	MUSLIM KHAN	Tetal
	The sales Addition	Total Marka 20
	L'	Mari
	mest suitable answer.	I'me Allowed I
	and suitable	2. Bile saits secreted in 20 = 20)
		Bile saits secreted into intestine are Excreted in stool
		a. Excreted in stool
	or simple diffusion	D. WANG AM
		c. 50% are efficiently absorbed d. Reabsorbed when
1	At of the above	d. Reabsorbed whenever it is required
1		4. Bile salts und
E	sulvery Hormone Gustin plays a role in	Bile salts undergo enterohepatic circulation 6-8 times a day
	Secretion of salivary amylase Secretion of lingual lipase	b. 2-4 times a day
	e Development of taste buds	the state of the s
	d. Secretion of phosphatase	The state of the s
	d. Secretion of prospiratuse	d. More than 10 times a day
-	Among the inorganic constituents, saliva is saturated with	6. Salvary gramular
	A Na+	The state of the s
	b. K+	Both starch and glycogen in the presence of ci
	c. Care	C. At PH (6.6-6.8)
	d. Mg++	d. All of the above are true
	Tev of the	o. All of the above are true
7.	75% of the gastric secretion is secreted by	8. Disaccharidases and olicococci
	a. Cardiac end	Disaccharidases and oligosacchridases are present in Pancreatic juice
	b. Pylaric end C. Surface enithelium	b. Gastric juice
	Surface epithelium None of the above	c. Mucosal lining of upper Jejunum
	u. None of the above	d. Mucosal lining of ileum
		or manager manager means
9.	PH of the gastric Juice ranges from	
	a. 1.5 -3.0	10. Five major pancreatic proteases are activated by
	b. 0-1.0	a. Chymotrypsin
	c. 5-7	b. Elastase
	d. It is always above 7	c. Trypsin
		d. Carboxypeptidase A and B
11.	Which one is the function of gastric juice HCL	
	- It converts Pepsingen to pensin	12. Steatorrhea is caused by lack of
	b. It converts ferric into ferrous from	a. Gastric juice
	C. It stimulates the release of secretion	b. Bile
	d. All of the above	c. Pancreatic enzyme
13	Gastele Have	d. All of the above
13.	Gastric lipase enzyme is inactivated by a. HCL	14. The distance is
	b. Pepsin	 The dietary lipids consists of 90% of Cholesterol
	c. Trypsin	b. Phospholiaide
	d. Lactic acid	- nosprioupids
		c. Triacylglycerol d. Cholesterylesters
		Endesterylesters
15.	Intrinsic factor is	16
	a. A polypeptide b. It's an entyme	16. Emulsification of dietary lipids occur in
	in a min critifitie	a. stollieth
	c. It's a glycoprotein d. Is a phospholipid	b. Duodenum
		c. Jejunum
17	in the formation of bile acids, hydrocarbon chain of cholesterol is shortened by	d. lleum
	The second relief by	18. In bile salts at all
	a. S carbons	 In bile salts glycine or taurine is attached with cholesterol through Ionic bond
	b. 4 carbons	b. Covalent bond
		and the state of t
	c. 3 carbons	C. Vander waste for
	d. 6 carbons	winder whale forces
19	d. 6 carbons	d. None of the above
19	d. 6 carbons Among the bile acids which and the second se	d. None of the above
19	d. 6 carbons Among the bile acids which one is the triol Cholic acid	20. Diagnostic test for acute
19	d. 6 carbons Among the bile acids which one is the triol Cholic acid Chenodeoxy cholic acid C. Glycochenodeoxy the literature	20. Diagnostic test for acute pancreatitis is a. Phospholipase
19	d. 6 carbons Among the bile acids which one is the triof a. Choic acid b. Chenodeoxy choic acid	20. Diagnostic test for acute



£ 30 £ 15 Minutes

Azra Naheed Medical College, Lahore.

Test on Carbohydrates Metabolism (2nd YEAR MBBS)

