UNIT - 26 - BIOMOLECULE

M.C.Q.

1) _____ is a biomolecule.
(A) protein (B) enzyme (C) lipid (D) all of above

2) _____ is not a biomolecule.
(A) vitamin (B) nucleic acid (C) formic acid (D) carbohydrate

3) what is the proportion of hydrogen and oxygen in molecule of all member of carbohydrate ?
(A) 2:1 (B) 1:1 (C) 1:2 (D) no certain ratio

4) which carbohydrate isn't soluble in water and tasteless ?
(A) monosaccharide (B) trisaccharide (C) oligosaccharide (D) none of above

5) which carbohydrate isn't soluble in water and tasteless ?
(A) lactose (B) dextrin (C) fructose (D) melitriose

6) general formula for_____ carbohydrate is $C_nH_{2n-6}O_{n-3}$
(A) Disaccharide (B) Trisaccharide (C) tetrasaccharide (D) polysaccharide

7) Cyclic configuration for glucose is called Glucopyranose , because its cyclic chain contains _____carbons &_____oxygens.
(A) 6,1 (B) 6,2 (C) 5,1 (D) 4,1

8) solubility of glucose in alcohol is
(A) not soluble (B) soluble (C) more soluble (D) soluble in more alcohol

9) When rotation of an optically active organic compound is measured as anticlockwise then if is know as
(A) lewrotation (B) levoratatory (C) (-) (D) ail of above

10) which carbon is anomeric carbon in cyclic structure of glucose?
(A) C_1 (B) C_2 (C) C_3 (D) C_4

11) which carbon is anomeric carbon in cyclic structure of fructose ?
(A) C_1 (B) C_2 (C) C_3 (D) C_4

12) what is the specific rotation of aqueous Solution of sucrose ? [before hydrolysis]
(A) +19° (B) $+52.5^0$ (C) $+66.5^0$ (D) 112^0

13) what's the name of phenomenon when rotation of sucrose solution reversed ?
(A) conversion (B) inversion (C) diversion (D) reversion

14) which optical rotation has been obtained by aqueous solution of sucrose mixture , which is produced before hydrolysis of and after hydrolysis of sucrose ?
(A) Dextrorotatory , levorotatory (B) levorotatory , Dextrorotatory
(C) levorotatory , levorotatory (D) Dextrorotatory , Dextrorotatory

15) two monosaccharide units of sucrose are linked by which carbon chain ?
(A) Cl-O-Cl (B) C2-O-C2 (C) C1-O-C6 (D) C1-O-C2

16) In sucrose α-D-(+)-glucose and β-D-(-)- Glucose are linked by_____ chain

(A) glycolipid (B) glycosidic (C) phospholipid (D) phosphosidic

17) which is non-reducing sugar?

(A) glucose (B) fructose (C) sucrose (D) A&B both

18) which is chosen as standard for Sweetness of sugar?

(A) sucrose (B) glucose (C) fructose (D) lactose

19) which substance is produced by heating sucrose at 486 K temperature ?

(A) sucralose (B) elitem (C) caramel (D) arneto

20) which substance is soluble in alcohol ?

(A) glucose (B) fructose (C) maltose (D) all of above

21) two monosaccharide units of maltose are linked by which carbon chain ?

(A) C_1-O-C_1 (B) C_1-O-C_2 (C) C_1-O-C_3 (D) C_1-O-C_4

22) which is reducing sugar?

(A) lactose (B) maltose (C) fructose (D) all of above

23) what are the sweetness index of fructose , glucose and lactose respectively

(A) 74,173,16 (B)16,173,74 (C) 16,74,173 (D) 173,74,16

24) which substance is produced before obtaining alcohol from the compound containing starch ?

(A) sucrose (B) maltose (C) lactose (D) A & C

25) by hydrolysis of which substance, we obtain two molecules of glucose?

(A) sucrose (B) maltose (C) lactose (D)A&B

26) by hydrolysis of which substance, we obtain one molecules of glucose ?

(A) lactose (B) sucrose (C) A&B (D) none

27) which sugar reduces fehling's solution and makes phenyl hydrazone with phenyl hygrazine ?

(A) maltose (B) lactose (C) A&B (D) none

28) which sugar doesn't reduce fehling's Solution ?

(A) sucrose (B) maltose (C) lactose (D) all of above

29) which sugar is hydrolyzed by emulsine enzyme ?

(A) sucrose (B) maltose (C) lactose (D) all of above

30) which sugar is dextrorotatory and indicates mutarotation ?

