

ECAT Chemistry Chapter 25 Macromolecules Online Test

Sr	Questions	Answers Choice
1	Macromolecules or polymers are large molecules built up from small molecules called monomers. This hypothesis put forward by	A. Schrodinger B. Standinger C. Lewis D. Newton
2	A polymer may be	A. Linear B. Branched C. Cross linked D. All of these
3	In macromolecules DP stands for	A. Dissociation parameter B. Dissociation polymer C. Degree of polymerization D. None of these
4	Organic synthetic or man made polymers are plastics, rubber and fibre. Which is not a synthetic polymer	A. Silk B. Polyester C. Polyvinyl chloride D. Nylon
5	The other name of cross linked polymers is	A. Linear polymer B. Branched polymer C. Inter connected polymers D. None of these
6	The temp. and pressure used for PVC polymerization is	A. 10°C and 10 atm B. 20°C and 20 atm C. 52°C and 9 atm D. 100°C and 10 atm
7	One of the followings is not type of polymer	A. Homopolymer B. Copolymer C. Heteropolymer D. Terpolymer
8	The polymers which can be re-softened again and again are caled	A. Thermoplastic B. Thermosetting C. Both a and b D. None
9	Which polymerization is free radical machanism based	A. Addition B. Condensation C. Both a and b D. None
10	Nylon, 6,6 is a condensation polymer of	A. Adipic acid and glycol B. Phthalic acid and glycol C. Adipic acid and hexaethylene diamine D. Pthalic acid and hexaethylene diamine
11	Which of the following polymers is used for weather resistant paints	A. Arcylic resins B. Polyvinyl acetate C. Polystyrene D. PVC
12	The temp. and pressure used for PVC polymerization is	A. 10°C and 10 atm B. 20°C and 20 atm C. 52°C and 9 atm D. 100°C and 10 atm
13	A polymer may be	A. Homopolemer B. Co-polymer C. Terpolymer D. All of these
14	Denaturation of protein means the structure of protein is disrupted, indicate which factor foes not denature protein	A. Heating protein B. pH changes C. Oxidising agent D. Keeping pH 7.35
15	Naturally occurring lipids are called	A. Fats B. protein C. Steroids D. ...

		D. None
16	A fat or oil is characterised for extent of unsaturation by one of the following number, which one	A. Rancidity number B. Acid number C. Iodine number D. Saponification number
17	Which is not a steroid	A. Cholesterol B. Ergosterol C. Phospholipids D. None of these
18	The polymers which can not be re-softened again and again are called	A. Thermoplastic B. Thermosetting C. Both a and b D. None
19	Which of these polymers is an addition polymer	A. Nylon 6,6 B. Polystyrene C. Terylene D. Epoxy resin
20	Which of these polymers is a synthetic polymer	A. Animal fat B. Starch C. Cellulose D. Polyester
21	Plastics are a pollution problem because many plastics	A. Are made from petroleum B. Are very inflammable C. Burn to produce toxic fumes D. Decompose to produce toxic products
22	A fibre which is made from acrylonitrile as monomer	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
23	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called a	A. Fibre B. Plastic C. Varnish D. Polyamide resin
24	Vegetable oils are	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Glycerides of saturated fatty acids D. Essential oils obtained from plants
25	Which one of the following elements is not present in all proteins	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
26	Which one of the following is a water soluble vitamin	A. Niacin B. Riboflavin C. Tyrosine D. Ascorbic acid
27	Which one of the following enzymes brings about the hydrolysis of fats	A. Urease B. Maltase C. Zymase D. Lypase
28	The reaction between fat and NaOH is called	A. Esterification B. Hydrogenolysis C. Fermentation D. Saponification
29	Monosaccharides and oligosacchradies are generally called as	A. Crystals B. Sugars C. Liquids D. Non-sugars
30	Enzymes are catalysts which contain other than carbon and hydrogen one other element	A. Oxygen B. Sulphur C. Phosphorus D. Iodine
31	The degree of unsaturation in fats or oils is usually measured by numbers of grams of iodine required by 100 grmas of fat, this is called	A. Oil number B. Saturation number C. Iodine number D. Un saturation number
32	The development of disagreeable odur in fats or oil is called	A. Fragrance B. Perfume C. Rancidity D. Smell

