



CHEMISTRY

BOOKS - U-LIKE CHEMISTRY (HINGLISH)

POLYMERS

Ncert Intext Exercises

1. What are polymers ?



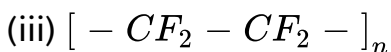
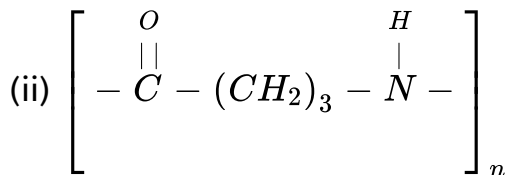
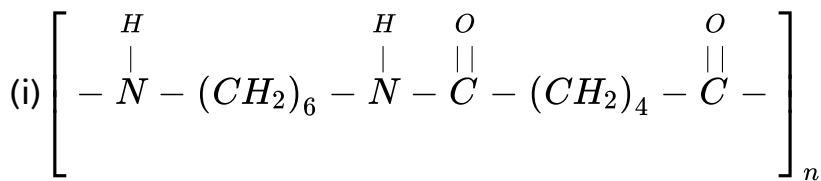
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2. How are polymers classified on the basis of structure ?



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3. Write the names of monomers of the following polymers :



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4. Classify the following as addition and condensation polymers :

Terylene, Bakelite, Polyvinyl chloride, Polythene



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5. Explain the difference between Buna-N and Buna-S.



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6. Arrange the following polymers in increasing order of their intermolecular forces:

(i) Nylon 6, 6, Buna-s, Polythene.

(ii) Nylon 6, Neoprene, Polyvinyl chloride.



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Ncert Textbook Exercises

1. Explain the terms polymer and monomer.



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2. What are natural and synthetic polymers ? Give two examples of each type.

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3. Distinguish between the terms homopolymer and copolymer and give an example of each.

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4. How do you explain the functionality of a monomer ?

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5. Define the term polymerisation.

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6. Is $(NH - CH - CO)_n$ a homopolymer or a copolymer ?

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7. In which classes, the polymers are classified on the basis of molecular forces ?

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8. How can you differentiate between addition and condensation polymerisation ?

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9. Explain the term copolymerisation and give two examples.



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10. Write the free radical mechanism for the polymerisation of ethene.



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11. Define thermoplastics and thermosetting polymers with two examples of each.



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12. Write the monomers used for getting the following polymers:

(i) Polyvinyl chloride (ii) Teflon

(iii) Bakelite



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13. Write the name and structure of one of the common initiators used in free radical addition polymerisation.



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14. How does the presence of double bonds in rubber molecules influence their structure and reactivity ?



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15. Discuss the main purpose of vulcanisation of rubber.



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16. What are the monomeric repeating units of Nylon 6 and Nylon 6, 6 ?



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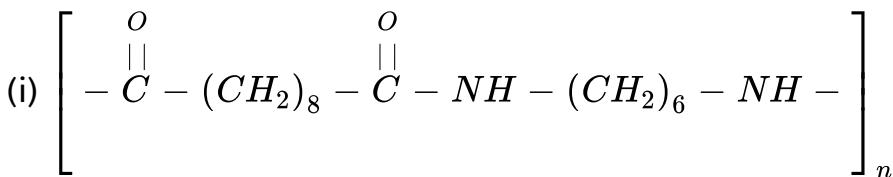
17. Write the names and structures of the monomers of the following polymers:

(i) Buna-S (ii) Buna-N (iii) Dacron (iv) Neoprene.



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18. Identify the monomer in the following polymeric structures :



(ii) 



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19. How is dacron obtained from ethylene glycol and terephthalic acid ?



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20. What is a biodegradable polymer ? Give an example of a biodegradable aliphatic polyester.



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Case Based Source Based Integrated Questions

1. Read the given passage and answer questions number 1 to 5 that follow :

Do you think that daily life would have been easier and colourful without the discovery and varied applications of polymers? The use of polymers in the manufacture of plastic buckets, cups and saucers, children's toys, packaging bags, synthetic clothing materials, automobile tyres, gears and seals, electrical insulating materials and machine parts has completely revolutionised the daily life as well as the industrial scenario. Indeed, the polymers are the backbone of four major industries viz., plastics, elastomers, fibres and paints and varnishes. The word 'polymer' is coined from two Greek words: poly means many and mer means unit or part. The term polymer is defined as very large molecules having high molecular mass ($10^5 - 10^6$). These are also referred to as macromolecules, which are formed by joining of repeating structural units on a large scale. The repeating structural units

are derived from some simple and reactive molecules known as monomers and are linked to each other by covalent bonds. The process of formation of polymers from respective monomers is called polymerisation.

