

NEET POLYMERS — PYQS

Max. Marks: 124

Questions: 31

Section A (MCQ) — 31 questions

Q.1 Which amongst the following molecules on polymerization produces neoprene?

[NEET (UG) 2023]

- (1) $\text{H}_2\text{C}=\overset{\text{Cl}}{\text{C}}-\text{CH}=\text{CH}_2$ (2) $\text{H}_2\text{C}=\text{CH}-\text{C}\equiv\text{CH}$
(3) $\text{H}_2\text{C}=\overset{\text{CH}_3}{\text{C}}-\text{CH}=\text{CH}_2$ (4) $\text{H}_2\text{C}=\text{CH}-\text{CH}=\text{CH}_2$

Scan or tap for the
full solution

Q.2 Which statement regarding polymers is not correct?

[NEET (UG) 2022]

- (1) Elastomers have polymer chains held together by weak intermolecular forces
(2) Fibers possess high tensile strength
(3) Thermoplastic polymers are capable of repeatedly softening and hardening on heating and cooling respectively
(4) Thermosetting polymers are reusable

Scan or tap for the
full solution

Q.3 Which among the following is a thermoplastic polymer?

[NEET (UG) 2022 (Phase 2)]

- (1) Melamine polymer
(2) Bakelite
(3) Polythene
(4) Urea-formaldehyde resin

Scan or tap for the
full solution

Q.4 Which one of the following polymers is prepared by addition polymerisation?

[NEET (UG) 2021]

- (1) Dacron (2) Teflon
(3) Nylon-66 (4) Novolac

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full solution

Q.5 Which of the following is a natural polymer?

[NEET (UG) 2020]

- (1) poly (Butadiene-styrene)
(2) polybutadiene
(3) poly (Butadiene-acrylonitrile)
(4) cis-1,4-polyisoprene

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full solution

Q.6 The biodegradable polymer is : [NEET (UG) 2019]

- (1) nylon-6 (2) Buna-S
(3) nylon-6, 6 (4) nylon-2-nylon 6

Scan or tap for the
full solution

Q.7 Regarding cross-linked or network polymers, which of the following statements is incorrect?

[NEET 2018]

- (1) They contain covalent bonds between various linear polymer chains.
(2) They are formed from bi- and tri-functional monomers.
(3) Examples are bakelite and melamine.
(4) They contain strong covalent bonds in their polymer chains.

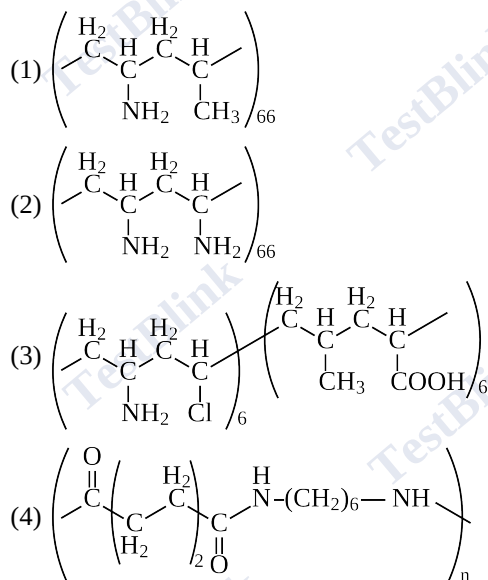
Scan or tap for the
full solution

Q.8 Natural rubber has [NEET 2016 (Phase 1)]

- (1) alternate cis- and trans-configuration
(2) random cis- and trans-configuration
(3) all cis-configuration
(4) all trans-configuration.

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full solution

Q.9 Which one of the following structures represents nylon 6, 6 polymer? [NEET 2016 (Phase 2)]



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Q.10 Caprolactam is used for the manufacture of

[AIPMT 2015]

- (1) teflon (2) terylene
(3) nylon 6, 6 (4) nylon 6

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Q.11 Biodegradable polymer which can be produced from glycine and aminocaproic acid is

[AIPMT 2015 (Cancelled)]

- (1) buna - N (2) nylon 6, 6
(3) nylon 2-nylon 6 (4) PHBV

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Q.12 Which of the following organic compounds polymerizes to form the polyester dacron?

