

**C**

DF-3037
Second Year B. Sc. (Medical Technology)
(Sem. III) Examination
March / April – 2016
MT-07 : General Biochemistry - I

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

<p>નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : SECOND YEAR B. Sc. (MEDICAL TECHNOLOGY) (SEM. 3)</p> <p>Name of the Subject : MT-07 : GENERAL BIOCHEMISTRY - 1</p> <p>Subject Code No. : 3 0 3 7 Section No. (1, 2,.....) : Nil</p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; width: 100%;">Student's Signature</div>
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- (2) This exam contains 50 multiple choice questions, each worth 1 mark.
- (3) Choose only ONE most appropriate answer per question.
- (4) Do not crease or fold the answer sheet.

***O.M.R. Sheet ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ
O.M.R. Sheet-ની પાછળ છાપેલ છે.***

***Important instructions to fillup O.M.R. Sheet
is given on back side of the provided O.M.R. Sheet.***

- 1 Esters of fatty acids with higher alcohol other than glycerol are called as:
 (A) Waxes (B) Terpenoids
 (C) Oils (D) Polyesters
- 2 Oligosaccharide contains,
 (A) 3 to 10 sugars
 (B) All of these
 (C) >2Carbons
 (D) 3 to 10 carbons
- 3 Following is not an example of reducing sugar :
 (A) Maltose (B) None of these
 (C) Glucose (D) Trehlose
- 4 Lysolecithin and fatty acid is formed due to breakdown of lecithin by which enzyme ?
 (A) Phospholypase C
 (B) Phospholypase D
 (C) Phospholypase A₁
 (D) Phospholypase A₂
- 5 Fat is stored in our body in,
 (A) Adipose tissue
 (B) Blood
 (C) Liver
 (D) Kidney
- 6 Which lipid is helpful in vision ?
 (A) Dipalmityl lecithin
 (B) Docosahaxanoic acid
 (C) Phospholipid
 (D) Bile salt
- 7 Derived lipids are obtained from hydrolysis of,
 (A) Compound lipid
 (B) All of these
 (C) TG
 (D) Simple lipid
- 8 A body of 70 kg person contains _____ TG which provides _____ energy.
 (A) 11 Kg and 100,000 Kcal
 (B) 11 gm and 100,000 cal
 (C) 11 gm and 100,000 Kcal
 (D) 11 Kg and 100,000 cal
- 9 Enzymes involve in enzymatic estimation of TG are,
 (A) Kinase (B) All of these
 (C) Lipase (D) Oxidase
- 10 Wax contains unsaturated fatty acid on carbon number,
 (A) 3 (B) None
 (C) 1 (D) 2

- 11 The optically inactive amino acid is :
(A) Threonine (B) Valine
(C) Glycine (D) Serine
- 12 Proteins contain mostly :
(A) DL-Amino acids
(B) Both L- α - amino acids and D-amino acids
(C) L- α - amino acids
(D) D-amino acids
- 13 _____ is an aromatic amino acid.
(A) Taurine (B) Arginine
(C) Lysine (D) Tyrosine
- 14 Which amino acid is known as helix breaker ?
(A) Leucine
(B) Phenyl alanine
(C) Alanine
(D) Proline
- 15 Non essential amino acids are,
(A) not important in the metabolism
(B) not synthesized in the body
(C) not a components of tissue proteins
(D) synthesized in the body
- 16 Ninhydrin test is positive with :
(A) Serotonin
(B) glycosidic bond
(C) Peptide bond
(D) α -Amino acids
- 17 An example of polar amino acid with positive charge on R group is :
(A) Arginine
(B) Valine
(C) Alanine
(D) Leucine
- 18 An example of metalloprotein is :
(A) Gelatin
(B) Salmine
(C) Casein
(D) Ceruloplasmin
- 19 In α -helix, the hydrogen bond is observed between _____ and _____ amino acid.
(A) 1 and 4
(B) 1 and 5
(C) 1 and 2
(D) 1 and 3
- 20 Haemoglobin contains _____ polypeptide chains.
(A) 3 (B) 4
(C) 1 (D) 2

