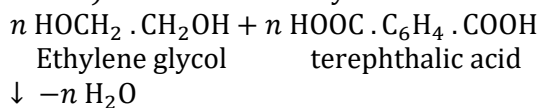
$\text{O}$   
 $\parallel$   
 $-\text{C}-\text{NH}-$  (amide) linkage, hence they are structurally polyamide. Also nylon is condensation polymer as molecule  $n\text{HOOC}-(\text{CH}_2)_4-\text{COOH} + n \cdot \text{H}_2\text{N}-(\text{CH}_2)_6-\text{NH}_2 \xrightarrow{-n\text{H}_2\text{O}}$

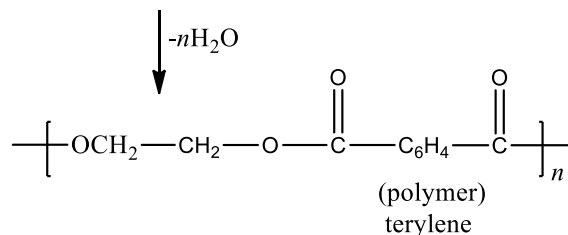
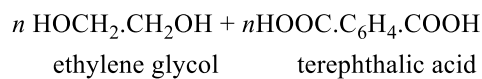


nylon-66

- 7 (c) Thiokol is a synthetic rubber.

8 (c) Ethylene glycol on reaction with terephthalic acid forms the polymer terylene (also known as Dacron or terene) which is used as synthetic fibre.





9 (d)

All are the characteristics and example of terpolymer.

10 (c)

Protein is a natural polymer of amino acids.

11 (b)

It is definition of copolymerisation.

13 (b)

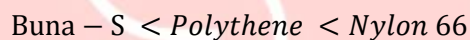
The vulcanisation of rubber makes it elastic and strengthened.

14 (d)

Nylon is a copolymer of hexamethylenediamine and adipic acid.

15 (c)

Buna-S is a elastomer, thus has weakest intermolecular forces. Nylon 66, is a fibre, thus has strong intermolecular forces like H-bonding. Polythene is a thermoplastic polymers, thus the intermolecular force present in polythene are in between elastomer and fibres. Thus, the order of intermolecular force of these polymers is



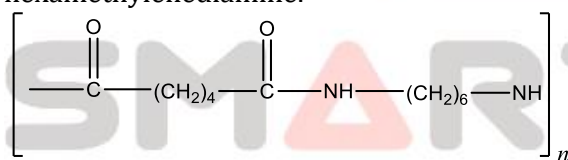
(B)(C)(A)

16 (c)

Rayon is regenerated fibre.

18 (d)

Nylon-66 is polyamide fibre which is manufactured by the condensation polymerization of adipic acid and hexamethylenediamine.



nylon-66

19 (c)

Teflon  $\left[ \text{—CF}_2\text{—CF}_2\text{—} \right]_n$  is fully fluorinated polymer.

### ANSWER-KEY

Q.	1	2	3	4	5	6	7	8	9	10
A.	B	B	D	D	A	D	C	C	D	C
Q.	11	12	13	14	15	16	17	18	19	20
A.	B	D	B	D	C	C	A	D	C	A



SMARTLEARN  
COACHING