33	Glycogen is stored in	A. Animals B. Plants C. Soil D. None of these
34	For every reaction occurring in the body there is at least one type of	A. Enzyme B. Vitamin C. Protein D. Amino acid
35	The substance upon which an enzyme acts is known as its	A. Domain B. Field C. Substrate D. Reactant
36	Activity of the enzyme is reduced by	A. Temperature B. Concentration C. pH D. Inhibitors
37	Which of the following is a steroid	A. Vitamin A B. Vitamin B C. Vitamin C D. Vitamin D
38	The three dimensional folding and twisting of a polypeptide chain give rise to	A. Primary structure B. Secondary structure C. Tertiary structure D. All of these tertiary
39	Proteins are classified into	A. Simple protein B. Complex protein C. Derived proteins D. All of these
40	Which of the following statements is incorrect about vitamins	A. Often function as coenzymes B. Molecules contain at least one ring structure C. Are often synthesized by the body D. Are polyfunctional compounds
41	Which one of the following is the most abundant organic substance found in nature	A. Fructose B. Starch C. Glucose D. Cellulose
42	Which of the following brings about the conversion of starch into maltose	A. Maltase B. Zymase C. Diastase D. Invertase
43	Iodine value of an oil or fat may be defined as	A. The number of grams of iodine taken up by 1 g of the oil or fat B. The number of grams of iodine taken up by 10 g of the oil or fat C. The number of grams of iodine taken up by 100 g of the oil or fat D. None of the above
44	Polysaccharides are also called	A. Crystals B. Sugars C. Liquids D. None sugars
45	Cotton is _____% cellulose	A. 90 B. 100 C. 99 D. 30
46	Substances that render enzymes catalytically inactive are called	A. Conenzymes B. Substrates C. Inhibitors D. Apoenzymes
47	Monosaccharides are	A. Aldoses B. Ketoses C. Either a and b D. None of these
48	Which of the following is the repeating monomeric unit in cellulose	A. Sucrose B. Maltose C. Cellobiose D. Glucose
49	$(\text{CH}_2\text{O})_n$ is general formula for	A. Monosaccharides B. Oligosaccharides C. Polysaccharides D. None of these

50	Which is not an enzyme	A. Transverses B. Lipase C. Lyase D. None of these
51	Enzymes are chemically	A. Carbohydrates B. Proteins C. Fatty acids D. Phospholipids
52	Which of these polymers is an addition polymer	A. Nylon 6,6 B. Polystyrene C. Terylene D. Epoxy resin
53	Purines include	A. Adenine B. Guanine C. Both a and b D. None
54	Plastics are a pollution problem because many plastics	A. Are made from petroleum B. Are very inflammable C. Burn to produce toxic fumes D. Decompose to produce toxic products
55	The fibre which is made from acrylonitrile as monomer	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
56	Vegetable oils are	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Glycerides of saturated fatty acids D. Essential oils obtained from plants
57	Which one of the following is a water soluble vitamin	A. D B. K C. A D. Ascorbic acid (Vitamin C)
58	Monosaccharides belong to the group	A. Lipids B. Fats C. Proteins D. Carbohydrates
59	β -D-glucose is a monomer for	A. Starch B. Cellulose C. Glycogen D. Protein
60	What is the most common catalyst used in hydrogenation of oils	A. Cobalt B. Nickel C. Tungsten D. Copper
61	Rickets is caused due to the deficiency of vitamin	A. A B. D C. B D. E
62	The clotting time of blood is increased due to the deficiency of	A. Vitamin A B. Vitamin K C. Vitamin D D. Vitamin C
63	Sterols, vitamin D and terpenes belong to	A. Simple lipids B. Complex lipids C. Derived lipids D. None
64	Protein may have	A. Primary structure B. Secondary structure C. Tertiary structure D. All of these
65	Oxidation reduction is done by	A. Oxidoreductase B. Lipases C. Lyase D. None of these
66	Which is the polymer that has amide linkage in its structure	A. PVC B. Poly ethene C. Polyester D. Nylon
		A. Ribose

