Q1 - 24 June - Shift 1

Which of the following is an example of polyester?

(A) Butadiene-styrene copolymer

(B) Melamine polymer

(C) Neoprene

(D) Poly-β-hydroxybutyrate-co-β-hydroxy valerate

Space for your notes:

Q2 - 24 June - Shift 2

Which of the following is **not** an example of a condensation polymer?

(A) Nylon 6,6 (B) Decron

(C) Buna-N (D) Silicone

Space for your notes:

Q3 - 25 June - Shift 2

The Novolac polymer has mass of 963 g. The number of monomer units present in it are

Space for your notes:

Q4 - 26 June - Shift 1

Which of the following sets are **correct** regarding polymer ?

(A) Copolymer : Buna–S

(B) Condensation polymer : Nylon–6,6

(C) Fibre : Nylon–6,6

(D) Thermosetting polymer : Terylene

(E) Homopolymer : Buna–N

Choose the **correct** answer from given options below:

(A) (A), (B) and (C) are correct

(B) (B), (C) and (D) are correct

(C) (A), (C) and (E) are correct

(D) (A), (B) and (D) are correct

Space for your notes:

Q5 - 27 June - Shift 1

Match List-I with List-II

List-I (Polymer)	List-II **(Used in)**
(A) Bakelite	(I) Radio and television Cabinets
(B) Glyptal	(II) Electrical switches
(C) PVC	(III) Paints and Lacquers
(D) Polystyrene	(IV) Water pipes

Choose the correct answer from the options given below:

(A) (A) – (II), (B) – (III), (C) – (IV), (D) – (I)

(B) (A) – (I), (B) – (II), (C) – (III), (D) – (IV)

(C) (A) – (IV), (B) – (III), (C) – (II), (D) – (I)

(D) (A) – (II), (B) – (III), (C) – (I), (D) – (IV)

Space for your notes:

Q6 - 27 June - Shift 2

Which is true about Buna-N?

(A) It is a linear polymer of 1, 3-butadiene.

(B) It is obtained by copolymerization of 1, 3-butadiene and styrene.

(C) It is obtained by copolymerization of 1, 3-butadiene and acrylonitrile.

(D) The suffix N in Buna-N stands for its natural occurrence

Space for your notes:

Q7 - 28 June - Shift 1

Which one of the following is **NOT** a copolymer ?

(A) Buna-S (B) Neoprene

(C) PHBV (D) Butadiene-styrene

Space for your notes:

Q8 - 28 June - Shift 2

Given below are two statements, one is Assertion (A) and other is Reason (R).

Assertion (A) : Natural rubber is a linear polymer of isoprene called cis-polyisoprene with elastic properties.

Reason (R) : The cis-polyisoprene molecules consist of various chains held together by strong polar interactions with coiled structure.

In the light of the above statements, choose the **correct** one from the options given below :

(A) Both (A) and (R) are true and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true but (R) is false.

(D) (A) is false but (R) is true.

Space for your notes:

Q9 - 29 June - Shift 1

The polymer, which can be stretched and retains its original status on releasing the force is

(A) Bakelite (B) Nylon 6,6

(C) Buna-N (D) Terylene

Space for your notes:

Q10 - 29 June - Shift 2

Given below are two statements : one is labelled as **Assertion A** and the other is labelled as **Reason R**.

Assertion A: Dacron is an example of polyester polymer.

Reason R: Dacron is made up of ethylene glycol and terephthalic acid monomers.

In the light of the above statements, choose the ***most appropriate*** answer from the options given below.

(A) Both **A** and **B** are correct and **R** is the correct explanation of **A**.

(B) Both **A** and **B** are correct but **R** is NOT the correct explanation of **A**.

(C) **A** is correct but **R** is not correct.

(D) **A** is not correct but **R** is correct.

Space for your notes:

Answer Key

Q1 (D) **Q2** (C) **Q3** (9) **Q4** (A)

Q5 (A) **Q6** (C) **Q7** (B) **Q8** (C)

Q9 (C) **Q10** (A)

Q1 (D)

Factual

Q2 (C)

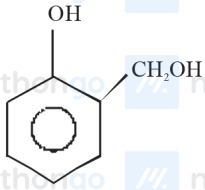
Buna-N is an addition copolymer of 1,3-butadiene and acrylonitrile.

$$CH_2=CH-CH=CH_2 + CH_2=\underset{\underset{CN}{|}}{CH}$$

$$[-CH_2-CH=CH-CH_2-CH_2-\underset{\underset{CN}{|}}{CH}-]_n$$

Buna-N

Q3 (9)

Monomer unit of Novolac is  its molecular mass is 124 amu.

Upon considering molecular weight of polymer as 963 amu (In question its given as 963 gram)

Now if during formation of Novolac, (n–1) unit of water are removed then

$$n \times 124 = 963 + \left[18 \times (n-1)\right]$$

$$n = 9$$

Q4 (A)

Which of the following set are correct regarding polymer.

Bona - 5 is copolymer of butadiene + styrene

Nylon 6.6 is condensation polymer of adipic Acid and hexanediamine.

Nylon 6.6 is fiber

Terylene is fiber not themosetting polymer

Buna-N is copolymer nol Homopolymer

Q5 (A)

Bakelite- It is thermosetting polymer used for making electrical switches.

Glyptal – manufacture of paints and lacquers

PVC – manufacture of water pipes, rain coats, hand bags

Polystyrene – manufacture of radio and television cabinets

Q6 (C)

It is copolymerization of 1, 3-butadiene and acrylonitrile.

Q7 (B)

Buna-S, PHBr and Butadiene-styrene are copolymer. Only neoprene is namopolymer.

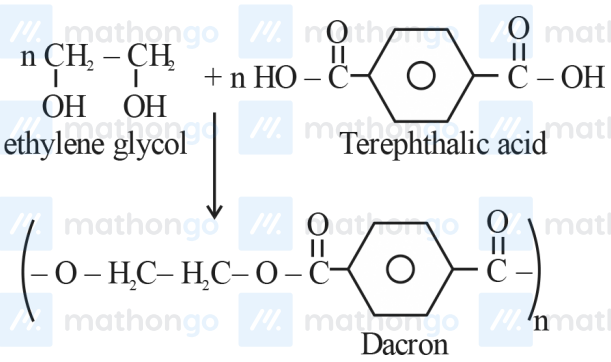
Q8 (C)

Natural rubber is linear polymer of isoprene (2-methyl-1,3-butadiene) and is also called cis-1,4-polyisoprene. The cis-polyisoprene molecules consists of various chains held together by weak Vander Waal's interactions and has a coiled structure

Q9 (C)

Buna – N is synthetic rubber which can be stretched and retains its original status on releasing the force.

Q10 (A)


n CH2 – CH2
OH OH
ethylene glycol
+ n HO – C
O
C – OH
O
Terephthalic acid
– O – H2C– H2C– O – C
O
C –
O
n
Dacron