	vietabolism (2 TEAR MBBS)
mptoms of Diabetes Mellitus are:	11: Glycogenolysis is the process in which glycogen in muscle
a) Gastrointestinal disorders	finally broken down to produce:
b) Edema in the limbs	a) Glucose
Polydipsia,polphagia and polyuria	
d) Watery mouth	b) Glucose-Po4
	c) Glucose -6PO4
2: HMP shunt is the process in which :	d Lactic acid
a) Ribose S-Po4 is formed	12: Main site for Gluconeogenesis in
b) Xylulose 5-Po4 in formed	a) Brain
c) NADPH is formed	(5) Liver
All of the above are true	c) Pancreas
3: Enzymes of citric acid cycle are present in:	d) Lungs
a) Golgibodies	13: Which of the following energy soleted
b) Lysosomes	13: Which of the following energy related activities does not occur in mitochondria:
c) Nucleolus	
(d) Mitochondria	Oxidative Phosphorylation
	b) Electron transport
: The substrate for Aldolase B is :	c)) Glycolysis
Glucose 6-Po4	d) Citric acid cycle
b) Fructose 6-Po4	14: Phosphofructokinase-2 (DEV. 2)
c) England and	TO TIGUISE D-POL TO FOURTON A CALL
c) Fructose 1-6-bisphosphate	b) Fructose 6-Po4 to fructose 2,6 bisphosphate c) Glucose 6-Po4 to fructose 2,6 bisphosphate
	c) Glucose 6-Po4 to fructose 5-Po4
an erythrocytes 2,3 bisphosphoglycerate in decimals	d) None of the above is true
in erythrocytes 2,3 bisphosphoglycerate in derived from which itermediate of glycoltic pathway:	15: At low blood always
a) Glyceraldehydas a na	15: At low blood glucose concentration brain but not liver will take up glucose this in due to the:
1,3 bisphosphoghusesses	a) low km of the:
-/ 3- Phosphosivenesse	a) Low Km of hexokinase
G) Dihrdovyzcoto o	b) Low Km of glucokinase
The HMP-shunt includes which as the fire	c) Blood brain barrier
: The HMP-shunt includes which of the following enzymes? a) Furnerase	d) Specificity of glucokinase
b) Pyruvate dehydrogenase complex	All of the following pathways occur in cytosol except Glycolysis
	a) Glycolysis cytosol except
(d) Glucora C post	b) Uronic acid pathway
Glucose 6-PO4 dehydrogenase (G6-PD) Which of the following is:	Citric acid cycle
: Which of the following is not the intermediate of citric acid ycle:	d) HMP-shunt
a) Oxaloacetate	17: In muscles glucose 6-PO4 is not converted to glucose due to the
b) Malate	absence of:
	e/ nexokinase
Phosphocenol pyruvate d) d-keto glutarate	b) Glucokinase
: Regarding transketolase:	@ Phosphorylase
a) It transfers to answerolase:	O) Glucosa C. aband
a) It transfers one carbon from aldosugar to ketosugar b) It transfer two carbons from ketosugar b)	20. Which of the following states
b) It transfer two carbons from ketosugar to ketosugar c) It transfer three carbons from ketosugar to aldosugar	a) It increase the entry of all about insulin is incorrect:
c) It transfer three carbons from ketosugar to aldosugar (d) It transfer three carbons from ketosugar to aldosugar	b) It stimulates plucoconocia
d it transfer three carbons from ketosugar to aldosugar Chemical energy required for synthesis are	it inhibits glycogenolysis
Chemical energy required for synthetic processes is provided	
a) Phocesses is provided	19: In citric acid cycle CO2 is released when
a) Phosphorylation of AMP	d d-ketoglutarate it commended when
Phosphorylation of Ann	
Phosphorylation of ATP	b) Succinyl-s-coA changes to succinate c) Succinate changes to succinate
TVDFDIUSIE OF ATO	I The state of the
or which is the true states.	d) Fumarate changes to Malate
a) In glycolysis, two steps generate ATP	
	Stress trauma, sever exercise and secretion of epinephrine will: Increase the secretion of insulin
c) In glycolysis four steps generate ATP d) None of the above is a series of the above is a seri	Increase the secretion of insulin Decrease the secretion of insulin
d) None of the at	o) Decrease the secret
The di tile above is	1 15 15 15 15 15 15 15 15 15 15 15 15 15
d) None of the above is true	Will have no effect on insulin All of the above are true

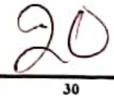


Name:

Roll No. :



Marks obtained:



SEND UP EXAMINATION - 2018 SECOND YEAR MBBS PART II - MCQs

Total marks: 30 Time Allowed: 25 minutes	**
Select one best answer	
1 Coenzyme Q (a) Oxidizes glucose (b) Reduces glucose Transfers electrons (d) Transfer phosphates	2 Accidental Ingestion of 2,4 Dinitrophenol will result in (a) More ATP synthesis (b) Thermogenesis (c) Increased synthasis of uracil (d) Reduced reduction of NADH
3 Steatorrhea is caused by Malabsorption of fats (b) Malabsorption of proteins (c) Lactose intolerance (d) Malabsorption of carbohydrates	4 Secondary bile acids are synthesized in (a) Stomach (b) Liver (c) Pancreas (d) Intestine
For glycogenesis, glucose should be first converted to UDP-glucose (b) Sorbitol (c) Lactic acid (d) Pyruvic acid	6 For the continuity of citric acid cycle, which of the following compounds should be regenerated? (a) Malate (b) Oxaloacetate (c) Furnarate (d) Succinate
7 During starvation, the first reserve nutrient to be depleted is (a) Triacylglycerol (b) Glycogen (c) Proteins (d) Cholesterol	8 All of the following statements about albinism are correct except (a) Tyrosinase is deficient in melanocytes (b) Skin is hypo pigmented (c) Eyes are hypo pigmented It results in mental retardation
Diabetes Insipidus is caused by the deficient secretion of Insulin (b) Glucagon (c) Oxytocin (d) Vasopressin	10 Irritability, tremors, Intolerance to heat and high blood glucose level are Indications of (a) Hypothyroidism (b) Cushing's syndrome (c) Addison's disease (d) Hyperthyroidism
11 Secretion of epinephrine will (a) Stimulate glycolysis (b) Inhibit gluconeogenesis (c) Stimulate glycogenesis Stimulate glycogenolysis	Allopurinol, which is used for the treatment of gout, is a competitive inhibitor of (a) Glycogen synthase (b) Catalase Xanthine oxidase (d) Alkaline phosphatase
Okazaki fragments are related to DNA synthesis (b) Protein synthesis (c) mRNA synthesis (d) tRNA synthesis	In the biosynthesis of pyrimidines Tyrosine and serine are added up to form pyrimidine (b) Glycine & methionine are added up to form pyrimidine (c) Aspartic acid is incorporated as a whole (d) Arginine & proline are added up form pyrimidine

CLASS TEST ON NUCLEOTIDES MBBS PART I - MCQs

Total marks:

20

Time Allowed:

20 minutes

Instructions

- All MCQs are to be attempted on the paper and returned to the invigilator within given time.
- Any cutting or overwriting will not be accepted and no marks will be given even if the answer is correct.
- Write your roll no. only on the perforated portion of the title page.
- 4. Do not write your name or discuss your identity in any way

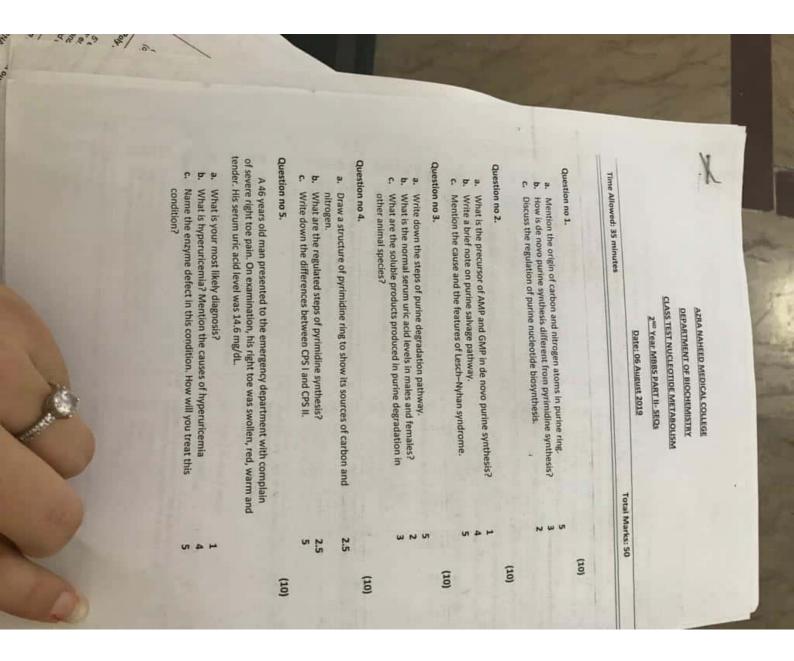
4. Do not write your name or discuss your identity	
1 Pseudouridine arm of tRNA has base sequence (a) GGU (b) CCC (c) TΨC (d) AGG	2 Non coding region of DNA is called (a) Exon (b) Intron (c) Codon (d) Neutron
3 Stop codon is (a) AUG (b) CCU (c) UAA (d) AAG	4 Initiation codon is (a) GAG (b) GAC (c) AGG (d) AUG
5 7 methyl guanosine triphosphate cap is present on (a) Transfer RNA (b) Messenger RNA (c) Ribosomal RNA (d) Small nuclear RNA	6 Variable arm is present on (a) Ribosomal RNA (b) Small nuclear RNA (c) Heterogenous nuclear RNA (d) Transfer RNA
7 Longer arm of transfer RNA (3'end) has terminal base sequence (a) GGU (b) GGC (c) CCA (d) CCG	In posttranscriptional modifications, tRNA loses from its 5'end (a) 13 bases (b) 18 bases (c) 15 bases (d) 16 bases
9 Poly A tall is present on (a) 5' end of IRNA (b) 3' end of tRNA (c) 5' end of messenger RNA (d) 3' end of messenger RNA	10 Which of the following has maximum number of minor bases (a) tRNA (b) rRNA (c) mRNA (d) Small nuclear RNA
11 Anticodon arm is present on (a) Messenger RNA (b) Ribosomal RNA (c) Transfer RNA (d) Heterogenous nuclear RNA	12 Which of the following base pairs will have 3 hydrogen bonds? (a) A-T (b) A-U (c) G-T (d) G-C
13 When ATP changes to ADP (a) 14.3 K.Cal are released (b) 7.3 K.Cal are released (c) No energy is released (d) 5 K.Cal energy is gained	14 Pyrimidine nucleotide is (a) ADP (b) GMP (c) IMP (d) CMP