(A) sucrose (B) maltose (C)A&B (D) none

31) which sugar is dextrorotatory and doesn't indicate mutarotation ?

(A) sucrose (B) maltose (C) lactose (D) B&C

32) what is the specific rotation of aqueous solution of mixture , which is produced after hydrolysis of sucrose ?

(A) -20^0 (B) -92° (C) $+52.5^0$ (D) $+66.5^0$

33) The specific rotation in inverted sugar during hydrolysis due to specific rotation of glucose solution is_____.(the mixture of glucose and fructose obtained at the end of hydrolysis is called inverted sugar)

(A) -20^0 (B) -92^0 (C) $+52.5^0$ (D) +66.5°

34) The specific rotation in inverted sugar during hydrolysis due to specific rotation of fructose solution is_____ .(the mixture of glucose and fructose obtained at the end of hydrolysis is called inverted sugar)

(A) -20° (B) -92° (C) +52.5° (D) +66.5°

35) example of polysaccharide is

(A)starch (B)sucrose (C) cellulose (D)A&C

36) general formula for polysaccharide is

(A) $(C_6H_{10}O_5)_n$ (B)$C_{n+2}H_{2n}O_n$ (C)$C_{n+1}H_{2n}O$ (D)$C_nH_{2n}O_n$

37) _____ is the main component of cell walls of plants.

(A) cellulose (B) starch (C) protein (D) nuclic acid

38) in which solvent, cellulose is soluble ?

(A)water (B)chloroform

(C) ammoniacal cupric hydroxide (D) alcoholic potassium hydroxide

39) which sugar is not present in vegetable ?

(A)glucose (B)sucrose (C)maltose (D) lactose

40) which is not a sugar ?

(A) starch (B) sucrose (C) maltose (D) glucose

41) which substance in animal body can be Converted in glucose and also gives energy when required ?

(A) sucrose (B) glycogen (C) cellulose (D) starch

42) _____ is not a cellulose .

(A) nylon fibre (B) lilen (C) rayon (D) acetate fibre

43) protein is/are_____

(A) enzyme (B) hormones (C) antibodies (D) all of above

44) what are the names of scientist, who had obtained many amino acid from hydrolysis of protein ?

(A) Haworth & Hirst (B) Tollens & Tanret (C) Emil Fischer (D) all of above

45) which amino acid is known as C-terminal residue in alanylglycylphenylalanine ?

(A) alanine (B) glycine (C) phenyl alanine (D) none

46) molecular mass of polypeptid is_____

(A) 100 (B) upto 10000 (C)upto 20000 (D) upto 1 Crore

47) molecular mass of protein _____

(A) upto 1000 (B) upto 5000 (C) upto 10000 (D) >10000

48) the polypeptide chains run parallel and are held together by _____bonds.

(A) disulphide (B) covalent

(C) co-ordination-covalent bond (D) none

49) By which bond the polypeptide chains are held together in fibrous protein ?

(A) hydrogen bond (B) covalent bond (C) disulphide bond (D) A&C

50) which protein is insoluble in water,which is present in muscle ?

(A) myosin (B) albumin (C) keratin (D) insulin

51) in a-helix shaped protein , polypeptide chain is coild in helix shape approximate_____ amino acids are included per turn of helix

(A) 3.6 (B) 48 (C) 60 (D) 72

52) which isn't true reason of denaturation of protein ?

(A) detergent (B) change in pH (C) increase in temperature (D) none

53) which is the reason of denaturation of protein ?

(A) organic solvent (B) detergent (C) adding concentrate alkali (D) all

54) in certain clynical chemistry tests removal of all protein materials , which chemical is added to sample ?

(A) trichloro acetic acid (B) bezoic acid

(C) ethanoic acid (D) benzene sulphonic acid

55) which is called as coenzyme ?

(A) protein chain (B) inorganic component as cofactor

(C) organic component as co-factor (D) apoenzyme

56) Which of the following ions may be co-factor ?

(A) Zn^{2+}, Cu^{2+} (B) C^{4+}, Si^{4+} (C) CI^{-}, Br^{-} (D) PO_4^{3-},$S0_4^{2-}$

57) which of the following is true ?

(A) Coenzyme + Apoenzyme → Enzyme
(Active) (Active) (Active)

(B) Coenzyme + Apoenzyme → Enzyme
(Active) (inactive) (Active)

(C) Coenzyme + Apoenzyme → Enzyme
(inactive) (Active) (Active)

(D) Coenzyme + Apoenzyme → Enzyme
(inactive) (inactive) (Active)

58) sucrose is hydrolyzed by_____enzyme

(A) zymase (B) invertaze (C) emulsin (D) lipase

59) fat soluble vitamin is

(A) H (B) A (C) C (D) B

60) haemorrhage disease caused by deficiency of_____vitamin

(A) Calciferol (B) phylloquinone (C) Tocopherol (D) retinol

61) which vitamin isn't synthesizes from vegetable ?