67	When a nitrogenous base combine with a sugar it is called	B. Nucleotides C. Nucleoside D. None
68	The protein which only yield amino acids and their derivatives	A. Simple proteins B. Complex proteins C. Derived protein D. All of these
69	How is the secondary structure of protein stabilized	A. Through hydrogen bonding B. Through ionic bonding C. Through van der Waals forces D. Through covalent bonding
70	The proteins which are derived by conjugated proteins are called as	A. Simple protein B. Complex protein C. Derived protein D. None
71	A nucleoside may be	A. Ribonucleoside B. Deoxyribonucleoside C. Both a and b D. None
72	Which test is not given by both glucose and fructose	A. Give yellow ppt of CHI_3 with alkaline aqueous iodine B. With 2, 4-DNP give yellow ppt of hydrazone C. Evolve H_2 gas with Na metal D. Oxidised with $[\text{Ag}(\text{NH}_3)_2]^+$ i.e. Tollen's reagent
73	Glycine at pH 7 has the structure	A. $\text{H}_2\text{N}-\text{CH}_2-\text{COOH}$ B. $\text{H}_3\text{N}^+-\text{CH}_2-\text{COO}^-$ C. $\text{H}_2\text{N}-\text{CH}_2-\text{COO}^-$ D. $\text{H}_3\text{N}^+-\text{CH}_2-\text{COO}^-$
74	At what pH glycine shows the structure $\text{H}_3\text{N}^+-\text{CH}_2-\text{COOH}$	A. 2 B. 7 C. 10 D. 14
75	Which functional group is present in glycerol tristearate	A. Carboxylic acid B. Alcohol C. Aldehyde D. Ester
76	There are 20 amino acids found in protein which is not the property of these amino acids	A. They are all α -amino acids B. They are all optically active C. They have high decomposition point D. They are water soluble
77	Enzymes catalyse all biological reactions occurring in the cell. What is true about an enzyme	A. Enzyme is a small molecule B. Enzyme is acidic in nature C. Enzyme is a protein D. Enzyme is a lipid
78	DNA is a polynucleic acid. The monomer is known as a nucleotide. What is not the component of the nucleotide	A. Phosphate group B. Deoxy ribose sugar C. Uracil base D. Adenine base
79	RNA is a polymer of nucleotide which consist of three components. Which one is not the component in the nucleotide of an RNA	A. D-Ribose B. Uracil base C. Phosphate group D. Thymine base
80	What is not true about DNA	A. It preserve genetic information B. To replicate C. Synthesized protein D. It has a linear structure
81	The reagent which forms crystalline osazone derivative when treated with glucose is	A. Fehling solution B. Phenyl hydrazine C. Benedict solution D. Hydroxylamine

		D. Hydroxylamine
82	The digestion of fats in the intestines is aided by	A. Diffusion B. Protection C. Peptization D. Emulsification
83	Ascorbic acid is a chemical name of	A. Vitamin D B. Vitamin A C. Vitamin C D. Vitamin B ₆
84	Which has maximum protein content?	A. Groundnut B. Cow milk C. Egg D. Wheat
85	Which of the following is a molecular disease?	A. Allergy B. Cancer C. German measles D. Sickle cell anemia
86	Vitamin A is present in	A. Liver B. Milk C. Green vegetables D. All
87	The main structure features of proteins is	A. An ester linkage B. An ether linkage C. The peptide linkage D. All
88	Which of the following is not present in RNA?	A. Uracil B. Thymine C. Ribose D. Phosphate
89	Enzymes are	A. Proteins B. Minerals C. Oils D. Fatty acids
90	The disaccharide present in milk is	A. Sucrose B. Maltose C. Lactose D. Cellobiose
91	Hydrolysis of sucrose is called	A. Inhibition B. Saponification C. Inversion D. Hydration
92	On hydrolysis of starch, we finally get	A. Glucose B. Fructose C. Both D. Sucrose
93	The monomeric units of starch is/are	A. Glucose B. Fructose C. Glucose and fructose D. Mannose
94	Enzymes, in the living systems	A. Provide energy B. Provide immunity C. Transport oxygen D. Catalyze biochemical processes
95	Which of the following is obtained by condensation polymerization?	A. Polyethylene B. Teflon C. Phenol formaldehyde resin D. Nitrile rubber
96	Synthetic polymer prepared from caprolactum is known as	A. Nylon 610 B. Teflon C. Terylene D. Nylon-6
97	Which of the following is a polyamide?	A. Nylon B. Orlon C. Teflon D. Terylene
98	Peptide bond is a key feature in	A. Polysaccharide B. Proteins C. Nucleotide D. Vitamins
		A. Tetrafluoroethylene B. Acrylonitrile

