

V-JEE INSTITUTE

CHEMISTRY - XII

Polymers, Chemistry in everyday life

Name :....

Total Marks = 164

Time: 6 hr

Q6.

Q11.

Date: 25/10/2017

Q1. What are the monomers involved in the formation of Nylon 6, 6?

1

1

Q2. Is
$$+ CH_2 - CH + a$$
 homopolymer or a copolymer?

Q3. Give an example of a narcotic which is used as an analgesic.

1

1

1

1

1

1

1

1

1

1

Q4. List two major classes of antibiotics and give one example of each class.

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

1

Q5. Why is bithional added to toilet soap?

1

Q7. Write the name of following polymer:

$$\begin{bmatrix}
H & H & O & O \\
 & | & | & | & | \\
 & N - (CH_2)_6 - N - C - (CH_2)_4 - C \\
\end{bmatrix}_{R}$$

Q8. Write the name of following polymer:

+ CF, - CF, +

- Q9. Classify the following as addition and condensation polymers: Terylene, Bakelite, Polyvinyl chloride, Polythene.
 - 1

Q10. Write the name of following polymer:

R
$$|$$
 Is $+$ NH $-$ CH $-$ CO $+$ a homopolymer or copolymer?

Q12. In which classes, the polymers are classified on the basis of molecular forces?

Q15. How is dacron obtained from ethylene glycol and terephathalic acid?

1

013. What is PHBV? Write its use also.

1

Q14. What do you understand by the term 'polyamides'?

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O16. Write two uses of Teflon.

1

Q17. Give the examples of semisynthetic polymers.

1

Q18. What is the importance of PHBV polymers?

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Q19. Differentiate between chain growth and step growth.

Q20. Write the preparation of Nylon-2-Nylon-6.	1
Q21. Write the structures of monomers used and one use of each of the following polymers (a) Teflon (b) Buna-N	: 1
Q22. Write the preparation of glyptal.	1
Q23. Write the monomers of polythene and teflon.	1
Q24. Give examples of biodegradable polymers.	1
Q25. Define the term polymerisation.	1
Q26. Can you use soaps and synthetic detergents to check the hardness of water?	1
Q27. Explain the cleansing action of soaps.	1
Q28. How are synthetic detergents better than soaps?	1
Q29. Why do soaps not work in hard water?	1
Q30. Name the sweetening agent used in the preparation of sweets for a diabetic patient.	1
Q31. What problem arises in using alitame as artificial sweetener?	1
Q32. Why is use of aspartame limited to cold foods and drinks?	1
Q33. What are artificial sweetening agents? Give two examples.	1
O34. What is tincture of iodine? What is its use?	1
Q35. What are food preservatives?	1
Q36. Why are cimetideine and ranitidine better antacids than sodium hydrogen carbonate of magnesium or aluminium hydroxide?	of 1
O37. What are the main constituents of dettol?	1
Q38. While antacids and antiallergic drugs interfere with the function of histamines, why thes not interfere with the function of each other?	e 1
Q39. What is meant by the term 'broad spectrum antibiotics'? Explain.	1
Q40. Why do we consider the average molecular mass of polymers?	1
Q41. What is natural rubber chemically?	1
Q42. What are the different polymers based upon the mode of polymerisation?	1
Q43. Name two synthetic rubbers.	1
Q44. What is phenol-formaldehyde polymer popularly known as?	1
Q45. What is the material used in making unbreakable crockery?	1
Q46. What is coprolactam?	1
O47. What are the chief uses of dacron?	1
Q48. What are the two main uses of low density polythene?	1

