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	PRACTICE TEST PART-A (BIOMOLECULES)(4)	
1	**Name the type of bonding which stabilizes α-helix structure of proteins?**	
2	**Name the deficiency diseases caused due to lack of vitamin B_1, & B_{12}**	
3	**Name the two components of starch. How do they differ from each other Structurally?**	
4	**What are essential and non essential amino acids? Give examples of each type?**	
5	**Write a note on zwitter ion.**	
6	**Distinguish between the following: Fibrous &Globular proteins?**	
7	**Write a note on Denaturation of proteins?**	
8	**Write the important differences between DNA and RNA?**	
9	**An optically active amino acid (A) can exist in three forms depending on the pH of the medium. If the molecular formula of (A) is $C_3H_7NO_2$ write** **(i) Structure of compound (A) in aqueous medium. What are such ions called?** **(ii) In which medium will the cationic form of compound (A) exist?(iii) In alkaline medium, towards which electrode will the compound (A) migrate in electric field?**	
10	**How are vitamins classified?**	
11	**(i) Write two main functions of carbohydrates in plants.** **(ii)What do you understand by the term glycosidic linkage?**	
12	**Distinguish between the α-helix and β-sheet proteins:**	
13	**Name the deficiency diseases caused due to lack of vitamin A,C, D,E,B_2,, B_6 &K?**	
14	**Write the reactions when D-Glucose reacts with following:** **(a)Hydrocyanicacid,HCN (b)Tollens reagent (c)HI (d)Conc.HNO_3 (e)Hydroxlamime(f)Bromine**	
15	**(a) How are carbohydrates classified on the basis of their behaviour on hydrolysis?.** **(b) Why cannot Vitamin C be stored in our body** **(c) What are different types of RNA found in the cell?**	
	PART-B POLYMERS(3)	
16	**Write the name and structure of one of the common initiators used in free radical polymerization?**	
17	**What do you by Biodegradable polymers?Give two examples.**	
18	**Give difference between the Thermoplastic polymers. & Thermosetting polymer ?**	
19	**Distinguish between Homopolymers and copolymer?**	
20	**Give difference between the Addition & Condensation Polymerization.**	
21	**Explain the difference between Buna-S and Buna-N.**	
22	**Discuss the mechanism of free radical polymerization of ethene?**	
23	**Write the structure of monomer and polymer of (a) Nylon 6, 6 (b) Nylon 6?**	
24	**Write the structure of monomer and polymer of Dacron (Terylene) & Glyptal.**	
25	**Write the structure of monomer and polymer of (a) Bakelite (b) Melamine-Formaldehyde polymer**	
26	**Write the structure of monomer and polymer of (a)Teflon (b) Polystyrene (c) PVC**	
27	**Write the structure of monomer and polymer of Natural rubber &Neoprene**	
28	**(a) Define the term polymerisation.** **(b)Write the structure of monomer and polymer of PHBV.** **(c) Discuss the main purpose of vulcanization of rubber.**	
29	**(a) Classify the following as addition and condensation polymers** **Terylene, Bakelite, Polyvinyl chloride, Polythene.?.** **(b) Arrange the following polymers in increasing order of their intermolecular forces.** **(i) Nylon 6,6, Buna-S, Polythene. (ii) Nylon 6, Neoprene, Polyvinyl chloride.** **(c)In which classes, the polymers are classified on the basis of molecular forces?**	
	PART-C CHEMISTRY IN EVERYDAY LIFE(3)	
30	**What is tincture of iodine? What is its use?**	
31	**Define the following a) Anionic detergents b) Limited spectrum antibiotics c) Antiseptics d) Antacids e) Narrow spectrum antibiotics , f) Cationic detergents g) Broad spectrum antibiotics h) Tranquilizers**	
32	**What are the Constituents of dettol.**	
33	**Define the following terms giving suitable examples : (i) Artificial sweetening agents (ii) Food Preservatives.**	
34	**Why is the use of aspartame limited to cold drinks and foods?**	
35	**Name a substance which can be used as an antiseptic as well as disinfectant.**	
36	**(i) Name the macromolecules that are chosen as drug targets (ii) What are antagonists and agonists?**	
37	**(i) Name a broad spectrum antibiotic and state two diseases for which it is prescribed (ii) What is the role of bithional in toilet soaps?**	
38	**(a) While antacids and ant allergic drugs interfere with function of histamines, why do these not interfere with the function of each other.** **(b) Why are cimetidine and rantidine better antacids than $NaHCO_3$,$Mg(OH)_2$, $Al(OH)_3$?.**	
39	**Explain the following terms with suitable examples : (a)Cationic detergents (b) Anionic detergents (c) Non-ionic detergents**	
40	**Point out the differences between Broad spectrum & narrow spectrum antibiotics.**	

41	**Point out the differences between Antiseptics & Disinfectants.**	
42	**Define the following terms giving suitable examples: (i)Analgesics(ii)Tranquilizers (iii)Antifertility drugs:**	
43	**Why soaps do not works in hard water. Explain the cleansing action of soaps?**	