Roll No:

Total marks: 30 Time allowed 20 min.

will not be accepted and no marks will be given even if the answer is correct.

	A COLLECT
SCOA reductase SCOA synthase SCOA isomerase SCOA decarboxylase	2 Maximum amount of cholesterol is found in (a) Chylomicrons (b) VLDL (c) LDL (d) HDL
Liver and intestine	4. Which of the following enzyme is inhibited by Aspirin (a) 5 lipoxygenase (b) 15 lipoxygenase (c) 12 lipoxygenase (d) Cyclo-oxygenase
For entry of fatty acids into mitochondria carnitine is needed, which takes in (a) Long chain fatty acids (b) Glycogen (c) Short chain fatty acids (d) Both short and medium chain fatty acids	6 Adipose tissues are unable to synthesize glycerol-3-PO ₄ due to absence of (a) Glycerol phosphatase (b) Glycerol dehydrogenase (c) Glycerol kinase (d) Glycerol oxidase
7 Ceramide is needed for the synthesis of glycosphingolipids and sphingophospholipids. It is synthesized from (a) Glycerol and phosphate group (b) Sphingosine and Glycerol (c) Sphingosine and phosphate group (d) Sphingosine and fatty acids	8 Bile acids are formed from cholesterol in liver by losing: (a) 4 carbons (b) 5 carbons (c) 3 carbons (d) 2 carbons
9 End product of B oxidation of 21 carbon fatty acid will be (a) Acetoacetyl-SCoA (b) Acetyl-SCoA (c) Propionyl- SCoA (d) Succinyl- SCoA	10 Which of the following enzyme is absent in liver (a) Thiophorase (b) Glycogen synthase (c) Phosphatase (d) Phosphorylase
11 Biosynthesis of sphingosine requires (a) Palmityl-SCo A · glycine (b) Palmityl-SCo A · serine (c) Palmityl-SCo A · tyrosine (d) Palmityl-SCo A · threonine	12 Which of the following compounds is the common intermediate in ketogenesis & cholesterol biosynthesis (a) Acetone (b) Mevalonic acid (c) Lecithin (d) Acetoacetyl SCoA
13 Elcosanolds are synthesized from arachidonic acid which can be released from (a) Dipalmityl lecithin (b) Sphingosine (c) Phosphotidyl inositol (d) Cholesterol	14 Conversion of cholecalciferol to 1,25 dihydro-cholecalciferol takes place in (a) Spieen and lungs (b) Liver and brain (c) Kidney and small intestine (d) Liver and kidneys



Marks obtained:	
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TEST ON G.I.T. & BIOENERGETICS - JAN. 2019 SECOND YEAR MBBS - MCQs

	30		
	Allowed: 20 minutes		
Sall .	which of the following statements regarding lipid digestion and absorption is true? (a) Pancreatic lipase emulsifies lipids (b) The products of lipid digestion are resynthesized into triacylglycerois in intestinal epithelial cells. (c) The products of lipid digestion are resynthesized into micelles in intestinal cells (d) The products of lipid digestion are absorbed by active transport	2	The function of enzyme enterokinase is to (a) Cause bicarbonate secretion by the pencreas (b) Stimulate secretion of gastrin by the stomach (c) Activate trypsinogen into trypsin (d) Activate pepsinogen into pepsin
3	The Gall bladder: (a) Synthesizes bile (b) Stores bile (c) Is stimulated to contract by the hormone CCK (d) B and C	4	Which is the inhibitor of gastric juice secretion? (a) Corticosteroids (b) Caffeine (c) Histamine (d) Secretin
5	1-6 glycosidic bonds is cleaved by which of the following enzyme? (a) Maltase (b) Isomaltase (c) Amylase (d) Lactase	•	Proteolytic enzymes are produced by (a) Stomach (b) Small intestine (c) Pancreas (d) All of above
7	Endopeptidases include all of following, except (a) Trypsin (b) Carboxypeptidase (c) Chymotrypsin (d) Pepsin	8	Which of the following regarding Pepain is correct? (a) Secreted by oxyntic cells (b) Converted to pepain by Trypsin (c) It converts proteins to proteoses and peptones (d) Pepain is an exopeptidase
9	Regulation of saliva is by: (a) Unconditioned reflex (b) Conditional Reflex (c) Spontaneous secretion (d) All of the above	10	Regarding saliva which of the following is incorrect: (a) Contains amylase and lipase (b) Contains salivary proteolytic enzymes (c) Contains secretory IgA and lysozymes (d) Contains peroxidases
11	Gastric julce contains all of the following except (a) HCI (b) Pepsin (c) Intrinsic factor (d) Vitamin B 12	12	Chyluria is the (a) Excretion of milky urine (b) Obstruction in transportation phase of lipid digestion in lacteals (c) An abnormal connection between urinary tract and lymphatic drainage (d) All of above
13	Activation of fatty acids inside the intestinal mucosa cells is by (a) Apo-B48 (b) Pepsin (c) Thiokinase (d) Lipase	14	(a) Facilitating the binding of the enzyme to the fats (b) Inhibition of emulsification (c) Micelle formation (d) True solution formation