Q49.	What is teflon?	1
Q50.	What are the alternative terms for addition polymerisation?	1
Q51.	Name giving its formula, a free radical generating initiator.	1
Q52.	What are copolymers?	1
Q53.	Name different kinds of polymers based upon the molecular forces.	1
Q54.	What does the polymer PHBV stand for?	1
Q55.	Give two examples each of linear polymer and cross linked polymer.	1
Q56.	Name a substance that can be used as an antiseptic as well as disinfectant.	1
Q57.	Name a food preservative which is most commonly used by food producers.	1
Q58.	Describe and illustrate with an example, a detergent.	1
Q59.	Define the following and given one example : Tranquilizers.	1
Q60.	Describe the following giving a suitable example: antioxidants.	1
Q61.	Describe the following type of substance, giving suitable example : antiseptics.	1
Q62.	What is the repeating structural unit in polythene polymer?	1
Q63.	Define the terms chemotherapy.	1
Q64.	Which forces are involved in holding the drugs to the active site of enzymes?	1
Q65.	Name one medicinal compound each that is used to treat (i) hypertension (ii) general body pain.	1
Q66.	State an example and function of the following : wide spectrum antibiotics.	1
Q67.	How are antiseptics different from disinfectants? Give one example of each of them.	1
Q68.	Soap is a weak antiseptic. What may be added to soaps to improve its antiseptic action?	1
Q69.	Write the formula and IUPAC name of aspirin. Why should it not be taken on empty stomach?	1
Q70.	Write the formula for sulphanilic acid and mention any one of its uses.	1
Q71.	What type of drug phenacetin is?	1
Q72.	Why is ethanol added to soap?	1
Q73.	Name a medicine which can act as analgesic as well as antipyretic. Give its chemical name.	1
Q74.	What is the use of a compound which is obtained from the bark of willow tree?	1
Q75.	What type of drug penicillin is?	1
Q76.	Pick out the odd amongst the following compounds on the basis of their medicinal properties mentioning the reason : luminal, seconal phenacetin and equanil.	1
077 .	Name the chemical responsible for the antiseptic properties of dettol.	1

Q78. Name two narcotics which are used as analgesics.

(a)
$$-C - (CH_2)_8 - C - NH - (CH_2)_6 - NH - NH - CH_2$$

Q99. (a) Write equations for the synthesis of Buna-S.

Q101Explain the differences between Buna-N and Buna-S.	2
Q102Arrange the following polymers in increasing order of their molecular forces: (a) Nylon-6,6 Buna-S, Polythene (b) Nylon-6, Neoprene, Polyvinyl chloride.	2
Q103What are biodegradable and non-biodegradable detergents? Give one example of each class.	2
Q104Mention one important use of each of the following: (a) Equanil (b) sucralose	2
Q105Name a broad spectrum antibiotic and state two diseases for which it is prescribed.	2
Q106State the functional along with one example each of : (i) antihistamines (ii) antioxidants.	2
Q107Describe the following with an example each : (a) Antimicrobials (b) Analgesics.	2
Q108Name the medicines used for the treatment of the following diseases: (a) Tuberculosis (b) Typhoid	2
Q109Describe the following with examples: (a) Preservatives (b) Biodegradable detergents	2
Q110Define the following and give one example of each: (a) Antipyretics (b) Antibiotics	2
Q111Describe the following giving an example, Antifertility drugs.	2
Q112Give one important use of each of the following: (a) Bithional (b) Chloramphenicol (c) Streptomycin (d) Paracetamol	2
Q113Give three examples of sulpha drugs and write main uses.	2
Q114Write the formula of paracetamol. What is it used for in medicine?	2
Q115What are antipyretic medicines? Name of them. Can it play any other role also?	2
Q116Sulpha drugs work like antibiotics but they are not antibiotics. Is this a valid statement and why? Give one example of sulpha druga and antibiotics.	2
Q117What for is each of the following medicines used? (a) Equanil (b) Bithional.	2
Q118What do you understand by broad spectrum antibiotics? Is penicillin a broad spectrum antibiotic? Name a place in India where penicillin is manufactured.	2
Q119Describe the functions of antibiotics and antiseptics. Give one example of each.	2
Q120Name the action of the following on the human body: (a) Aspirin (b) Penicillin (c) Phenacetin (d) Morphine	2
Q121Name the drug used in (a) Typhoid (b) tuberculosis (c) pneumonia	2
Q122Explain in term, target molecules drug targets as used in medicinal chemistry.	2
Q123Why do we need to classify drugs in different ways?	2
Q124Low level of noradrenaline is the cause of depression. What type of drugs are needed to cure this problem? Name two drugs.	2

- (a) Analgin
- (b) Luminal
- (c) seconal
- (d) Streptomycin