99	Orlon is a polymer of	<p>B. Acrylonitrile C. Ethanoic acid D. Benzene</p>
100	Which of the following fibres are made of polyamides?	<p>A. Dacron B. Orlon C. Nylon D. Rayon</p>
101	The raw material to form nylon is	<p>A. Adipic acid B. Butadiene C. Isoprene D. Ethylene</p>
102	Bakelite is obtained from phenol by reacting with	<p>A. Acetaldehyde B. Acetal C. Formaldehyde D. Chlorobenzene</p>
103	The product of addition polymerization reaction is	<p>A. PVC B. Nylon C. Terylene D. Polyamide</p>
104	Of the following which is a step growth polymer	<p>A. Bakelite B. Polyethylene C. Teflon D. PVC</p>
105	Among the following polymers, the strongest molecular forces are present in	<p>A. Elastomers B. Fibres C. Thermoplastics D. Thermosetting polymers</p>
106	Glyptal polymer is obtained from glycerol on reacting with	<p>A. Malonic acid B. Phthalic acid C. Maleic acid D. Acetic acid</p>
107	Which of the following is not an example of addition polymer?	<p>A. Polyethene B. Polystyrene C. Neoprene D. Terylene</p>
108	Which one is a polymer compound?	<p>A. SO_2 B. CO_2 C. CH_4 D. PVC</p>
109	Copolymer is	<p>A. Nylon-6 B. Nylon 66 C. PMMA D. Polyethene</p>
110	The metal present in blood is	<p>A. Al B. Hg C. Cu D. Fe</p>
111	Which of the following is not present in nucleotide?	<p>A. Guanine B. Cytosine C. Adenine D. Tryoxine</p>
112	DNA has deoxyribose, a base and the third component is	<p>A. Phosphoric acid B. Ribose C. Adenine D. Thymine</p>
113	Which carbohydrates is an essential constituent of plant cells?	<p>A. Starch B. Cellulose C. Sucrose D. Vitamins</p>
114	Which of the following has magnesium?	<p>A. Carbonic anhydrase B. Haemocyanin C. chlorophyll D. Vitamin B₁₂</p>
115	An example of water soluble vitamin is	<p>A. Vitamin D B. Vitamin E C. Vitamin A D. Vitamin C</p>
116	The prosthetic group in glycoprotein is	<p>A. Carbohydrate B. Fat C. Vitamin D. Nucleic acid</p>

117	Violet colour is obtained when dilute CuSO_4 is added in alkaline solution of protein. This test is known as	A. Biuret B. Xanthoproteic test C. Hopkins-cole D. All of these
118	In fructose the possible optical isomers are	A. 12 B. 8 C. 16 D. 4
119	Purine derivative among the following bases is	A. Thymine B. Uracil C. Guanine D. Cytosine
120	The number of amino acids found in proteins that a human body can synthesize is	A. 20 B. 10 C. 5 D. 14
121	Two vitamins absorbed from intestine along with fats are	A. A, D B. A, B C. A, C D. D, B
122	Which of the following is an example of ketohexose?	A. Mannose B. Galactose C. Maltose D. Fructose
123	A sequence of how many nucleotides in messenger RNA makes a codon for an amino acid	A. Three B. Four C. One D. Two
124	The group linkage present in fats is	A. Peptide linkage B. Ester linkage C. Glycosidic linkage D. None of these
125	Which of the following is not a synthetic polymer?	A. Polyethylene B. PVC C. Nylon D. Cellophane
126	Natural rubber is a polymer of	A. Butadiene B. Ethyne C. Styrene D. Isoprene
127	Which one of the following is not an example of chain growth polymer?	A. Neoprene B. Buna-S C. PMMA D. Glyptal
128	Terylene is made by polymerization of terephthalic acid with	A. Ethylene glycol B. Phenol C. Ethanol D. Catechol
129	Teflon, styron and neoprene are all	A. Copolymers B. Condensation polymers C. Homopolymers D. Monomers
130	Soft drinks and baby feeding bottles are generally made up of	A. Polyester B. Polyurethane C. Polyurea D. Polystyrene
131	Which of the following is a constituent of nylon?	A. Adipic acid B. Styrene C. Teflon D. None of these
132	A condensation polymer among the following is	A. Dacron B. PVC C. Polysterene D. Teflon
133	Polymer formation from monomers starts by	A. Condensation reaction between monomers B. Coordination reaction between monomers C. Conversion of monomer to monomer ions by protons D. Hydrolysis of monomers