(A) Cyanocobalamine (B) pyridoxine (C)thiamine (D) Tocopherol

62) which vitamin's source is yeast?

(A) B1 (B) H (C) B6 (D) all

63) which disease caused by deficiency of vitamin E ?

(A) Sterility (B) skin disease

(C) bone deformation in children (D) paralysis

64) which substance isn't formed by complete hydrolysis of nucleic acid ?

(A) hexos sugar (B) phosphoric acid

(C) hetrocyclic bases which contains nitrogen element (D) pentose sugar

65) purine base is

(A) G (B) C (C) T (D) U

66) pyrimidine base is

(A) C (B) T (C) U (D) All

67) which base isn't present in DNA ?

(A) A (B) G (C) C (D) U

68) which base isn't present in RNA ?

(A) G (B)T (C) U (D)C

69) a unit formed by attachment of a base to_____ position of sugar is known as nucleoside

(A) Cl (B) C2 (C) C3 (C) C4

70) unit formed by attachment of which carbon of nucleoside to phosphate ion is known as nucleotide ?

(A) Cl (B)C2 (C)C3 (C)C4

71) two nucleosides are joined together by phosphodiester linkage, this linkage is formed between _____ of one sugar and _____ of other sugar.

(A) Cl ,C1 (B) Cl, C3 (C) C3, C5 (D) C5,C5

72) structure of DNA is look alike _____

(A) spiral straircase (B) double helix (C) twisted rope (D) all

73) who proposed that structure of DNA is double helix ?

(A) luis & pouling (B) HC crick & JDWatson

(C) howarth & hirst (D) tallence & tenrate

74) by which bond , base of one nucleotide and base of another nucleotide are joined together ?

(A) hydrogen bond (B) covalent bond (C) coordination covalent bond (D) ionic

75) which pairs of bases are true for linkage between two chain of polynucleiotide ?

(A) adenine-Thymine (B) adenine- guranine

(C) guanine-thymine (D) adenine-cytosine

76) how many hydrogen bonds between base G and Base C are present in structure of DNA ?

(A) 1 (B) 2 (C) 3 (D) no certain number

77) if a person bleeds by his gingiva , so what would you suggest to eat to prevent the disease ?

(A) vegetable oil (B) citrus fruits (C) cheese (D) milk

78) which subgroup isn't possible for vitamin ?

(A)B1 (B) B4 (C) B6 (D) B12

79) _____ term is familiar for vitamin nowdays

(A) vitamin (B) vitamine (C) vitmin (D) viatamine

80) which sugar indicates mutarotation ?

(A) glucose (B) fructose (C) maltose (D) all

81) whichsugarisn'tindicatingmutarotation?

(A) sucrose (B) lactose (C) maltose (D) none

82) molecularmass of_____ carbohydrate is 180 gm/mol

(A) glucose (B) fructose (C) galactose (D) all

83) molecularmassof_____ sugar is 342 gm/mol

(A) cellobios (B) maltose (C) A&B (D)none

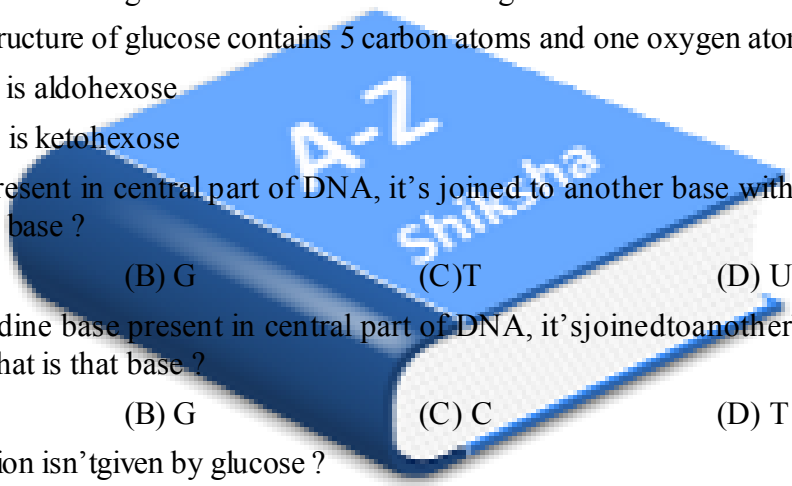
84) Glucose is known as glucopyranose because

(A) cyclicstructure of glucose contains 6 memberring

(B) cyclicstructure of glucose contains 5 carbon atoms and one oxygen atoms

(C) glucose is aldohexose

(D) glucose is ketohexose



85) one base present in central part of DNA, it's joined to another base with 3 hydrogen bond, so what is that base ?

