

# **CHEMISTRY**

# BOOKS - NEET PREVIOUS YEAR (YEARWISE + CHAPTERWISE)

# **POLYMERS**

Exercise

- 1. Natural rubber has:
  - A. All trans-configuration
  - B. Alternate cis-and trans-configuration
  - C. Rendom cis-and trans-configuration

D. All cis-configuration

#### **Answer: D**



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# 2. Which one of the following represent nylon 6,6 polymer?

(b) 
$$\begin{pmatrix} H_2 & H & H_2 & H \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & &$$

$$D. \stackrel{(d)}{\overset{()}}{\overset{()}{\overset{()}{\overset{()}}$$

**Answer: D** 

**3.** Biodegradable polymer which can be produced from glycine and aminocaproic acid.

A. nylon 2-nylon 6

B. PHBV

C. buna-N

D. nylon-6,6

**Answer: A** 



<b>4.</b> Caprolactam is used for the manufacture of :
A. nylon-6
B. teflon
C. terylene
D. nylon-6-
A
Answer: A
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- B. Benzoic acid and ethanol
- C. Terephthalic acid and ethylene glycol
- D. Brnzoic acid and para $-\mathit{OH}(C_6H_4)-\mathit{OH}$

#### **Answer: C**



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6. Which one of the following is an example of a thermosetting polymer?

A. 
$$-(C_2H-C=CH-CH_2)_n$$

$$\mathsf{B.-}(C_2H-C)_n$$

$$\mathsf{B.}-(C_2H-C)_n$$
  $\stackrel{H}{\underset{Cl}{\cup}}$   $\stackrel{H}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$   $\stackrel{O}{\underset{Cl}{\cup}}$ 

#### **Answer: D**



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7. Which is the monomer of neoprene in the following?

A. 
$$CH_2 = CH - C = CH$$

B. 
$$CH_2= {\scriptsize C\atop CH_3}-CH=CH_2$$

C. 
$$CH_2 = C - CH = CH_2$$

$$\operatorname{D.} CH_2 = CH - CH = CH_2$$

#### **Answer: C**





8. Nylone is an example of

A. polyester

B. polysaccharide

C. polymide

D. polytene

#### **Answer: C**



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**9.** Which one of the following is not a condensation polymer?

A. Melamine B. Glyptal C. Dacron D. Neoprene **Answer: D Watch Video Solution** 10. Which of the following statements is flase A. Artificial skill is derived from cellulose

B. nylon-66 is an example of elestomer

C. The repeat unit in natural rubber is isoprene

D. Both starch and cellulose are polymers of glucose

#### **Answer: B**



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**11.** Of the following which one is classified as polyester polymer?

A. Bakelite

B. Melamine

C. Nylon-66

D. Terylene

**Answer: D** 

**12.** Which of the following structures represents neoprene polymers?

A. 
$$-(CH_2-C=CH-CH_2-)_n$$
  $Cl \ CN$ 

$${\sf B.-}(CH_2-\stackrel{|}{C}H-)_n$$

C. 
$$-\left(CH_2-\stackrel{|}{C}H-\right)_n$$

D. 
$$-(CH-CH_2-)_n$$

#### Answer: A



**13.** Struchures of some common polymers are given. Which one is not correctly represented?

A. Teflon 
$$-(CH_2-CH_2-)_n$$

B. Neoprene 
$$\left( -CH_2 - C = CH - CH_2 - CH_2 
ight)_n$$

C. Terylene +OC -COOCH<sub>2</sub>-CH<sub>2</sub>-O-)<sub>n</sub>

D. Nylone 66

$$-\left(NH(CH_2)_6NHCO(CH_2)_4-CO-\right]_n$$

#### **Answer: B**



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**14.** Which one of the following statements is not ture?