Name the industries that are dependent on polymers.



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2. Read the given passage and answer questions number 1 to 5 that follow :

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What is the range of molecular mass of polymers ?



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3. Read the given passage and answer questions number 1 to 5 that follow :

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called polymerisation.

How are the polymers formed ?



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Name four articles of daily use that are obtained from polymers.



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5. Read the given passage and answer questions number 1 to 5 that follow :

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Name another term that is used for polymers.



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6. Read the given passage and answer questions number 1 to 5 that follow :

A variety of alkenes or dienes and their derivatives are polymerised in the presence of a free radical generating initiator (catalyst) like benzoyl peroxide, acetyl peroxide, tert-butyl peroxide, etc. For example, the polymerisation of ethene to polythene consists of heating or exposing to light a mixture of ethene with a small amount of benzoyl peroxide initiator. The process starts with the addition of phenyl free radical formed by the peroxide to the ethene double bond thus generating a new and larger free radical. This step is called chain initiating step. As this radical reacts with another molecule of ethene, another bigger sized radical is formed. The repetition of this sequence with new and bigger radicals carries the reaction forward and the step is termed as chain propagating step. Ultimately, at some stage the product radical thus formed reacts with another

radical to form the polymerised product. This step is called the chain terminating step.

List the different steps involved in polymerisation reaction.



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7. Read the given passage and answer questions number 1 to 5 that follow :

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Name different initiators that can be used to perform polymerisation.



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Show the formation of a free radical from benzoyl peroxide.



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9. Read the given passage and answer questions number 1 to 5 that follow :

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radical to form the polymerised product. This step is called the chain terminating step.

How does the free radical combine with the monomer? Show the reaction with ethene as monomer and benzoyl peroxide as the initiator.



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10. Read the given passage and answer questions number 1 to 5 that follow :

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How does the chain terminate to form the polymerised product?



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11. Read the given passage and answer questions number 1 to 5 that follow Rubber is a natural polymer and possesses elastic properties. It is also termed as elastomeric polymer. In elastomeric polymers, the polymer chains are held together by

the weak intermolecular forces. These weak binding forces permit the polymer to be stretched. A few 'crosslinks' are introduced in between the chains, which help the polymer to retract to its original position after the force is released. Rubber has a variety of uses. It is manufactured from rubber latex which is a colloidal dispersion of rubber in water. This latex is obtained from the rubber tree which is found in India, Sri Lanka, Indonesia, Malaysia and South America. Natural rubber may be considered as a linear polymer of isoprene (2-methyl-1,3-butadiene) and is also called as cis-1,4-polyisoprene. The cis-polyisoprene molecule consists of various chains held together by weak van der Waals interactions and has a coiled structure. Thus, it can be stretched like a spring and exhibits elastic properties. Natural rubber becomes soft at high temperature ($> 335\text{ K}$) and brittle at low temperatures ($< 283\text{ K}$) and shows high water absorption capacity. It is soluble in non-polar solvents and is non-resistant to attack by oxidising agents. To improve upon these physical

properties, a process of vulcanisation is carried out.

What is latex ?



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12. Read the given passage and answer questions number 1 to 5 that follow Rubber is a natural polymer and possesses elastic properties. It is also termed as elastomeric polymer. In elastomeric polymers, the polymer chains are held together by the weak intermolecular forces. These weak binding forces permit the polymer to be stretched. A few 'crosslinks' are introduced in between the chains, which help the polymer to retract to its original position after the force is released. Rubber has a variety of uses. It is manufactured from rubber latex which is a colloidal dispersion of rubber in water. This latex is obtained from the rubber tree which is found in India, Srilanka, Indonesia, Malaysia and South America, Natural rubber may be considered

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Name the countries producing rubber tree.



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What is the chemical formula of natural rubber?



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What is the cause of elasticity of natural rubber?