(A)A (B) G (C)T (D) U

86) one pyrimidine base present in central part of DNA, it'sjoinedtoanotherbase with 2 hydrogen bond, so what is that base ?

(A) A (B) G (C) C (D) T

87) which reaction isn'tgiven by glucose ?

(A) glucose is oxidized by tollen's reagent

(B) glucose gives violet color with skiff's reagent

(C) Fehling'ssolution is reduced by glucose

(D) glucose gives addition product with sodium bisulphite

88) the crystal of glucose obtained from which solvent are dissolved in water and the specific rotation of this freshly prepared solution of glucose is +112 ?

(A) ethyle alcohol (B) aceticacid (C) pyridine (D) A & B

89) mutarotation for aqueous solution of glucose is_____

(A)+19° (B) +52.5° (C) +112° (D) +119°

90) which type of carbon is called anomeric carbon in cyclic structure of glucose ?

(A) it's joined with aldehyde group in open chain structure

(B) it's carbonyl carbon in open chain structure of glucose

(C) it's joined with carboxylic group in open chain structure

(D) none

91) if the solution of glucose shows a specific rotation of +52.5 then mixture of α - D^+ glucose ___% and [α - D + glucose_____ %

(A) 25,75 (B) 36,64 (C)64,36 (D) 33,67

92) glucose known as_____

(A) aldopentose (B) ketopentose (C) aldohexos (D) ketohexose

93) fructose is known_____

(A) aldopentose (B) ketopentose (C) aldohexos (D) ketohexose

94) which substance is insoluble in water?

(A) starch (B) sucrose (C) maltose (D) lactose

95) starch is mixture of amylose_____% and amylopectin of_____%

(A) 10,90 (B) 20,80 (C) 30,70 (D) 80,20

96) in structure of amylopectin α-D+glucose units are joined by C1-0-C4linkage, but some α-D+ glucose units are joined by _____ linkage

(A) C_1-O-C_2 (B) C_1-O-C_5 (C) C_1-O-C_6 (D) C_2-O-C_4

97) in structure of amylose α-D+glucose units are joined by_____linkage.

(A)Cl-0-C2 (B) C1-0-C4 (C) C1-0-C3 (D) C1-0-C6

98) cellulose consist of long chain of_____

(A) α-D+glucose (B) α-D+fructose (C) β-D+ glucose (D) β-D-glucose

99) in cellulose 2 monosaccharide molecule are joined by_____linkage

(A) C_1-O-C_2 (B) C_1-O-C_3 (C) C_1-O-C_4 (D) C_1-O-C_6

100) structure of all α-aminoacid posses _____aminogroup.

(A) primary (B) secondary (C) tertiary (D) A&B

101) proline amino acid contains_____amino group

(A) primary (B) secondary (C) tertiary (D) A&B

102) essential amino acid is

(A) valine (B)histidine (C)methionine (D)all

103) some amino acids are known as none essential aminoacid because

(A) they are not necessaryfor normal body reaction

(B) they are synthesized in body

(C) instead of those another amino acid are obtained through diet

(D) they cause disease in body

104) amino acid contains

(A) aminogroup (B) amide group (C) carboxyl group (D) A&C

105) in dry solid form the amino acid exists as dipolar molecule in which carboxyl group is present as carboxylate ion & amino group is present as amonium ion this dipolar ion is also known as_____ ion

(A) twitterion (B) zwitterion (C) carboxeminium (D) all

106) in electric field the pH value at which amino acid doesn't migrate towards any electrode is called_____

(A) neutral point (B) amphotericpoint (C) isoelectricpoint (D) all

107) by which method a mixture of amino acid can be separated

(A) breedingArc (B) electrophoresis (C) chromatography (D) B&C

108) which bond is formed to reaction between amino group of 1-amino acid and carboxyl group of another amino acid

(A) esterbond (B) amide bond (C) peptide bond (D) B&C

109) three different amino acids joined in different sequence to form different types of tri-peptide

(A)2^3 (B)3^3 (C)6 (D) 3

110) which ofthe followingsentence is true or false ? (symbol fortrue isT, and forfalse it's F)