A. Reaction of formaldehyde with

134	Bakelite is a product formed from	phenol B. Reaction of polyethylene with phenol C. Reaction of polypropylene with acid D. It is a natural product
135	Which is a protein?	A. Nylon B. Rayon C. Natural silk D. Terylene
136	Which of the following has ester linkage?	A. Nylon B. Bakelite C. Terylene D. PVC
137	Which of the following is a biodegradable polymer?	A. Cellulose B. Polyethene C. Polyvinyl chloride D. Nylon-6
138	Which of the following is fully fluorinated polymer?	A. Neoprene B. Teflon C. Thiokol D. PVC
139	In which of these processes are small organic molecules made into macromolecules?	A. The cracking of petroleum fractions B. The fractional distillation of crude oil C. The polymerization of ethane D. The hydrolysis of proteins
140	Which of these polymers is an addition polymer?	A. Nylon-6,6 B. Polystyrene C. Terylene D. Epoxy resin
141	Which of these polymers is a synthetic polymer?	A. Animal fat B. Starch C. Cellulose D. Polyester
142	Plastics are a pollution problem because many plastics:	A. Are made from petroleum B. Are very inflammable C. Burn to produce toxic fumes D. Decompose to produce toxic products
143	The fiber which is made from acrylonitrile as monomer:	A. PVC B. Rayon Fiber C. Acrylic fiber D. Polyester fiber
144	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called a:	A. Fiber B. Plastic C. Vanish D. Polyamide resin
145	Vegetable oils are:	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Essential oils obtained from plants D. None of these
146	Which of the following elements is not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
147	Which of the following is a water soluble vitamin?	A. Niacin B. Riboflavin C. Trypsin D. Ascorbic acid
148	Which of the following enzymes brings about the hydrolysis of fats?	A. Urease B. Maltase C. Zymase D. Lipase
149	The reaction between fat and NaOH is called:	A. Esterification B. Hydrogenolysis C. Fermentation D. Saponification
150	Which one of the following statements of glucose and sucrose is incorrect?	A. Both are soluble in water B. Both are naturally occurring C. Both are carbohydrates D. Both are disaccharides

151	Which behaves as insulator for animals body?	A. Carbohydrates B. Proteins C. Fats D. Skin
152	The steroids of fungi and yeast are called:	A. Vitamin D B. Vitamin D ₂ C. Ergosterol D. Cholesterol
153	An oil or fat with no double bond have iodine number:	A. Zero B. 100% C. 50% D. Minimum
154	Which property is not present in lipids?	A. Liquid B. Solid or semi solid C. Soluble in water D. Form emulsion
155	Which is the derived lipid?	A. Common fats B. Vitamin-D C. Common oils D. Spinolipids
156	Major food factors are:	A. Fats and oils B. Carbohydrates C. Proteins D. All of these
157	Factors affecting denaturation of proteins:	A. Change in temp and pH B. Strong reducing agent C. Strong oxidizing agent D. All of these
158	The high molecular weight materials which yield on hydrolysis the amino acids is called:	A. Carbohydrates B. Lipids C. Fatty acids D. Proteins
159	Cellulose does:	A. Satisfy human appetite B. Stimulates intestinal peristalsis C. Gives fibre and bulk to the food D. All of these
160	Cotton has cellulose in it:	A. 96% B. 97% C. 98% D. 99%
161	Simple sugars are :	A. Monosaccharides B. Disaccharides C. Oligo saccharides D. Trisaccharides
162	Poly hydroxyl compounds of aldehyde and ketones are:	A. Carbohydrates B. Proteins C. Fats D. Lipids
163	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimer D. Macromer
164	Molar mass of high molecular w.f. polymers ranges from:	A. 1000 to 10000 B. 10000 to 100000 C. 100000 to 1000000 D. 1000 to 100000000
165	Two or more similar monomers combine to form:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymers
166	Polyester resins have special use in:	A. Clothing B. Paints C. Emulsion D. Floor covering
167	C ₆ H ₁₂ O ₆ is molecular formula of:	A. Glucose B. Dextrose C. Fructose D. All of these