Revis	Revision Test GIT	
\$ 600	Total	
S AND MUNICIPAL MUSLIM KHAN	Total Marka 20	
3) Jacob Miles Miles	Obtain Marks:	
AND ANCHAMMAD MUSLIM KHAN	Time to	
3	Time Allowed: 15 Min.	
the most suitable answer.	(1=20=20)	
31 he mile	2. Bile salts secreted into intesting	
or saliva is by dependent active process	Excreted in stool 95% efficiently reabsorbed	
surgion of saliva is by	C. 50% are efficiently absorbed	
The state of the s	d. Reabsorbed whenever it is required	
As of the above	4. Bile salts undergo enterohepatic circulation	
Salvary Hormone Gustin plays a role in	a. 6-8 times a day b. 2-4 times a day	
salvary Hormone Gustar parylase Secretion of salivary amylase	b. 2-4 times a day c. Only when it is required	
	d. More than 10 times a day	
a sleament of taste buss		
d Secretion of phosphatase	6. Salivary α-amylase acts briefly on	
5. Among the inorganic constituents, saliva is saturated with	a. Both starch and glycogen	
No.	b. In the presence of cl	
a. Na+ b. K+	c. At PH (6.6-6.8) d. All of the above are true	
c. Ca++	d. All of the above are true	
d Me++	8. Disaccharidases and oligosacchridases are present in	
and the partie secretion is secreted by	non-serie hairs	
7. 75% of the gastric secretary of a cardiac end	b. Gastric Juice	
b. Pyloric end	c. Mucosal lining of upper Jejunum	
c. Surface epithelium	d. Mucosal lining of lleum	
d. None of the above		
- · · · · · · · · · · · · · · · · · · ·		
	 Five major pancreatic proteases are activated by 	
9. PH of the gastric juice ranges from	a. Chymotrypsin	
a. 1.5 -3.0	b. Elastase	
b. 0-1.0	c. Trypsin d. Carboxypeptidase A and B	
c. 5-7 d. It is always above 7	d. Carboxypepuloase A allo	
	12. Steatorrhea is caused by tack of	
11. Which one is the function of gastric juice HCL	a. Gastric Juice	
to converts Pepsinogen to pepsin	b. Bile	
b it converts ferric into ferrous from	c. Pancreatic enzyme	
c. It stimulates the release of secretin	d. All of the above	
d. All of the above		
is inactivated by	14. The dietary lipids consists of 90% of	
13. Gastric lipase enzyme is inactivated by	a. Cholesterol	
a. HCL b. Pepsin	b. Phospholipids	
b. Pepsin c. Trypsin	c. Triacylgiycerol d. Cholesterylesters	
d. Lactic acid	d. Cholesterylesters	
and the state of actions in	Emulsification of dietary lipids occur in	
15. Intrinsic factor is a. A polypeptide	a. Stomach	
A polypeptide It's an enzyme	b. Duodenum	
c. It's a glycoprotein	c. Jejunum	
d. Is a phospholipid	d. Ileum	
	18. In bile salts glycine or taurine is attached with cholesterol throu	
17. In the formation of bile acids, hydrocarbon chain of	a. Ionic bond	
cholesterol is shortened by	b. Covalent bond	
a. 5 carbons b. 4 carbons	c. Vander waals forces	
b. 4 carbons c. 3 carbons	d. None of the above	
d. 6 carbons		
West State Communication of the Communication of th		
19. Among the bile acids which one is the triol	20. Diagnostic test for acute pancreatitis is	
a. Cholic acid	a. Phospholipase	
b. Chenodeoxy cholic acid	b. Serum amylase	
	c. Trypsin	
c. Glycochenodeoxycholic acid d. Taurocheno deoxycholic acid	d. Elastases	