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15. Read the given passage and answer questions number 1 to 5 that follow Rubber is a natural polymer and possesses elastic

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Give some properties of natural rubber.



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Multiple Choice Questions

1. Monomers used in making polymer are

- A. Melamine + Phenol
- B. Melamine + Formaldehyde
- C. Melamine + Ethyl alcohol
- D. Melamine + Acetaldehyde

Answer: B



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2. Polymerisation of tetrafluoroethene gives

A. Neoprene

B. Buna-S

C. Buna-N

D. Teflon

Answer: D



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3. Caprolactum on heating with water gives

- A. nylon
- B. nylon 6,6
- C. terylene
- D. neoprene

Answer: A



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4. Dacron fibre is used

- A. in blending with cotton fibres.
- B. in blending with wool fibres.
- C. as glass reinforcing material.
- D. all the above

Answer: D



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5. Which of the following are biodegradable polymers ?

A. PHBV

B. Nylon 2

C. Nylon 6

D. All of the above

Answer: D



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6. The monomer used in preparing nylon 6 is

A. butadiene + styrene

B. isoprene

C. caprolactum

D. chloroprene

Answer: C



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7. The polymers obtained from the monomers phenol and formaldehyde are

A. polythene

B. novolac

C. bakelite

D. polystyrene

Answer: A::B::C::D



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8. High density polythene is prepared

- A. using Ziegler-Natta Catalyst
- B. persulphate catalyst.
- C. peroxide catalyst.
- D. at 350-570 K and 1000 to 2000 atmosphere.

Answer: A



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9. Properties associated with teflon are

- A. It is chemically merit.
- B. It is used in making oil seeds.
- C. It is used for non-stick surface coated utensils
- D. All the above.

Answer: D

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10. The monomer used in the preparation of neoprene is

- A. isoprene
- B. styrene
- C. chloroprene
- D. tetrafluroethene

Answer: C



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11. The commercial name of polyacrylonitrile is

A. Dacron

B. Orlon (acrilan)

C. PVC

D. Bakelite

Answer: B



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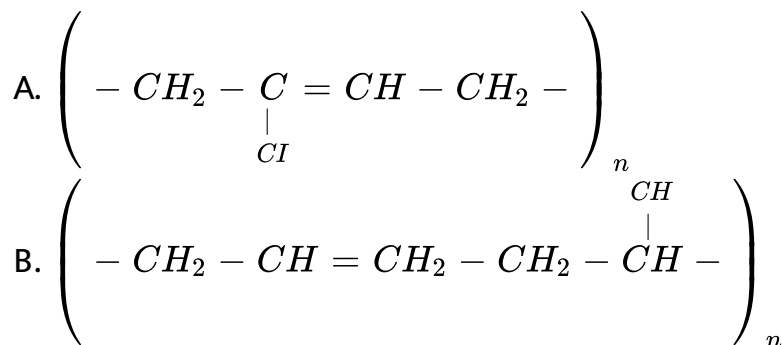
12. Monomers of bakelite are

- A. phenol and formaldehyde.
- B. phenol and acetaldehyde.
- C. quinol and formaldehyde.
- D. None of the above.

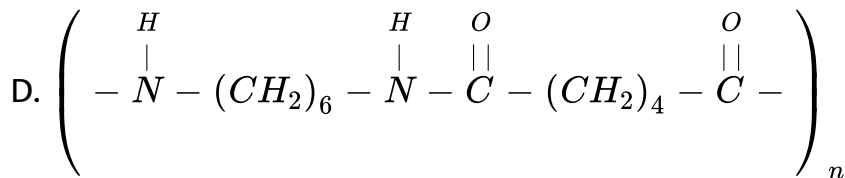
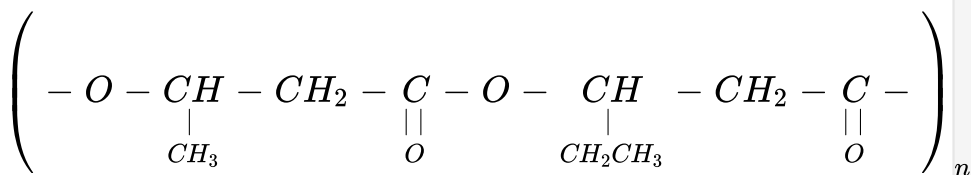
Answer: A

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13. Which of the following polymer is biodegradable ?