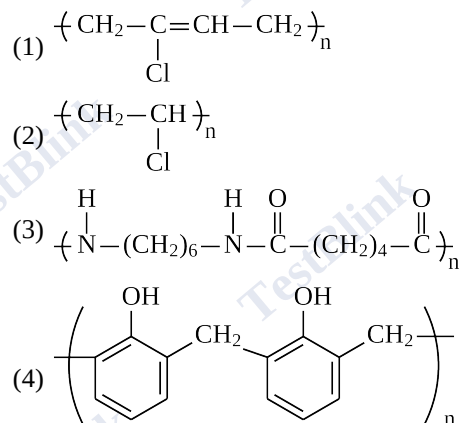
[AIPMT 2014]

- (1) Propylene and para $\text{HO}-(\text{C}_6\text{H}_4)-\text{OH}$
(2) Benzoic acid and ethanol
(3) Terephthalic acid and ethylene glycol
(4) Benzoic acid and para $\text{HO}-(\text{C}_6\text{H}_4)-\text{OH}$

Scan or tap for the full solution 

Q.13 Which one of the following is an example of thermosetting polymer?

[AIPMT 2014]



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Q.14 Nylon is an example of

[NEET 2013]

- (1) polyamide (2) polythene
(3) polyester (4) polysaccharide.

Scan or tap for the full solution 

Q.15 Which is the monomer of neoprene in the following?

[NEET 2013]

- (1) $\text{CH}_2=\underset{\text{Cl}}{\text{C}}-\text{CH}=\text{CH}_2$ (2) $\text{CH}_2=\text{CH}-\text{C}\equiv\text{CH}$
(3) $\text{CH}_2=\text{CH}-\text{CH}=\text{CH}_2$ (4) $\text{CH}_2=\underset{\text{CH}_3}{\text{C}}-\text{CH}=\text{CH}_2$

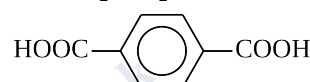
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Q.16 Which one of the following sets forms the biodegradable polymer?

[AIPMT 2012 (Mains)]

- (1) $\text{CH}_2=\text{CH}-\text{CN}$ and $\text{CH}_2=\text{CH}-\text{CH}=\text{CH}_2$
(2) $\text{H}_2\text{N}-\text{CH}_2-\text{COOH}$ and $\text{H}_2\text{N}-(\text{CH}_2)_5-\text{COOH}$

- (3) $\text{HO}-\text{CH}_2-\text{CH}_2-\text{OH}$ and



- (4) $\text{C}_6\text{H}_5-\text{CH}=\text{CH}_2$ and $\text{CH}_2=\text{CH}-\text{CH}=\text{CH}_2$

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Q.17 Which one of the following is not a condensation polymer?

[AIPMT 2012 (Prelims)]

- (1) Melamine (2) Glyptal
(3) Dacron (4) Neoprene

Scan or tap for the full solution 

Q.18 Which of the following statements is false?

[AIPMT 2012 (Prelims)]

- (1) Artificial silk is derived from cellulose.
- (2) Nylon-6, 6 is an example of elastomer.
- (3) The repeat unit in natural rubber is isoprene.
- (4) Both starch and cellulose are polymers of glucose.

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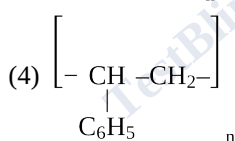
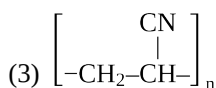
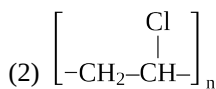
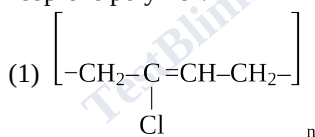
Q.19 Of the following which one is classified as polyester polymer? [AIPMT 2011 (Prelims)]

- (1) Terylene
- (2) Bakelite
- (3) Melamine
- (4) Nylon-6,6

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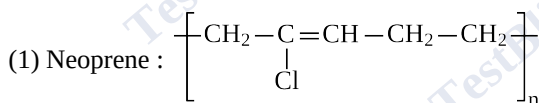
Q.20 Which of the following structures represents neoprene polymer? [AIPMT 2010 (Prelims)]



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Q.21 Structures of some common polymers are given. Which one is not correctly presented? [AIPMT 2009]



(2) Terylene :



(3) Nylon 6,6 :



(4) Teflon : $\left[\text{CF}_2\text{---CF}_2 \right]_n$

Scan or tap for the full solution



Q.22 Which one of the following statements is not true? [AIPMT 2008]

- (1) Buna-S is a copolymer of butadiene and styrene.
- (2) Natural rubber is a 1,4-polymer of isoprene.
- (3) In vulcanization, the formation of sulphur bridges between different chains makes rubber harder and stronger.
- (4) Natural rubber has the trans-configuration at every double bond.

