AIPMT 2006

1. Which one of the following is a peptide hormone–
(1) Glucagon (2) Testosterone
(3) Thyroxin (4) Adrenaline

2. During the process of digestion, the proteins present in food materials are hydrolysed to amino acids. The two enzymes involved in the process –

$$\text{Proteins} \xrightarrow{\text{Enzyme (A)}} \text{Polypeptides} \xrightarrow{\text{Enzyme (B)}}$$

Amino acids, are respectively –
(1) Amylase and Maltase
(2) Diastase and Lipase
(3) Pepsin and Trypsin
(4) Invertase and Zymase

AIPMT 2007

3. Which one of the following vitamins is water–soluble–
(1) Vitamin A (2) Vitamin B
(3) Vitamin E (4) Vitamin K

4. RNA and DNA are chiral molecules, their chirality is due to –
(1) D–sugar Component
(2) L–sugar component
(3) Chiral bases
(4) Chiral phosphate ester units

5. Which one of the following polymers is prepared by condensation polymerization
(1) Styrene (2) Nylon–66
(3) Teflon (4) Rubber

AIPMT 2008

6. In DNA, the complimentary bases are :
(1) Adenine and thymine ; guanine and uracil
(2) Adenine and guanine ; thymine and cytosine
(3) Uracil and adenine ; cytosine and guanine
(4) Adenine and thymine ; guanine and cytosine

7. Which one of the following is an amine hormone:
(1) Oxypurin (2) Insulin
(3) Progesterone (4) Thyroxine

8. Which of the following statement is not true :
(1) Natural rubber has the trans-configuration at every double bond.
(2) Buna-S is a copolymer of butadiene and styrene.
(3) Natural rubber is a 1, 4-polymer of isoprene.
(4) In vulcanization, the formation of sulphur bridges between different chains make rubber harder and stronger.

9. Green chemistry means such reaction which :
(1) reduce the use and production of hazardous chemicals.
(2) are related to the depletion of ozone layer
(3) study the reaction in plants
(4) produce colour during reactions

AIPMT 2009

10. Which one of the following is employed as a tranquilizer ?
(1) Chlorpheninamine (2) Equanil
(3) Naproxen (4) Tetracycline

11. Structures of some common polymers are given. Which one is not correctly presented ?
(1) Nylon 66 $+NH(CH_2)_6NHCO(CH_2)_4 - CO -]_n$
(2) Teflon $+CF_2 - CF_2 -)_n$
(3) Neoprene $\left(-CH_2-\underset{\underset{Cl}{|}}{C}=CH-CH_2-CH_2-\right)_n$
(4) Terylene $\left\{OC-\langle O\rangle-COOCH_2-CH_2-O\right\}_n$

12. The segment of DNA which acts as the instrumental manual for the synthesis of the protein is :-
(1) Nucleoside (2) Nucleotide
(3) Ribose (4) Gene

13. Which of the following hormones contains iodine ?
(1) Thyroxine (2) Insulin
(3) Testosterone (4) Adrenaline

AIPMT 2010

14. Which one of the following is employed as a tranquilizer drug ?
(1) Mifepristone (2) Promethazine
(3) Valium (4) Naproxen

15. Which one of the following does not exhibit the phenomenon of mutarotation ?
(1) (–) Fructose (2) (+) Sucrose
(3) (+) Lactose (4) (+) Maltose

16. Which of the following structures represents Neoprene polymer ?

(1) $\left(CH(C_6H_5)-CH_2\right)_n$ (2) $\left(CH_2-C(Cl)=CH-CH_2\right)_n$

(3) $\left(CH(CN)-CH_2\right)_n$ (4) $\left(CH(Cl)-CH_2\right)_n$

AIPMT Main 2010

17. Fructose reduces Tollen's reagent due to :-
(1) primary alcoholic group
(2) secondary alcoholic group
(3) enolisation of fructose followed by conversion to aldehyde by base.
(4) asymmetric carbons