TEST ON G.I.T. & BIOENERGETICS – JAN. 2019 Test of the second of	SA CONTON OF DE	Roll No. :
### Activation of salts in size of the salts in the salts	TEST ON G.LT. & BIO	CITERGETICS - JAM. 2019
Contains any locates in indestinal cells Contains any locates Contains peroxidases	30 tautes	
A continue to the following regarding Persin	reconnectes in intestinal cells reconnectes of lipid digestion are absorbed by	(a) Cause bicarbonate secretion by the pancreas (b) Stimulate secretion of gastrin by the stomach (c) Activate trypsinogen into trypsin
following enzyme? (a) Mallase (b) Isomaliase (c) Isomaliase (c) Anylase (d) Lactase (d) All of above (d) All of above (d) All of above (e) Pancreas (d) All of above (e) Pancreas (d) All of above (e) Pancreas (d) All of above (e) Carboxypeptidase (e) Carboxypeptidase (e) Converted to pepsin by Trypsin (e) Converted proteins to proteoses and peptones (d) Pepsin (e)	Synthesizes bile Stores bile Is stimulated to contract by the hormone CCK	(a) Corticosteroids (b) Caffeine (c) Histamine
(a) Trypsin (b) Carboxypeptidase (c) Chymotrypsin (d) Pepsin 9 Regulation of saliva is by: (a) Unconditioned reflex (b) Contains amylase and lipase (c) Spontaneous secretion (d) All of the above 10 Regarding saliva which of the following is incorrect: (a) Contains salivary proteolytic enzymes (c) Contains secretory IgA and lysozymes (d) Contains peroxidases 11 Gastric juice contains all of the following except (a) HCI (b) Pepsin (c) Intrinsic factor (d) Vitamin B 12 12 Chyluria is the (a) Excretion of milky urine (b) Obstruction in transportation phase of lipid digestion in lacteals (c) An abnormal connection between urinary tract and lymphatic drainage (d) All of above 13 Activation of fatty acids inside the intestinal mucosa cells is by (a) Apo-B48 (b) Pepsin (c) Thiokinase 14 Calcium ions facilitate action of ilpase by (a) Facilitating the binding of the enzyme to the fats (b) Inhibition of emulsification (c) Micelle formation	(a) Maltase (b) Isomaltase (c) Amylase	(a) Stomach (b) Small intestine (c) Pancreas
(a) Unconditioned reflex (b) Conditional Reflex (c) Spontaneous secretion (d) All of the above (e) Spontaneous secretion (d) All of the above (f) Contains amylase and lipase (h) Contains salivary proteolytic enzymes (c) Contains secretory IgA and lysozymes (d) Contains peroxidases (e) Contains secretory IgA and lysozymes (d) Contains peroxidases (e) Contains secretory IgA and lysozymes (d) Contains peroxidases (e) Contains salivary proteolytic enzymes (f) Contains secretory IgA and lysozymes (d) Contains secretory IgA and IgA (d) Contains secretory IgA and IgA (e) Contains secretory IgA and IgA (d) Contains secretory IgA and IgA (e) Contains secretory IgA and IgA (e) Contains secretory IgA (d) Contains secretory IgA (e) Contains secre	(a) Trypsin (b) Carboxypeptidase (c) Chymotrypsin	(a) Secreted by oxyntic cetts (b) Converted to pepsin by Trypsin (c) It converts proteins to proteoses and peptones
(a) HCI (b) Pepsin (c) Intrinsic factor (d) Vitamin B 12 (a) Excretion of milky urine (b) Obstruction in transportation phase of lipid digestion in lacteals (c) An abnormal connection between urinary tract and lymphatic drainage (d) All of above 13 Activation of fatty acids inside the intestinal mucosa cells is by (a) Apo-848 (b) Pepsin (c) Thiokinase (a) Excretion of milky urine (b) Obstruction in transportation phase of lipid digestion in lacteals (d) An abnormal connection between urinary tract and lymphatic drainage (d) All of above 14 Calcium ions facilitate action of lipase by lipid digestion in lacteals (d) All of above	(a) Unconditioned reflex (b) Conditional Reflex (c) Spontaneous secretion	(a) Contains amylase and lipase (b) Contains salivary proteolytic enzymes (c) Contains secretory IgA and lysozymes
cells is by (a) Apo-848 (b) Pepsin (c) Thickinase (a) Facilitating the binding of the enzyme to the fats (b) Inhibition of emulsification (c) Micelle formation	(a) HCI (b) Pepsin (c) Intrinsic factor	 (a) Excretion of milky urine (b) Obstruction in transportation phase of lipid digestion in lacteals (c) An abnormal connection between urinary tract and lymphatic drainage
·	cells is by (a) Apo-B48 (b) Pepsin (c) Thickinase	(a) Facilitating the binding of the enzyme to the fats (b) Inhibition of emulsification (c) Micelle formation