C.



Answer: C



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

A. Melamine

B. Glyptal

C. Dacron

D. Neoprene

Answer: D



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15. Which of the following polymers of glucose is stored by animals ?

A. Cellulose

B. Amylose

C. Amylopectin

D. Glycogen

Answer: D



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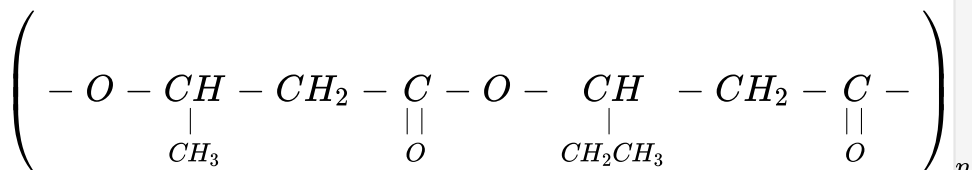
16. In which of the following polymers ethylene glycol is one of the monomer units?

A. 

B. $(-CH_2 - CH_2 -)_n$

C. 

D.



Answer: A



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17. Which of the following is not a semisynthetic polymer ?

- A. cis-polyisoprene
- B. Cellulose nitrate
- C. Cellulose acetate
- D. Vulcanised rubber

Answer: A



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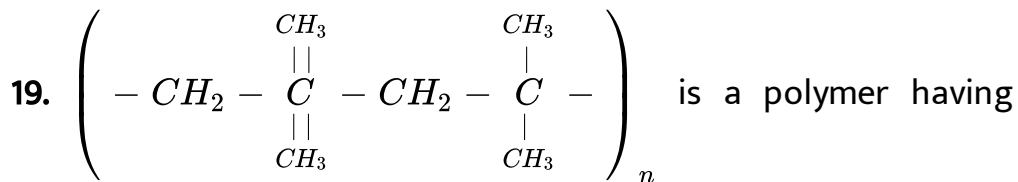
18. Which of the following are addition polymers ?

- A. Nylon
- B. Melamine formaldehyde resin
- C. Orlon
- D. Polystyrene

Answer: A::C::D



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monomer units

A. 

B. 

C. 

D. 

Answer: A



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20. Which of the following polymers are condensation polymers ?

A. Bakelite

B. Teflon

C. Butyl rubber

D. Melamine formaldehyde resin

Answer: A::D



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Assertion Reason Questions

1. Assertion (A): The process of formation of polymers from respective monomers is called polymerisation.

Reason (R) : Polymers have large molecular masses in the range of $10^3 - 10^7 u$.

- A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion (A)
- B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)
- C. Assertion (A) is correct, but Reason (R) is incorrect statement.
- D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: B



2. Assertion (A): Polymers like Buna-S, Buna-N and Neoprene are elastomeric polymers.

Reason (R) In polymers like Buna-S and Buna-N, the polymer chains are held together by weakest intermolecular forces which allow the polymer to be stretched.

A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion

(A)

B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the

Assertion (A)

C. Assertion (A) is correct, but Reason (R) is incorrect statement.

D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: A



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3. Assertion (A): Polyamides and polyesters are used as fibres.

Reason (R) : Bakelite and urea-formaldehyde are thermoplastic polymers.

A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion

(A)

B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)

C. Assertion (A) is correct, but Reason (R) is incorrect statement.

D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: C



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4. Assertion (A): Ziegler-Natta catalyst is used for the manufacture of low density polythene.

Reason (R) : Teflon is used in making non-stick utensils.

- A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion (A)
- B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)
- C. Assertion (A) is correct, but Reason (R) is incorrect statement.
- D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: D



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5. Assertion (A): Nylon 6 is used for the manufacture of tyre, cords, fabrics and ropes.

? Reason (R) : Polyesters are made by the condensation of glycerol and terephthalic acid.

A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion (A)

B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)

C. Assertion (A) is correct, but Reason (R) is incorrect statement.

D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: C

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6. Assertion (A): Copolymers have properties quite different from homopolymers.

Reason (R) : Rubber is a natural polymer and possesses elastic properties.