Scan or tap for the full solution



Q.23 Which one of the following polymers is prepared by condensation polymerisation? [AIPMT 2007]

- (1) Teflon
- (2) Natural rubber
- (3) Polystyrene
- (4) Nylon-6,6

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Q.24 $\sim[\text{NH(CH}_2\text{)}_6\text{NHCO(CH}_2\text{)}_4\text{CO}]_n\sim$

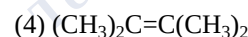
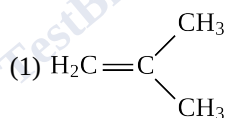
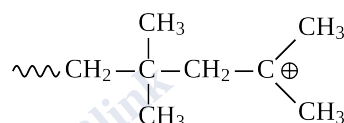
is a

- (1) homopolymer
- (2) copolymer
- (3) addition polymer
- (4) thermosetting polymer.

[AIPMT 2006]

Q.25 The monomer of the polymer

[AIPMT 2005]



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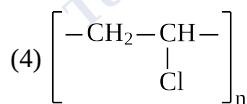
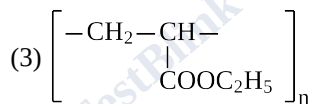
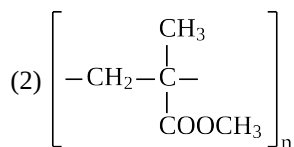
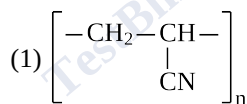
Q.26 Which one of the following is a chain growth polymer? [AIPMT 2004]

- (1) Starch
- (2) Nucleic acid
- (3) Polystyrene
- (4) Protein

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Q.27 Acrilan is a hard, horny and a high melting material. Which one of the following represents its structure? [AIPMT 2003]

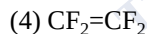
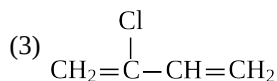
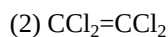
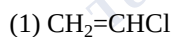


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Q.28 Which one of the following monomers gives the polymer neoprene on polymerization?

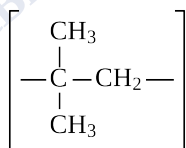
[AIPMT 2003]



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Q.29 Monomer of



is

[AIPMT 2002]

(1) 2-methylpropene

(2) styrene

(3) propylene

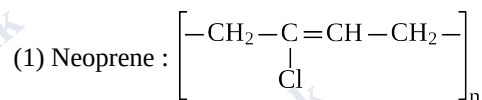
(4) ethene

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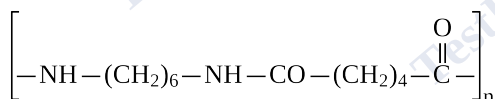


Q.30 Which of the following is not correctly matched?

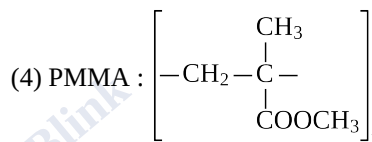
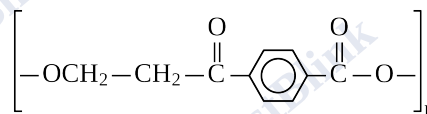
[AIPMT 2001]



(2) Nylon-6,6 :



(3) Terylene :



Scan or tap for the full solution



Q.31 $\text{CF}_2=\text{CF}_2$ is the monomer of [AIPMT 2000]

(1) teflon

(2) orlon

(3) polythene

(4) nylon-6

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11
Ans.	1	4	3	2	4	4	4	3	4	4	3
Ques.	12	13	14	15	16	17	18	19	20	21	22
Ans.	3	4	1	1	2	4	2	1	1	1	4
Ques.	23	24	25	26	27	28	29	30	31		
Ans.	4	2	1	3	1	3	1	3	1		