- A. In vulcanisation, different chains make rubber harder and stronger
- B. Natural rubber has the trans-configuration at every double bond
- C. Buna-S is a copolymer of butadiene and siyrene
- D. Natural rubber is a 1,4-polymer of isoprene

#### **Answer: B**



- **15.** ~  $\left[NH(CH_2)NHCO(CH_2)_4CO\right]$  ~ is a
  - A. copolymer

- B. addition polymer
- C. therom-setting polymer
- D. homopolymer

#### **Answer: A**



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**16.** The monomer of the polymer

$$CH_3$$
 $CH_2$ 
 $CH_2$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

(a) 
$$H_2C = C < CH_3$$
 $CH_3$ 

B. 
$$(CH_3)_2C = C(CH_3)_2$$

$$C. CH_3CH = CH. CH_3$$

$$\operatorname{D.} CH_3CH=CH_2$$

#### **Answer: A**



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17. Which one of the following is a chain growth polymer?

- A. Starch
- B. Nucleic acid
- C. Polystyrene
- D. Protein

#### **Answer: C**



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**18.** Which one of the following monomers gives the polymer neoprene on polymerization?

A. 
$$CH_2=\overset{C\iota}{C}CH=CH_2$$

$$\operatorname{B.}CF_2=CF_2$$

$$\mathsf{C}.\,CH_2=ChCl$$

D. 
$$CCl_2 = CCl_2$$

#### **Answer: A**



19. Acrilan is a hard, horny and a high melting matrial.

Which of the following represent its structure?

A. 
$$\left(CH_2-CH- \atop COOC_2H_5
ight)_n$$
B.  $\left(CH_2-CH- \atop Cl \right)_n$ 
C.  $\left(CH_2-CH- \atop CN \right)_n$ 
D.  $\left(CH_2-CH- \atop CN \right)_n$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 
 $CH_3$ 

#### **Answer: C**



## **20.** Callulose is polymer of

- A. glucose
- B. fructose
- C. ribose
- D. sucrose

#### **Answer: A**



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A. 2-methylpropene

- B. styrene
- C. propylene
- D. ethene

#### **Answer: A**



- 22. Which one of the following is not conrrectly matched?
  - A. Neoprene  $\left| CH_2 C = CH CH_2 
    ight|_{Cl}$ 
    - B. Nylon-66

$$-\left[NH-\left(CH_{2}
ight)_{6}-NH-CO(CH_{2})_{4}-Co-O-
ight]_{n}$$

(c) Terylene
$$\begin{bmatrix}
O & CH, & CH, & CH_1, & CH_2, & CH_3\\
COOCH_3
\end{bmatrix}_{n}$$
(d) PMMA
$$\begin{bmatrix}
CH_2 & C & COOCH_3\\
COOCH_3
\end{bmatrix}_{n}$$

C. Terylene

#### **Answer: C**



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# **23.** $CH_2=CH_2$ is a monomer of

- A. buna-S
- B. teflon
- C. glyptal
- D. nylon-6

### Answer: B



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# 24. Natural rubber is a polymer of

A. butadiene

B. ethyne

C. styrene

D. isoprene

#### **Answer: D**



**25.** Terylene is a condensation polymer of ethylene glycol and

- A. benzico acid
- B. phthalic acid
- C. salicylic acid
- D. terephthalic acid

#### **Answer: D**



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**26.** Which one of the following is used to make ' non — stick ' cookware ?

- A. PVC
- B. Polystyrene
- C. Polethylene terephthalate
- D. Polytetrafluoro ethylene

#### **Answer: D**



- 27. Nylon 6,6 is a polyamide obainted by the reaction of
  - A.  $COOH(CH_2)COOH + H_2NC_6H_4NH_2 (p)$
  - B.  $COOH(CH_2)_4COOH + NH_2(CH_2)_6NH_2$
  - $\mathsf{C.}\ COOH(CH_2)_6COOH + NH_2(CH_2)_4NH_2$

D. 
$$COOHC_6H_4COOH-(p)+NH_2(CH_2)_6NH_2$$

**Answer: B** 



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28. In elastomer, intermolecular forces are

A. strong

B. weak

C. nil

D. None of the above

**Answer: B** 



# 29. Bakelite is prepared by the reaction between

- A. urea and formaldehyde
- B. ethylene glycol
- C. phenol and formaldehyde
- D. tetramethylene glycol

#### **Answer: C**