44	**(a) What problem arises in using alitame as artificial sweetener?** **(b) Explain the following with suitable examples: (i) Antihistamines (ii) Antacids (iii) Antimicrobials: (iv) Antipyretic**	
45	**(a) What are biodegradable and non-biodegradable detergents? Give one example of each.** **(b) Mention one use of each of the following: Paracetamol, Seconal, Norethindrone Bromophenarzine, ranitidine, equanil.**	
	VALUE BASED QUESTION	
46	**Mr Roy the principal of one reputed school organized a seminer in which he invited parents and principals to discuss the serious issue of diabetes and depression in students. They all resolved this issue by strictly banning junk food in schools and introducing healthy snacks and drinks like soup, lasssi, milk etc in school canteens. They also decided to make compulsory half an hour of daily physical activities for the students in the morning assembly. After six months, Mr Roy conducted the health survey in most of the schools and discovered a tremendous improvement in the health of the students.** **(i) What are the values (at least two) displayed by Mr Roy?** **(ii) As a student , how can you spread awareness about this issue ?** **(iii) What are tranquilizers? Give an example.** **(iv) Why is use of aspartame limited to cold foods and drinks ?**	
47	**On the occasion of World Health Day, Dr. Satpal organized a 'health camp' for the poor farmers living in a nearby village. After checkup, he was shocked to see that the most farmers suffered from cancer due to regular exposure to pesticides and many were diabetic. They distributed free medicines to them. Dr. Satpal immediately reported the matter to the National Human Rights Commissions (NHRC). On the suggestion of NHRC, the govt. decided to provide medical care, financial assistance, setting up of super specialty hospitals for treatment and prevention of the deadly disease in the affected village all over the India.** **(i)Write the values shown by(a)Dr. Satpal (b)NHRC** **(ii)What type of analgesics are chiefly used for the relief of pains of terminal cancer?** **(iii)Give an example of artificial sweetener that could have been recommended to diabetic patients.**	
48	Due to hectic and busy schedule, Mr.Singh started taking junk food in the lunch break and slowly became habitual of eating food irregularly to excel in his field. One day during meeting he felt severe chest pain and fell down. Mr. Khanna, a close friend of Mr.Singh, took him to doctor immediately. The doctor diagnosed that Mr.Singh was suffering from acidity and prescribed some medicines. Mr.Khanna advised him to eat home made food and change his lifestyle by doing Yoga, meditation and some physical exercise. Mr.Singh followed his friend's advice and after few days he started feeling better. After reading the above passage, answer the following : (i) What are the values (at least two) displayed by Mr.Khanna ? (ii) What are antacids ? Give one example. (iii) Would it be advisable to take antacids for a long period of time ? Give reason.	
49	**After watching a programmme on TV about the presence of carcinogens (cancer causing agents) Potassium bromated and Potassium iodate in bread and othe bakery products , Rupali a class XII student decided to make others aware about the adverse effects of these carcinogens in food. She consulted the school principal and requested him to instruct the canteen contractor to stop selling sandwiches, pizzas, burgers and othe bakery products to the students. The principal took an immediate action and instructed to the canteen contractor to replace the bakery products wit some protein and vitamin rich food like fruits , salads, sprouts , etc. The decision was welcome by the parents and the students.** **After reading the above passage , answer the following questions :** **a) What are the values (at least two) displayed by Rupali ?** **b) Which polysaccharide component of carbohydrate is commonly present in bread ?** **c) Write the two types of secondary structures of protein** **d) Give two examples of water soluble vitamins.**	
50	**(a)Shanti, aa domestric helper of Mrs. Anuradha, fainted while mopping the floor. Mrs. Anuradha immediately took her to the nearby hospital where she was diagnosed to be severely 'anaemic.' The doctor prescribed an iron rich diet and multivitamins supplement to her. Mrs. Anuradha supported her financially to get the medicines. After a month, Shanti was diagnosed to be normal.** **After reading the above passage, answer the following questions :** **(i) What values are displayed by Mrs. Anuradha ?** **(ii) Name the vitamin whose deficiency causes 'pernicious anaemia'.** **(iii) Give an example of waer soluble vitamin.** **What is the product of hydrolysis of sucrose?**	

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