(i) group attached to C_1 in cyclicstructure of glucose acts as reducingagent group, this glucose is one monosaccharide unit of sucrose

(ii) group attached to C_1 in cyclicstructure of glucose acts as reducing agent group, this glucose is one monosaccharide unit of maltose

(iii) in maltose two monosaccharide units are joined to each other

(iv) group attached to C_4 in cyclicstructure of galactose acts as reducing agent group

(A) FFTF (B) FTTF (C) TFFT (D)TTTT

111) starch is mixture of

(A) zymez (B) amiloze (C) amilo pectine (D) B&C

112) cellulose consist of long chain of

(A) α-D+glucose (B) β-D+glucose (C) fructose (D) A&B

113) Answer, whether the following statements are true of false, & select properchoice !

(i) Tyrosine got its name because of its sweet taste

(ii) glycine got its name because it was first obtained from cheese

(iii) glutamic is acidic amino acid

(iv) arginine is basicaminoacid

(v) alanine is neutral amino acid

(vi) glycin isn't neutral amino acid

whethergiven statements are true or false

(a) (i, ii, iii) -true (b) (i, ii, vi) -false (c) (iii, iv, v)-true (d) (ii)-false,(ii,iv)-true

Multiple choice-

(A) a-F,b-T,c-T,d-F (B) a-T,b-T,c-T,d-F

(C) a-F,b-T,c-F,d-T (D) a-F,b-T,c-T,d-T

114) Amino acid is given in Column-1 & its nature is given in Column-ll so match the following

Column 1	Column II
i. lysine	a. acidic
ii. glysine	b. basic
iii. arginine	c. nutral
iv. alanine	

(A) i-b,ii-c,iii-b,iv-c (B) i-b,ii-a,iii-b,iv-c (C) i-a,ii-a,iii-b,iv-c (D) i-c,ii-b,iii-a,iv-b

115) Match section 1 & 2

SECTION I	SECTION II
i. N-terminal residu	a. aminogroup written at right side in peptide chain
ii. C-terminal residue	b. carboxyl group written at leftside in peptide chain
	c. aminogroup written at leftside in peptide chain
	d. carboxyl group written at rightside in peptide chain

(A) i-a,ii-b (B) i-c,ii-d (C) i-b,ii-c (D) i-b, ii-a

116) carbohydrate given in column I and its example given in column II, select proper choice

SECTION I	SECTION II
i. monosaccharide	a. raffinose
ii. disaccharide	b. fructose
iii. trisaccharide	c. stachyose
iv. tetrasaccharide	d. glycogene
v. polysaccharide	e. cellobiose

(A) i-b,ii-e,iii-a,iv-d,v-c (B) i-b,ii-e,iii-a,iv-c,v-d

(C) i-b,ii-d,iii-a,iv-e,v-c (D) i-a,ii-b,iii-c,iv-d,v-e

117) chemical reactions are given in section I and chain or group present in structure of glucose are given in section II. Match Section-I with Section-II

Section-I	Section-II
i. glucose forms oxime with hydroxyl amine	a. OHC-C-C-C-C-C chain is present
ii. glucose is oxidized by nitric acid and give saccharic acid	b. carbonyl group is present
iii. glucose is oxidized by bromine water and givegluconicacid	c. OHC-C(OH)-C(OH)-C(OH)-C(OH)-CH_2OH chain is present
iv. glucose forms penta-acitile glucose with aceticenhydride in presence of pyridine	d. OHC-C-C-C-C-CH_2OH chain is present

(A) i-b,ii-d,iii-a,iv-c (B) i-a,ii-b,iii-c,iv-d (C) i-d,ii-biii-a,iv-c (D) i-b,ii-a,iii-d,iv-c

118) the observered angle of rotation of 6.25 g of sucrose in 25 ml of aqueous solution in a polarimeter tube 15 cm long is $+66.5^0$ what is the specific rotation of solution of sucrose?

(A) 13.3^0 (B) 66.5^0 (C) 24.9^0 (D) 26.6^0

119) the observered angle of rotation of 20g of sucrose in 40 ml of aqueous solution in a polarimeter tube 30cm long is +28.5, what is the specific rotation of solution of glucose ?

(A) 19 (B) 52.5 (C) 57 (D) 112

120) which of the followingsentence istrue or false ?

