

Karunya Institute of Technology & Sciences
(Declared under section-3 of the UGC Act, 1956)
End Semester Examination – Nov/Dec – 2016

Semester : 2016-17 ODD

Code : 15BT2001

Duration : 3 hrs

Sub. Name : Medical Biochemistry

Max. marks : 100

Q. No.	Questions				Course outcome	Marks
PART-A(20X1=20 MULTIPLE CHOICE QUESTIONS)						
1.	Which among the following is an aromatic amino acid ?					
	a. Methionine	b. glycine	c. lysine	d. tyrosine	Co1	(1)
2.	Amino acids containing both positive and negative ionic groups known as?					
	a. anion	b. cation	c. Zwitterion	d. ions	Co1	(1)
3.	Pick out the fat soluble vitamin from the list					
	a. Vitamin A	b.riboflavin	c. vitamin C	d. thiamine	Co1	(1)
4.	Identify the compound present in vitamin D					
	a.calcitriol	b.carotene	c. Glutamic acid	d.glycine	Co1	(1)
5.	Amino acids are ampholytes because they can function as ?					
	a. acid or base	b. polar	c. non polar	d. dipolar	Co1	(1)
6.	Find out the globulin from the given list					
	a. thymine	b. vitelline	c. uracil	d. Ribose	Co1	(1)
7.	Which among the following is the albumin present?					
	a. Chitin	b. ovalbumin (egg)	c. Cellulose	d. uracil	Co1	(1)
8.	Identify the compound responsible for dim light vision					
	a. Heparin	b.rods	c. cones	d. xylose	Co1	(1)
9.	The loss of native protein structure is known as?					
	a. chiral	b. denaturation	c. renaturation	d. spiral	Co1	(1)
10.	Pick out the basic unit of genetic information present in the list:					
	a. DNA	b. RNA	c. Glucose	d.proteins	Co1	(1)
11.	Identify the compound responsible for bright light vision					

	a. leucine	b.cones	c. rods	d. valine	Co1	(1)
12.	Identify the vitamin responsible for collagen formation					
	a. Vitamin C	b.Vitamin E	c. Vitamin D	d. DNA	Co1	(1)

13.	Vitamin responsible for iron metabolism				Co1	
	a.Vitamin A	b.Vitamin C	c.Vitamin B	d. Vitamin K		(1)
14	Identify the coenzyme present in vitaminB ₁					
	a.flavoprotein	b.thiamine pyrophosphate	c. cytosine	d. adenine	Co1	(1)
15.	Which test is involved in identifying the proteins?					
	a. Orcinol	b. DNS	c. Lowry	d.dimethyl	Co1	(1)
16.	Which among the protein is present in DNA?					
	a. histone	b. glycine	c. lysine	d. tyrosine	Co1	(1)
17.	Identify the iminoacid found in protein structure:					
	a. arginine	b. proline	c. histidine	d.lysine	Co1	(1)
18.	The deficiency of vitamin c results in				Co1	
	a. Scurvy	b. beri beri	c. edema	d.neuropathy		(1)
19.	Pick up the peptide from the given list:				Co1	
	a. Plasmalogen	b. Sphingomyelin	c. oxytocin	d. Galactose		(1)
20.	The deficiency caused by vitamin D leads to				Co1	
	a. rickets	b. keratomalacia	c. xerophthalmia	d. night blindness		(1)
21.	The major site of cholesterol biosynthesis in humans				Co1	
	a. liver	b. intestine	c. gall bladder	d. pancreas		(1)
22.	The precursor of a component of fatty acyl synthase				Co1	
	a. coenzyme Q	b. carnitine	c. lipoic acid	d. cytochrome		(1)
23	Lipids are formed by a chemical reaction between				Co1	
	a. two glucose molecules	b.glycerol and three fatty acid molecule	c. amino acid molecule	d.none of the above		(1)
24.	Ketosis is the consequence of increased blood levels of				Co1	
	a.acetoacetate	b.acetyl CoA	c.HMG CoA	d.ethanol		(1)
25.	Which of the following dietary components influences heart disease				Co1	
	a.saturated fat	b. unsaturated fat	c.poly unsaturated fat	d.palm oil		(1)
26.	Which sugar is present in gangliosides				Co1	
	a. neuraminic acid	b. galacose	c.fat	d. Glucose		(1)
27.	During prolonged starvation brain oxidizes significant amounts of				Co1	
	a. neuraminic acid	b. galacose	c.fat	d. Glucose		(1)
28.	Utilization of ketone bodies occur in all the following tissues except				Co1	
	a. Liver	b. skeletal muscles	c.renal cortex	d. cardiac muscles		(1)
29.	Collagen contains a carbohydrate moiety linked to				Co1	
	a. Serine	b. Hydroxyproline	c.hydroxylysine	d. threonine		(1)
30	An enzyme found in liver and not in skeletal muscles				Co1	
	a. hexokinase	b.Glucose6 phosphatase	c.dehydrogenase	d. kinase		(1)
31	Which of the following not required for transketolase				Co1	
	a.PP	b.TPP	c.cobalamine	d. kinase		(1)
32	The mitochondrial membrane are permeable to				Co1	
	a.Fatty acyl ACP	b.Fatty acyl COA	c.cobalamine	d. None of the above		(1)
33	Glycerol containing lipids are synthesized from				Co1	
	a.Cephalin	b.Fatty acyl COA	c.cobalamine	d. Phosphatidic acid		(1)
34	Which of the following must be provided in the diet				Co1	
	a.fat	b.Fatty acid	c.linoleic acid	d. Phosphatidic acid		(1)

35.	Which of the following is a tetrose?					
	a. Methionine	b. erythrose	c. glucose	d. tyrosine	Co1	(1)
36.	Select the odd one from the following					
	a. Erythrose	b. Peptides	c. Glucose	d. Arabinose	Co1	(1)
37.	Pick out the fat soluble vitamin which contains beta carotene					
	a. Vitamin A	b. riboflavin	c. vitamin E	d. thiamine	Co1	(1)
38.	Pick the dietary sources which contains vitamin C					
	a. citrus fruits	b. carotene	c. carrot	d. Brinjal	Co1	(1)
39.	Creatinine Clearance test is used to detect -----disorders					
	a. liver	b. kidney	c. gastric	d. lungs	Co1	(1)
40.	Bilirubin level is detected to find -----					
	a. liver	b. stomach	c. jaundice	d. fever	Co1	(1)

PART B(8 X 5 = 40 MARKS) (ANSWER ANY EIGHT)

41.	Draw the diagram of plant cell and animal cell and label its parts	Co1	(5)
42.	Brief on the functions of various cell organelles	Co1	(5)
43.	State the reasons for onset of diabetes mellitus	Co1	(5)
44.	How the level of blood glucose is monitored? Justify by Glucose tolerance test	Co1	(5)
45.	List the functions of cholesterol	Co1	(5)
46.	Mention the functions of proteins	Co1	(5)
47.	Write short notes on deficiency diseases of vitamins	Co1	(5)

48.	What are essential fatty acid. Comment on it	Co1	(5)
49.	How gastric disorders are diagnosed?	Co1	(5)
50.	Give an outline on redox potential with examples	Co1	(5)
PART C(2 X 10 = 20 MARKS) (ANSWER ANY TWO)			
51.	How ATP is produced by Oxidative phosphorylation? Explain with suitable diagrams	Co1	(10)
52.	Give a detailed account on classification of carbohydrates	Co1	(10)
53.	Elaborate on the functions of fat soluble vitamins	Co1	(10)