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	Azra Nahand	Medical College, Lahore,
-	Test and	Medical College, Lahore, tes Metabolism (2 nd YEAR MBBS) finally broken .
symp	Gastrointestical Mellitus are:	torse College
a) b)	Gastrointestinal disorders	Metabolism (200
c)	Edema in the limbs	11: Glycogenolysis is the process in about prosper in all Glycose Post C) Glycose SPOst C)
d)	Polydipsia,polphagia and polyuria Watery mouth	finally broken (sit the
	, mouth	a) Glucore to produce in all
2: HMP	shunt is the process in which:	b) Glucose-Pos
a)	Ribose 5-Po4 is formed	d) Glycose GPOs
0)	Ayluluse S-Post In C	d) Lactic acid 12: Main site for Gluconeogenesis in b) (1)
c) d)	morn is formed	a) Brain
	All of the above	-1 rust
- chizyr	nes of citric acid cycle are	c) Pancreas
		d) Lungs 13: Which of the following energy related activities does not see mitochondria: a) Oxidative Phosphonder
c)	Lysosomes Nucleolus	mitochondria: notiowing energy related and
d)		a) Oxidarius na
-	Mitochondna	b) Electron transpar
		-y Giycolysis
	ubstrate for Aldolase B is :	d) Citric acid cycle
a)	Glucose 6-Po4	14: Phosphofructokinase-2 (PFK-2) converts: a) Fructose 6-Po4 to fructose 1-6 bisphosphuse b) Fructose 6-Po4 to fructose 1-6 bisphosphuse
1112	Fructose 6-Po4	
c) d)	Fructose 1-6-bisphosphate Glucose 1-Po4	THE PARTY OF THE INVESTIGATION OF THE PARTY
	throcytes 2,3 bisphosphoglycerate in derived from white	d) None of the above is true
	diate of glycoltic pathway:	th 15: At low blood glucose concentration brain but not liver will to up glucose this in due to the:
a)	Glyceraldehydes 3-Po4	a) Low Km of hexokinase
	1,3 bisphosphoglycerate	b) Low Km of glucokinase c) Blood brain barrier
c)	3- Phosphoglycerate	d) Specificity of glucokinase
d)	Dihrdoxyacetone-Po4 MP-shunt includes which of the following enzymes?	16: All of the following pathways occur in cytosol except
41	Fumerase	a) Glycolysis b) Uronic acid pathway
b)	Pyruvate dehydrogenase complex	c) Citric acid cycle
	**tianra	The same and the same
	Glucose 6-PO4 dehydrogenase (G6-PD) of the following is not the intermediate of citric acid	d) HMV-shunt 17: In muscles glucose 6-PO4 is not converted to glucose due to t
7: Which	of the following is not the mean	absence of: a) Hexokinase
cycle:	Oxaloacetate	h) Glucokinase
	Malate	c) Phosphorylase d) Glucose 6- phosphatase
(1)	Phosphocenol pyruvate	d) Glucose 6- phosphatase 18: Which of the following statement about insulin is incorrect.
d)	d-keto glutarate	18: Which of the following statement about 18: Which of the followin
8: Regard	ding transketolase: It transfers one carbon from aldosugar to aldosugar It transfers one carbons from ketosugar to aldosugar	b) It stimulates group
		to the citric Bold Cycle Commented to supply
d)	It transfer three carbons from aldosugar to kelosog- it transfer three carbons from aldosugar to kelosog- lical energy required for synthetic processes is provided	b) Succinyl-s-coA changes to succinst
9: Chemi	CALCIO	
by a)	Phosphorylation of AMP	d) Furnarate Charles and secretion of epinephrine with
b)	Phosphorylation of ATP	20: Stress trauma, sever exercice and increase the secretion of insulin a) increase the secretion of insulin secretion
254	sudrolysis of Att	a) increase the secretion of insulin b) Decrease the secretion of insulin con have no effect on insulin secretion
d)	Hydrolysis of ATP his the true statement about glycolysis: his the true statement about glycolysis: lin glycolysis, two steps generate ATP lin glycolysis, two steps generate ATP	a) Increase the secretion of insum b) Decrease the secretion of insum c) Will have no effect on insulin secretion d) All of the above are true
THE RESERVE	In glycolysis, two steps generate ATP In glycolysis three steps generate ATP Are the steps generate ATP Are the steps generate ATP	all of the above are
a)	In glycolysis three steps generate ATP In glycolysis four steps generate ATP In glycolysis four steps generate ATP	d) Allorate