(symbol fortrue isT, and forfalse it's F)

i. in maltose anomericcarbon of two monosaccharide units are involved in formation of glycosidicbond

ii. in sucrose anomericcarbon of one monosaccharide unit is involved in formation of glycosidicbond

iii. in lactose anomericcarbon of one monosaccharide unit is involved in formation of glycosidicbond

(A) FFT (B) TTF (C)TFT (D) FTT

121) structure of protein given in column I, Shape & example of protein is given in Column II & its bond isgiven in Column III, so match following,

COLUMN I	COLUMN II	COLUMN III
i. primary structure	a. β- platinated	P. hydrogen bond
ii. secondary structure	b. myoglobin	Q. disulphide bond
iii. tertiary structure	c. insulin	R. ionicbond
iv. quaternary structure	d. hemoglobin	S. vanderwall's force

(A) i-c-Q, ii-a-P, iii-b-R, iv-d-S (B) i-c-Q. ii-a-P- iii-b-P,QR,S, iv-d-P,QR

(C) i-b-P, ii-a-S, iii-c-Q iv-d-QR (D) i-b-P,QR, ii-d-R, iii-a-Q iv-c-P,S

122) which effects are show in denaturation Of protein ?

i. protein forming insoluble form

ii. interference with the hydrophobic interaction in protein

iii. interference with the hydrophilic interaction in protein

iv. protein maintain their biological activity

v. protein loss their biological activity

vi. hydrogen bond is increase to adding concentrate acid in protein

(A) (ii,iv,v) (B) (i,ii,iv) (C) (i,iii,v) (D) (i,ii,iv,vi)

123) solubility of vitamin & sources are given in column-1 and vitamin isgiven in column II

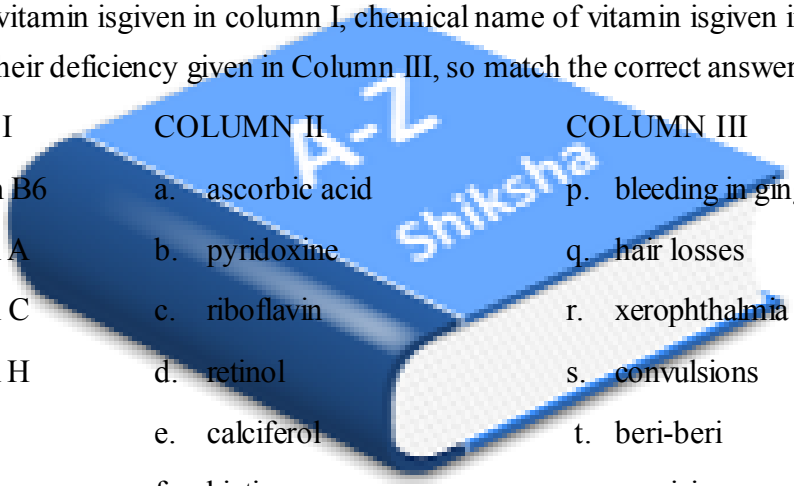
COLUMN - I	COULMN II
i. fat soluble vitamin	a. vitamin-A
ii. watersoluble vitamin	b. vitamin-B
iii. both fat & watersoluble vitamin	c. vitamin-C
iv. synthezisesfrom carotene in human body	d. vitamin-D
v. synthezises in skin with the help of sunlight	e. vitamin-E
vi. formed by microorganism in intestine	f. vitamin- H
	g. vitamin-K

(A) (i-b,c) (ii-a,d,e,g) (iii-f) (iv-a) (v-d) (vi-g) (B) (i-a,d,e,g) (ii-b,c) (iii-f) (iv-a) (v-d) (vi-b,g)

(C) (i-b,a) (ii-c,d,e,g) (iii-f) (iv-c) (v-a,d) (vi-e,g) (D) (i-f) (ii-a,d,e,g) (iii-d)(iv-d) (v-b,c) (vi-a)

124) Symbol of vitamin isgiven in column I, chemical name of vitamin isgiven in column II & disease caused by their deficiency given in Column III, so match the correct answers

COLUMN I	COLUMN II	COLUMN III
i. vitamin B6	a. ascorbic acid	p. bleeding in gingiva
ii. vitamin A	b. pyridoxine	q. hair losses
iii. vitamin C	c. riboflavin	r. xerophthalmia
iv. vitamin H	d. retinol	s. convulsions
	e. calciferol	t. beri-beri
	f. biotin	u. pernicious anemia



(A) (i-c,t) (ii-d,r) (iii-a,p) (iv-f,u) (B) (i-e,q) (ii-a,u) (iii-bs,) (iv-f,t)

(C) (i-b,s) (ii-d,r) (iii-e,p) (iv-c,s) (D) (i-b$_y$s) (ii-d,r) (iii-a,p) (iv-f,q)

125) which of thefollowingsentence istrue or false ?