- 21 Enzymes, which are produced in inactive form in the living cells, are called:
- (A) Apoenzymes
 - (B) Proenzymes
 - (C) Papain
 - (D) Lysozymes
- 22 Lyases are present in class _____.
- (A) 4
 - (B) 6
 - (C) 1
 - (D) 3
- 23 Fischer's 'lock and key' model of the enzyme action implies that
- (A) Substrates change conformation prior to active site interaction.
 - (B) The active site is flexible and adjusts to substrate.
 - (C) The active site is complementary in shape to that of substance only after interaction.
 - (D) The active site is complementary in shape to that of substance.
- 24 Inolase inhibition by fluoride is an example of,
- (A) Irreversible Non competitive inhibition
 - (B) Irreversible competitive inhibition
 - (C) Reversible competitive inhibition
 - (D) Reversible Non competitive inhibition
- 25 Enzyme involved in joining together two substrates is :
- (A) Gunaine deaminase
 - (B) Arginase
 - (C) Glutamine synthetase
 - (D) Aldolase

- 26 A coenzyme containing aromatic hetero ring is :
- (A) Coenzyme Q
 - (B) Biotin
 - (C) TPP
 - (D) Lipoic acid
- 27 Lineweaver — Burk double reciprocal plot is related to
- (A) Temperature
 - (B) Both Substrate concentration and Enzyme activity
 - (C) Substrate concentration
 - (D) Enzyme activity
- 28 In neutral fats, the unsaponifiable matter includes :
- (A) Phospholipids
 - (B) Cholesterol
 - (C) Hydrocarbons
 - (D) Triacylglycerol
- 29 LDH have _____ isoenzymes.
- (A) 6
 - (B) 8
 - (C) 4
 - (D) 5
- 30 Trypsin and Chymotrypsin are example showing _____ specificity.
- (A) Substrate
 - (B) Group relative substrate
 - (C) Optical
 - (D) Reaction

- 31 Following is not a triose sugar :
- (A) Erythrose
 - (B) All of these
 - (C) Fructose
 - (D) Ribose
- 32 The smallest monosaccharide having furanose ring structure is :
- (A) Glucose
 - (B) Fructose
 - (C) Erythros
 - (D) Ribose
- 33 Iodine gives a red colour with :
- (A) Glycogen
 - (B) Inulin
 - (C) Starch
 - (D) Dextrin
- 34 Amylose is a constituent of :
- (A) Glycogen
 - (B) None of these
 - (C) Starch
 - (D) Cellulose
- 35 Tautomerism is :
- (A) Shift of both
 - (B) None of these
 - (C) Shift of hydrogen
 - (D) Shift of carbon
- 36 Glycosides are found in many :
- (A) Minerals
 - (B) Nucleoproteins
 - (C) Vitamins
 - (D) Drugs
- 37 Cellulose is made up of the molecules of :
- (A) Both α glucose and β glucose
 - (B) None of these
 - (C) α glucose
 - (D) β glucose

- 38 Iodine solution produces no color with :
(A) Erythroextrin
(B) Glycogen
(C) Cellulose
(D) Starch
- 39 N-acetylneuraminic acid is an example of :
(A) Glucuronic acid
(B) Hippuric acid
(C) Sialic acid
(D) Mucic acid
- 40 Following is a specific test for ketohexoses :
(A) Molisch test
(B) None of these
(C) Seliwanoff's test
(D) Osazone test
- 41 α -D-Glucose and β -D-glucose are related by :
(A) Multirotation
(B) Ketoenol pair
(C) Epimers
(D) Anomers
- 42 On boiling Benedict's solution is not reduced by :
(A) Maltose
(B) Sucrose
(C) Fructose
(D) Lactose
- 43 Starch and glycogen are polymers of :
(A) α -D-Glucose
(B) Galactose
(C) Fructose
(D) Mannose
- 44 Following is not an example of compound lipid :
(A) Fatty acid
(B) Phospholipid
(C) Glycolipid
(D) Sulfolipid

- 45 Deterioration of food (rancidity) is not prevented by :
- (A) Vitamin D
 - (B) All of these
 - (C) Phenol
 - (D) Vitamin E
- 46 Lecithin contains _____ as a nitrogenous compound.
- (A) Ethanol amine
 - (B) Inositol
 - (C) Serine
 - (D) Choline
- 47 PUFA can take up _____ number of Hydrogens by Hydrogenation process.
- (A) >2
 - (B) None
 - (C) 1
 - (D) 2
- 48 Free fatty acids are transported in the blood :
- (A) Combined with β -lipoprotein
 - (B) In unbound free salts
 - (C) Combined with albumin
 - (D) Combined with globulin
- 49 In 50% of cholesterol esters contain _____ as a fatty acid.
- (A) Linolenic acid
 - (B) Linoleic acid
 - (C) Palmitic acid
 - (D) Arachidonic acid
- 50 Acroleic test is given by :
- (A) Glycosides
 - (B) Sphingol
 - (C) Cholesterol
 - (D) Glycerol