AIPMT Pre. 2011

18. Which one of the following statements is not true regarding (+) Lactose ?
(1) On hydrolysis (+) Lactose gives equal amount of D(+) glucose and D(+) galactose
(2) (+) Lactose is a β–glycoside formed by the union of a molecule of D(+) glucose and a molecule of D(+) galactose
(3) (+) Lactose is a reducing sugar and does not exhibit mutarotation
(4) (+) Lactose, $C_{12}H_{22}O_{11}$ contains 8–OH groups

19. Which one of the following is empolyed as Antihistamine ?
(1) Chloramphenicol
(2) Diphenyl hydramine
(3) Norethindrone
(4) Omeparazole

20. Which of the following one is classified as polyester polymer ?
(1) Terylene (2) Bakelite
(3) Malamine (4) Nylon-66

AIPMT Mains 2011

21. Which of the following is not a fat soluble vitamin ?
(1) Vitamin A (2) Vitamin B complex
(3) Vitamin D (4) Vitamin E

22. Which of the following statements about 'Denaturation" given below are correct ?
Statements
(a) Denaturation of proteins causes loss of secondary and tertiary structures of the protein
(b) Denaturation leads to the conversion of double strand of DNA into single strand.
(c) Denaturation affects primary structure which gets distorted
Options :
(1) (a), (b) and (c) (2) (b) and (c)
(3) (a) and (c) (4) (a) and (b)

AIPMT Pre 2012

23. Deficiency of vitamin B_1 causes the disease
(1) Cheilosis (2) Sterility
(3) Convulsions (4) Beri-Beri

24. Which one of the following sets of monosaccharides forms sucrose?
(1) β-D-Glucopyranose and α-D-fructofuranose
(2) α-D-Glucopyranose and β-D-fructopyranose
(3) α-D-Galactopyranose and α-D-Glucopyranose
(4) α-D-Glucopyranose and β-D-fructofuranose

25. Which one of the following is not a condensation polymer?
(1) Dacron (2) Neoprene
(3) Melamine (4) Glyptal

26. Which of the following statements is false?

(1) The repeat unit in natural rubber is isoprene

(2) Both starch and cellulose are polymers of glucose

(3) Artificial silk is derived from cellulose

(4) Nylon-66 is an example of elastomer

AIPMT Mains 2012

27. Which one of the following sets forms the biodegradable polymer ?

(1) $HO–CH_2–CH_2–OH$ & HOOC-  COOH

(2)  $CH=CH_2$ and $CH_2=CH–CH=CH_2$

(3) $CH_2=CH–CN$ and $CH_2=CH–CH=CH_2$

(4) $H_2N–CH_2–COOH$ and $H_2N–(CH_2)_5–COOH$

28. Chloroamphenicol is an :-

(1) Antiseptic and disinfectant

(2) Antibiotic broad spectrum

(3) Antifertility drug

(4) Antihistaminic

NEET UG 2013

29. Nylon is an example of :-

(1) Polythene (2) Polyester

(3) Polysaccharide (4) Polyamide

30. Antiseptics and disinfectants either kill or prevent growth of microganisms. Identify which of the following statements is **not true** :-

(1) Disinfectants harm the living tissues

(2) A 0.2% solution of phenol is an antiseptic while 1% solution acts as a disinfectant

(3) Chlorine and Iodine are used as strong disinfectants

(4) Dilute solutions of Boric acid and Hydrogen Peroxide are strong antiseptics

31. Which is the monomer of Neoprene in the following ?

(1) $CH_2=CH–C\equiv CH$ (2) $CH_2=CH–CH=CH_2$

(3) $CH_2=\underset{\displaystyle CH_3}{\underset{|}{C}}–CH=CH_2$ (4) $CH_2=\underset{\displaystyle Cl}{\underset{|}{C}}–CH=CH_2$