(symbol for true is T and for false is F)

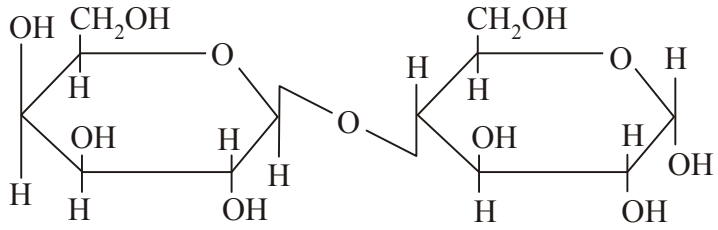
i. message forthe synthesis of a specific protein is present in DNA

ii. cytosine base is derivatives of pyrimidine

iii. β-D ribose sugar present in DNA

iv. DNA is the exclusively responsible for maintaining the identity of different species of organism upto 100 years

(A) TTFT (B) FTFF (C) FTFT (D) FFFF

126) 

Structure P Structure Q

Structure R is formed by Joining structure P and Q, so give the namesof P, Q, R

(A) P = α - D + glucose, Q = β - D + galectose R = α + lactose

(B) P = β - D + galectose, Q = α - D + glucose R = α + lactose

(C) P = α - D + glucose, Q = α - D + galectose R = α + lactose

(D) P = β - D + galectose, Q = β - D + glucose & β - D + glucose ?

127) what are α - D+glucose & β - D + glucose?

(A) epimer (B)anomer (C) enantiomer (D) confirmer

128) which statement is appropriate for anomer of glucose ?

(A) they are isomers of glucose which contain different structure with C_1 & C_4

(B) theyare isomers of glucose which contain different structure with C_1

(C) they are enantiomers of glucose

(D) they are mixture of D-glucose&L- glucose

129) from which carbon of sugar, hetrocyclic base and phosphate ester are joined in both DNA & RNA ?

(A) base of sugarwith C_5 & phosphate of sugar with C_2

(B) base of sugarwith C_2 & phosphate of sugar with C_5

(C) base of sugarwith C_5 & phosphate of sugarwith C_1

(D) base of sugarwith C_1 & phosphate of sugarwith C_5

130) which purine bases are joined in DNA ?

(A) cytosine & adenine

(B) cytosine & guanine

(C) adenine &guanine

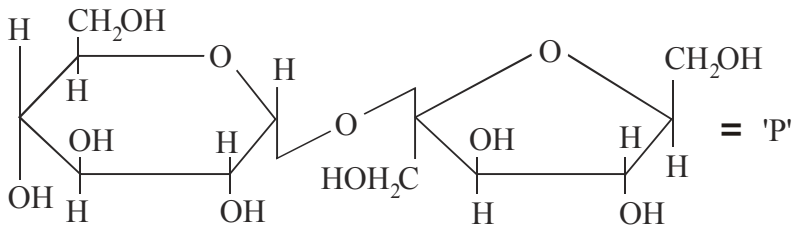
(D) adenine &thymine

131) which pyrimidine bases are joined in DNA ?

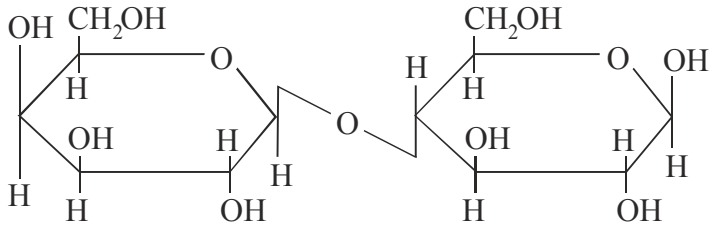
(A) cytosine & adenine (B) cytosine & guanine

(C) cytosine & uracil (D) cytosine & thymine

132) which statement is true of false for following structure of sugar?