A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion (A)

- B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)
- C. Assertion (A) is correct, but Reason (R) is incorrect statement.
- D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: B



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7. Assertion (A): Latex is a colloidal solution of rubber in water.

Reason (R) : Natural rubber may be considered as a linear polymer of isoprene.

- A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion (A)
- B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)
- C. Assertion (A) is correct, but Reason (R) is incorrect statement.
- D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: B



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8. Assertion (A): Melamine and acetaldehyde are the monomers for the preparation of melamine polymers.

Reason (R) Butadiene-styrene copolymer is quite tough and is a good substitute for natural rubber.

A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion

(A)

B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)

C. Assertion (A) is correct, but Reason (R) is incorrect statement.

D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: D



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9. Assertion (A): The molecular mass of polymers can be determined by chemical and physical methods.

Reason (R) PHBV does not undergo bacterial degradation in the environment.

A. Both Assertion (A) and Reason (R) are correct statements,

and Reason (R) is the correct explanation of the Assertion

(A)

B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)

C. Assertion (A) is correct, but Reason (R) is incorrect statement.

D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: C



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10. Assertion (A): Condensation polymerisation progresses step by step and is also called step growth polymerisation.

Reason (R) : Polypropene is used in the manufacture of ropes, toys, pipes and fibres.

- A. Both Assertion (A) and Reason (R) are correct statements, and Reason (R) is the correct explanation of the Assertion (A)
- B. Both Assertion (A) and Reason (R) are correct statements, but Reason (R) is not the correct explanation of the Assertion (A)
- C. Assertion (A) is correct, but Reason (R) is incorrect statement.
- D. Assertion (A) is incorrect, but Reason (R) is correct statement.

Answer: B



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Fill In The Blanks

1. Cellulose acetate and cellulose nitrate are examples of _____ polymers.



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2. The solid waste of polymers causes acute _____ problems and remain ungraded for quite a long time.



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3. Nylon 6, 6 is an example of _____ polymer.



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4. The repeating structural units of a polymer molecule are called_____.



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5. Natural rubber is manufactured from_____ which is a colloidal dispersion of rubber in water.



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6. The monomers used in the preparation of nylon 6, 6 are_____ and_____.



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7. The polymers obtained by the addition polymerisation of two different monomers are termed as _____.



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8. Polythene is prepared by the polymerisation of ethane at 350-570 K at high pressure in the presence of traces of _____.



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9. In elastomeric polymers, the polymer chains are held together by the _____ intermolecular forces.



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1. Is $\left(-CH_2 - \underset{\substack{| \\ Cl}}{CH} - \right)_n$ a homopolymer or a copolymer?

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2. Define the term, 'homopolymerisation' giving an example.

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3. What are biodegradable polymers?

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4. What does the designation '6, 6' mean in the name nylon 6, 6?

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5. Give an example of elastomers.



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6. What is the repeating structural unit in polythene polymer ?



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7. Name the monomers of nylon 2 or nylon 6 polymer.



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8. What is the range of molecular mass of polymers ?

— A — A — A — A — A — A —



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 [View Text Solution](#)

9. What is the range of molecular mass of polymers ?

 [View Text Solution](#)

10. Identify the type of polymer

- A - B - B - A - A - A - B - A

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11. Identify the type of polymer given in the following figure :



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12. Out of chain growth polymerisation and step growth polymerisation, in which type will you place the following:



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13. Identify the polymer given below :



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14. Can enzyme be called a polymer ?

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15. Give two examples each of thermoplastic and thermosetting plastics.



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16. To have practical applications, why are cross-links required in rubber?



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17. Name the polymers used in laminated sheets and give the name of monomeric units involved in its formation.



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18. Which type of biomolecules have some structural similarity with synthetic polyamides? What is this similarity?

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19. Define the term polymerisation.

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20. Give the other name for polymers.

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21. Name the polymer obtained from the combination of monomers hexamethylene diamine and adipic acid.



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22. What type of polymer is high density polythene ?



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23. Give an example of network polymer.



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24. Name a polymer which is capable of repeatedly softening on heating and hardening on cooling .



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25. Name a free radical generating initiator.



[View Text Solution](#)

26. Name the catalyst used in the manufacture of high density polythene.



[View Text Solution](#)

27. Name the monomer used in the preparation of Teflon.



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28. Which polymer is obtained by the condensation reaction between ethylene glycol and terephthalic acid ?