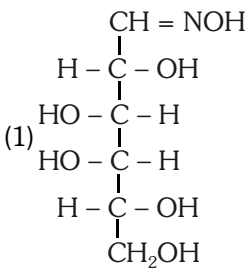
AIPMT 2014

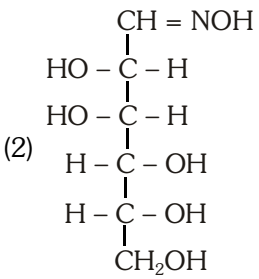
32. Artificial sweetner which is stable under cold conditions only is :-

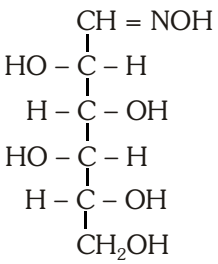
(1) Saccharine (2) Sucralose

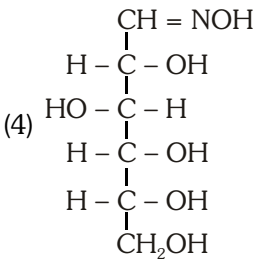
(3) Aspartame (4) Alitame

33. D (+) glucose reacts with hydroxylamine and yields an oxime. The structure of the oxime would be :

(1) 

(2) 

(3) 

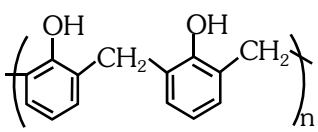
(4) 

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

(1) $\left(CH_2–\underset{\displaystyle Cl}{\underset{|}{C}}=CH–CH_2\right)_n$

(2) $\left(CH_2–\underset{\displaystyle Cl}{\underset{|}{CH}}\right)_n$

(3) $\left(\underset{\displaystyle H}{\underset{|}{N}}–(CH_2)_6–\underset{\displaystyle H}{\underset{|}{N}}–\overset{\displaystyle O}{\overset{\|}{C}}–(CH_2)_4–\overset{\displaystyle O}{\overset{\|}{C}}\right)_n$

(4) 

35. Which of the following organic compounds polymerizes to form the polyester Dacron?

(1) Propylene and para HO – (C_6H_4) – OH

(2) Benzoic acid an ethanol

(3) Terephthalic acid and ethylene glycol

(4) Benzoic acid and para HO – (C_6H_4) – OH

Re-AIPMT 2015

36. Caprolactam is used for the manufacture of :
(1) Terylene (2) Nylon - 6, 6
(3) Nylon - 6 (4) Teflon

AIPMT 2015

37. Bithional is generally added to the soaps as an additive to function as a/an :-
(1) Dryer (2) Buffering agent
(3) Antiseptic (4) Softner

38. Biodegradable polymer which can be produced from glycine and aminocaproic acid is :-
(1) PHBV (2) Buna - N
(3) Nylon 6, 6 (4) Nylon 2- nylon 6

NEET-I 2016

39. In a protein molecule various amino acids are linked together by :
(1) α-glycosidic bond (2) β-glycosidic bond
(3) peptide bond (4) dative bond

40. The **correct** statement regarding RNA and DNA, respectively is :
(1) The sugar component in RNA is arabinose and the sugar component in DNA is 2'-deoxyribose.
(2) The sugar component in RNA is ribose and the sugar component in DNA is 2'-deoxyribose.
(3) The sugar component in RNA is arabinose
(4) The sugar component in RNA is 2'-deoxyribose and the sugar component in DNA is arabinose.