= 'P'



= 'Q'

i. P is reducing sugar & q is non reducing sugar

ii. P is non-reducing sugar & q is reducing sugar

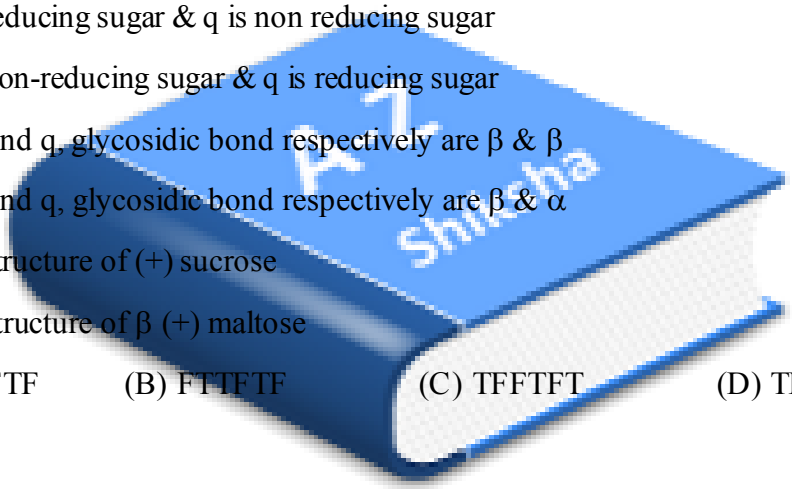
iii. in p and q, glycosidic bond respectively are β & β

iv. in p and q, glycosidic bond respectively are β & α

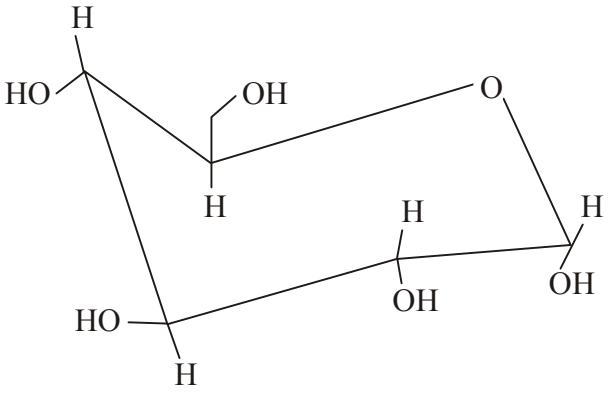
v. p is structure of (+) sucrose

vi. q is structure of β (+) maltose

(A) FTFFTF (B) FTTFTF (C) TFFTFT (D) TFFTTT



133)



Given Structure of carbohydrate is

(A) Ketohexos (B) aldohexos

(C) β-furanose (D) β–pyranose

134) P is responsible for heredity & P is formed by Qand R. So give the name for P, Q and R.

(A) P = chromozomes Q = protein R = nucleicacid

(B) P = chromozomes Q = petrocine R = nucleic acid

(C) P = nucleicacid Q= chromozomes R = chromozomes

(D) p = DNA Q = sugar R = adenine

135) Scientists names are given in Column I, their contribution & researches in science is given in Column II, match the correct answer

COLUMN I	**COLUMN II**
i. Haworth & Hirst	a. proposed a double helix structure of DNA
ii. Emil Fischer	b. suggested that reaction between amino group of one aminoacid and carboxyl group of anotheraminoacid losses watermolecules and forms amide
iii. Watson & crick	c. suggested that glucose molecule may contain pyranose ring
	d. determined the configuration of almost all aldopentose and aldohexose.
	e. mechanism of enzyme can be explained by the lock& key model

(A) i-c, ii-d,e, iii-b (B) i-b, ii-d,e, iii-a (C) i-c, ii-b,d , iii-a (D) i-a, ii-b,d,e, iii-c

ANSWER KEY

1	D	21	D	41	B	61	A	81	A	101	B	121	B
2	C	22	D	42	A	62	D	82	D	102	D	122	C
3	D	23	D	43	D	63	A	83	C	103	B	123	B
4	D	24	B	44	C	64	A	84	B	104	D	124	D
5	B	25	B	45	D	65	A	85	B	105	B	125	B
6	C	26	C	46	B	66	D	86	D	106	C	126	B
7	C	27	C	47	D	67	D	87	B	107	D	127	B
8	A	28	A	48	A	68	B	88	D	108	D	128	B
9	D	29	C	49	D	69	A	89	B	109	C	129	D
10	A	30	B	50	A	70	D	90	B	110	B	130	B
11	B	31	A	51	A	71	C	91	B	111	D	131	D
12	C	32	A	52	D	72	D	92	C	112	B	132	B
13	B	33	C	53	D	73	B	93	D	113	D	133	B
14	A	34	B	54	A	74	A	94	A	114	A	134	A
15	D	35	D	55	C	75	A	95	B	115	B	135	C
16	B	36	A	56	A	76	C	96	C	116	B		
17	A	37	A	57	D	77	B	97	B	117	A		
18	A	38	C	58	B	78	B	98	C	118	C		
19	C	39	D	59	B	79	A	99	C	119	A		
20	B	40	A	60	B	80	D	100	A	120	A		