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29. Name the substance which on heating with water at 533-543 K gives nylon 6.

 [View Text Solution](#)

30. Name the product obtained initially when phenol and formaldehyde are condensed.

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31. Which polymer is used in the manufacture of unbreakable crockery?

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32. Name the process which is used to improve upon the physical properties of rubber.



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33. Name the polymer that is used to manufacture conveyor belts, gaskets and hoses.



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34. Which polymer is used for making paints and lacquers ?



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Short Answer Questions

1. Define thermoplastic and thermosetting polymers. Give one example of each.



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2. What is a biodegradable polymer? Give an example of a biodegradable aliphatic polymer.



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3. Draw the structure of the monomer for each of the following polymers:

(i) Nylon 6

(ii) Polypropene



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4. Mention two important uses of each of the following:

(i) Bakelite (ii) Nylon 6



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5. Draw the molecular structures of the monomers of.

(i) PVC (ii) Teflon .



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6. Draw the structures of the monomers for the following polymers

:

(i) Teflon (ii) Polythene .



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7. What is the repeating unit in the condensation polymer obtained by combining $HO_2CCH_2CH_2CO_2H$ (Succinic acid) and $H_2NCH_2CH_2NH_2$ (ethylene diamine) ?

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8. Differentiate between molecular structures and behaviours of thermoplastic and thermosetting polymers. Give one example of each type.

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9. Differentiate the following pairs of polymers based on the property mentioned against each :

(i) Novolac and Bakelite (structure).

(ii) Buna - S Terylene (intermolecular forces of attraction).

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10. A natural linear polymer of 2-methyl-1,3-butadiene becomes hard on treatment with sulphur between 373 to 415K and -S-S- bonds are formed between chains. Write the structure of the product of this treatment?

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11. Write one difference between chain growth and step growth polymerisation. Give one example of each.

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12. Why are rubbers called elastomers ?

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13. Can nucleic acids, proteins and starch be considered as step growth polymers ?

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14. How is the following resin intermediate prepared and which polymer is formed by this monomer unit?



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15. Which factor imparts crystalline nature to a particle like nylon ?

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16. Why should the monomers used in addition polymerisation through free radical pathway be very pure ?

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17. What are thermoplastic and thermosetting polymers ? Give one example of each.

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18. Distinguish between the term homopolymer and copolymer and give one example of each type.

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19. Draw the structure of the monomer of each of the following polymers :

(i) Poly vinyl chloride (PVC) (ii) Nylon 6.



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20. Distinguish between addition polymers and condensation polymers and give one example of each class.



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21. How does vulcanisation change the character of natural rubber?



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22. Why are the numbers 6, 6 and 6 put in the names of nylon 6, 6 and nylon 6 ?

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23. Write the structures of monomers used and one use of the following polymers: Buna-N.

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24. Write the names and structures of the monomers used for getting the following polymer : PVC.

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25. What are biodegradable polymers ? Give two examples.



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26. Giving one example for each to differentiate between thermosetting and thermoplastic polymers.



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27. Can a copolymer be formed in both addition and condensation polymerisation ? Explain with examples.



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28. Differentiate between a homopolymer and a copolymer. Give one example of each



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29. How is bakelite made and what is its major use ? Why is bakelite a thermosetting polymer ?



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30. Distinguish between 'chain growth polymerisation' and 'step growth polymerisation' and give one example of each process.



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31. Write the structural formulae for the monomers of following polymers :

(i) Nylon 6 (ii) Natural rubber.



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32. What are the different ways of initiating addition polymerisation ? Describe one of them for polymerising vinyl chloride.



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33. Name the four categories in which polymers have been classified on the basis of magnitude of forces present in them .



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34. Write the structure of a reagent used for initiating a free chain reaction. How does it act?

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35. Write equations used for the synthesis of (i) terylene, (ii) neoprene.

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36. What are elastomers? Write the chemical equation to represent the preparation of Buna-S.

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37. How is terylene synthesised ?



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38. Write equation for the synthesis of Buna - S .



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39. Write the names and structure of the monomers of the following polymers : Natural rubber .



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40. How are polymers classified categories on the basis of intermolecular forces ?