41. Which one given below is a non-reducing sugar ?
(1) Maltose (2) Lactose
(3) Glucose (4) Sucrose

42. Natural rubber has
(1) All cis-configuration
(2) All trans-configuration
(3) Alternate cis-and trans-configuration
(4) Random cis-and trans-configuration

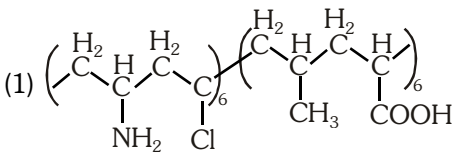
43. Which of the following is an analgesic ?
(1) Novalgin (2) Penicillin
(3) Streptomycin (4) Chloromycetin

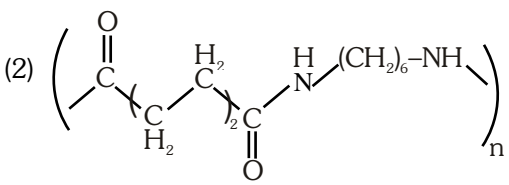
NEET-II 2016

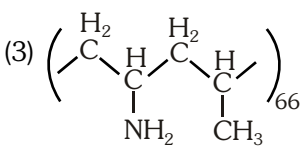
44. The central dogma of molecular genetics states that the genetic information flows from :-
(1) DNA → RNA → Proteins
(2) DNA → RNA → Carbohydrates
(3) Amino acids → Proteins → DNA
(4) DNA → Carbohydrates → Proteins

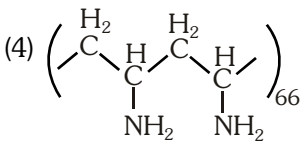
45. Which one of the following compounds shows the presence of intramolecular hydrogen bond ?
(1) Cellulose
(2) Concentrated acetic acid
(3) H_2O_2
(4) HCN

46. Which one of the following structures represents nylon 6,6 polymer ?

(1) 

(2) 

(3) 

(4) 

NEET(UG) 2017

47. Mixture of chloroxylenol and terpineol acts as :
(1) antiseptic (2) antipyretic
(3) antibiotic (4) analgesic

48. Which of the following statements is not correct :-
(1) Ovalbumin is a simple food reserve in egg-white
(2) Blood proteins thrombin and fibrinogen are involved in blood clotting
(3) Denaturation makes the proteins more active
(4) Insulin maintanis sugar level in the blood of a human body

NEET(UG) 2018

49. The difference between amylose and amylopectin is
(1) Amylopectin have $1 \rightarrow 4$ α-linkage and $1 \rightarrow 6$ α-linkage
(2) Amylose have $1 \rightarrow 4$ α-linkage and $1 \rightarrow 6$ β-linkage
(3) Amylopectin have $1 \rightarrow 4$ α-linkage and $1 \rightarrow 6$ β-linkage
(4) Amylose is made up of glucose and galactose

50. Which of the following compounds can form a zwitterion ?
(1) Aniline (2) Acetanilide
(3) Benzoic acid (4) Glycine

51. Regarding cross-linked or network polymers, which of the following statements is ***incorrect?***
(1) They contain covalent bonds between various linear polymer chains.
(2) They are formed from bi-and tri-functional monomers.
(3) Examples are bakelite and melamine.
(4) They contain strong covalent bonds in their polymer chains.

NEET(UG) 2019

52. Among the following, the narrow spectrum antibiotic is :-
(1) penicillin G (2) ampicillin
(3) amoxycillin (4) chloramphenicol

53. The biodegradable polymer is :-
(1) nylon–6,6 (2) nylon 2–nylon 6
(3) nylon–6 (4) Buna–S

54. The non-essential amino acid among the following is:
(1) valine (2) leucine
(3) alanine (4) lysine

NEET(UG) 2019 (ODISHA)

55. Which structure(s) of proteins remains(s) intact during denaturation process ?
(1) Both secondary and tertiary structures
(2) Primary structure only
(3) Secondary structure only
(4) Tertiary structure only

56. The polymer that is used as a substitute for wool in making commercial fibres is :-
(1) Melamine (2) nylon-6, 6
(3) polyacrylonitrile (4) Buna-N

57. The artificial sweetner stable at cooking temperature and does not provide calories is :-
(1) Saccharin (2) Aspartame
(3) Sucralose (4) Alitame