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41. Write equations to form

(i) Nylon 6 (ii) Nylon 6,6.

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42. Write the chemical reaction for reactions involved in synthesis of Bakelite .

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Long Answer Questions

1. Write the names and structures of the monomers of the following polymers :

(i) Nylon 6,6 (ii) PHBV

(iii) Neoprene.



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2. Write the names and structure of the monomers of the following polymers :

(i) Terylene (ii) Buna - S

(iii) Neoprene .



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3. Write the names and structures of the monomers of the following polymers :

(i) Buna -s (ii) Neoprene .

(iii) Nylon 6,6



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4. Draw the structure of the following polymers :

(i) Polythene (ii) PVC

(iii) Teflon.

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5. Give one example each of

(i) addition polymers (ii) condensation polymers ,

(iii) copolymers .

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6. Identify aliphatic biodegradable polyester which is used in packing and orthopaedic devices .

(i) Write its full form.

(ii) Give the structures of monomer of nylon 6.



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7. Write the name and structure of the monomer of nylon 6.



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8. Given an example of a synthetic rubber and mention its main advantage .



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9. Write the structure of the monomers of Dacron.



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10. Arrange the following polymers in increasing order of tensile strength :

Nylon 6, Buna - S, Polythene.

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11. Write :

(a) Reaction involved in the preparation of a biodegradable polyester .

(b) Monomer unit of synthetic rubber (neoprene).

(c) One use of Nylon 6,6.

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12. How do you classify polymers based on source ?



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13. What is the role of benzoyl peroxide in polymerisation of ethene ?



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14. What are LDF are HDPE ? How are they prepared ?



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15. Write names of monomer/s of the following and classify them as addition or condensation polymers .

(a) Teflon (b) Bakelite .

(c) Natural Rubber .





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16. Low density polythene and high density polythene , both are polymers of ethene but there is marked difference in their properties . Explain.



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17. Which of the following polymers of soften on heating and harden on cooling ? What are the polymers with this property collectively called ? What are the structural similarities between such polymers ?



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18. Give the schematic representation of linear polymers, branched chain polymer and cross intermolecular forces of elastomers and fibres.



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19. What are the monomers of novolac and bakelite ? What is the difference between the two ? What are their uses ?



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Self Assessment Test Section A Multiple Choice Questions

1. Which of the following macromolecule does not have a repeating structure unit ?

A. Polythene

B. Nylon

C. Chlorophyll

D. Terylene

Answer: C



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2. Which of the following is not a biopolymer ?

A. Proteins

B. Cellulose

C. Strach

D. Polypropylene

Answer: D



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3. Identify the copolymer in the following :

A. Bakelite

B. Polyisoprene

C. Teflon

D. PVC

Answer: A



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4. Which of the following isomers has a high melting point, high density and high tensile strength ?

- A. Amylopection
- B. Terylene
- C. Bakelite
- D. Urea - formaldehyde

Answer: B



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5. Polymers in which the chains are held together by van der Waals' forces are called ?

- A. Fibres

B. thermosetting polymers

C. elastomers

D. thermoplastics

Answer: C



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Self Assessment Test Section A Assertion And Reason

1. Assertion (A) : Polyester and nylon are examples of linear polymers .

Reason (R) : Styron is obtained by polymerisation of styrene in the presence of benzoyl peroxide.

- A. Both Assertion (A) and Reason (R) are correct statement and Reason (R) is the correct explanation of the Assertion (A).
- B. Both Assertion (A) and Reason (R) are correct statement ,but Reason (R) is not the correct explanation of the Assertion (A)
- C. Assertion (A) is correct, but Reason (R) is incorrect statement
- D. Assertion (A) is incorrect , but Reason (R) is correct statement.

Answer: B



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2. Assertion (A) : SBR is a copolymer of two moles of butadiene and mole of styrene.

Natural rubber is used in making shoes , golf balls and water proof coats.

A. Both Assertion (A) and Reason (R) are correct statement and Reason (R) is the correct explanation of the Assertion (A).

B. Both Assertion (A) and Reason (R) are correct statement ,but Reason (R) is not the correct explanation of the Assertion (A)

C. Assertion (A) is correct, but Reason (R) is incorrect statement

D. Assertion (A) is incorrect , but Reason (R) is correct statement.

Answer: D



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