58. Match the catalyst with the process :-

	Catalyst		**Process**
(i)	V_2O_5	(a)	The oxidation of ethyne to ethanal
(ii)	$TiCl_4+Al(CH_3)_3$	(b)	Polymerisation of alkynes
(iii)	$PdCl_2$	(c)	Oxidation of SO_2 in the manufacture of H_2SO_4
(iv)	Nickel complexes	(d)	Polymerisation of ethylene

Which of the following is the correct option ?
(1) i-c, ii-d, iii-a, iv-b (2) i-a, ii-b, iii-c, iv-d
(3) i-a, ii-c, iii-b, iv-d (4) i-c, ii-a, iii-d, iv-b

NEET(UG) 2020

59. Sucrose on hydrolysis gives :
(1) α-D-Fructose + β-D-Fructose
(2) β-D-Glucose + α-D-Fructose
(3) α-D-Glucose + β-D-Glucose
(4) α-D-Glucose + β-D-Fructose

60. Which of the following is a cationic detergent ?
(1) Sodium dodecylbenzene sulphonate
(2) Sodium lauryl sulphate
(3) Sodium stearate
(4) Cetyltrimethyl ammonium bromide

61. Which of the following is a natural polymer ?
(1) poly (Butadiene-acrylonitrile)
(2) cis-1,4-polyisoprene
(3) poly (Butadiene-styrene)
(4) polybutadiene

62. Which of the following is a basic amino acid :

(1) Lysine (2) Serine

(3) Alanine (4) Tyrosine

NEET(UG) 2020 (COVID-19)

63. Which of the following is **not** true about chloramphenicol ?

(1) It inhibits the growth of only grampositive bacteria.

(2) It is a broad spectrum antibiotic.

(3) It is not bactericidal.

(4) It is bacteriostatic.

64. Which of the following statement is correct about Bakelite ?

(1) It is a cross linked polymer.

(2) It is an addition polymer.

(3) It is a branched chain polymer.

(4) It is a linear polymer.

65. The reaction of concentrated sulphuric acid with carbohydrates ($C_{12}H_{22}O_{11}$) is an example of

(1) Dehydration (2) Oxidation

(3) Reduction (4) Sulphonation

66. Deficiency of which vitamin causes osteomalacia?

(1) Vitamin A (2) Vitamin D

(3) Vitamin K (4) Vitamin E

NEET(UG) 2021

67. Given below are two statements:

Statement I :

Aspirin and Paracetamol belong to the class of narcotic analgesics.

Statement II :

Morphine and Heroin are non-narcotic analgesics. In the light of the above statements, choose the **correct** answer from the options given below.

(1) Both **Statement I** and **Statement II** are true.

(2) Both **Statement** I and **Statement II** are false.

(3) **Statement I** is correct but **Statement II** is false.

(4) **Statement I** is incorrect but **Statement II** is true.

68. he RBC deficiency is deficiency disease of:

(1) Vitamin B_{12} (2) Vitamin B_6

(3) Vitamin B_1 (4) Vitamin B_2

69. Which one of the following polymers is prepared by addition polymerisation ?

(1) Teflon (2) Nylon-66

(3) Novolac (4) Dacron

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	**1**	**3**	**2**	**1**	**2**	**4**	**4**	**1**	**1**	**2**	**3**	**4**	**1**	**4**	**2**
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	**2**	**3**	**3**	**2**	**1**	**2**	**4**	**4**	**4**	**2**	**4**	**4**	**2**	**4**	**4**
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	**4**	**3**	**4**	**4**	**3**	**3**	**3**	**4**	**3**	**2**	**4**	**1**	**1**	**1**	**1**
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	**2**	**1**	**3**	**1**	**4**	**4**	**1**	**2**	**3**	**2**	**3**	**3**	**1**	**4**	**4**
Que.	61	62	63	64	65	66	67	68	69						
Ans.	**2**	**1**	**1**	**1**	**1**	**2**	**2**	**1**	**1**						