	a' stankdings in
Due to the deficiency of hypoxanthine guanine phosphoribosyl transferase (b) Phosphoribosyl synthetase (c) Carbamoyl phosphate synthetase (d) Phosphorytase kinase	16 The major catabolite product of pyrimidines in mammals is (a) Urea (b) Guanine (c) Uric acid (d) β-alanine
(a) Coding strand on DNA (b) Non coding strand on DNA (c) Coding region on rRNA (d) Non coding region on tRNA	18 The new DNA strand which is copied away from replication fork is called (a) Coding strand (b) Template strand (c) Leading strand (d) Lagging strand
The development of neuropathy and retinopathy in diabetes mellitus is implicated to (a) Increased synthesis of atty acids increased breakdown of latty acids (c) Glycogenesis (d) Conversion of glucose to sorbitol	20 End product of exidation of odd chain fatty acids will be (a) Acetyl SCoA (b) Malonyl SCoA (c) Succinyl SCoA (d) Propionyl SCoA
21 Which of the following amino acids is incorporated into purine molecule and becomes the atom number 4, 5 and seven of purine? (a) Histidine (b) Citruffine (c) Hydroxy Proline Glycine	22 The mutation in which changed base, codes for the same amino acids is called (a) Nonsense (b) Missense (c) Silent (d) Frame shift
23 Which of the following statement is untrue about pancreatic hormones? (a) Insulin stimulates lipogenesis (b) Insulin stimulates glycogenesis (c) Insulin inhibits glycogenolysis Glucagon stimulates gluconeogenesis	24 All of the following about phenylketonuria are correct except: (a) Urinary excretion of phenyl pyruvate and phenyl lactate is increased (b) It can be controlled by giving low dose of alanine Phenylalanine cannot be converted into tyrosine (d) It leads to decreased synthesis of thyroid hormone, catecholamine and melanin
25 Ammonia is transferred from muscles to liver in the form of (a) Free ammonia (b) Glutamine (c) Alanine (d) Tyrosine	26 Niemenn-Pick disease results from the deficiency of (a) Ceramidase (b) Hexoseaminidase (c) Sphingomyelinase Arylsulphatase A
27 Clay colored stools are due to absence of (a) Bile salts (b) Bile pigments (c) Vitamin D (d) Vitamin A	Which of the following pathways is amphibolic in nature? Give Citric acid cycle (b) Glycolysis (c) Uronic acid pathway (d) HMP shunt
29 Lipoprotein lipase hydrolyzes (a) Triacylglycerol present in chylomicrons (b) Methyl Maionyl SCoA to Succinyl SCoA (c) PGH ₂ to PGI ₂ (d) PGE ₂ to PGF ₂	30 Respiratory acidosis occurs due to (a) Retention of CO ₂ (b) Hyperventilation (c) Retention of HCO ₃ (d) Overdose of some drugs e.g. salicylates

ADRA NAHEED MEDICAL COLLEGE DEPARTMENT OF BIOCHEMISTRY

NUCLEOTIDE METABOLISM - 2019 2ND YEAR MBBS - MCQs

Name:	
Roll No:	
Marks obtained	
Total marks:	30

	Which of the following is a purine base?	2. The activated const
	1. Which of the following is a partie	The activated sugar in purine and pyrimidine synthesis is
	a. Adenine	a. Glucose 6- phosphate
	b. Cytosine	b. Ribosyl photobara
	c. Thymine	c. 5 phosphoribosyl 1 pyrophospahte
	d. Uracil	d. Deoxy ribosyl pyrophosphate
	a property of a state of the st	which is the world distributed in married to be an application
		The same of the sa
1	The amino acids which donate amine groups for the	4. The first purine nucleotide that is fully formed in the de novo
3.	purine biosynthesis are:	synthesis pathway is:
	AND THE RESERVE OF THE PARTY OF	Manufacture of the control of the co
a.	Glycine, glutamine, aspartate	a. AMP
ь.	Glycine, Phenylalanine, Glutamate	b. GMP
c.	Lysine, glutamine, aspartate	c. CMP
d.	and the second second	d. IMP and property of the selection of the selection of
u.	A SHORT WILL AS A SHORT OF THE SHOT OF THE SHORT OF THE SHORT OF THE SHORT OF THE SHORT OF THE SHOT OF THE SHORT OF THE SHORT OF THE SHOT OF THE SHORT OF THE SHOTT OF THE SHORT OF THE SHOTT OF THE SHOTT OF THE SHOTT OF THE SHO	The state of the s
	the man better be and have a march to	
-	Which of the following serves as the cofactor for the de	6. What is an activator of the enzyme "Glutamine:
5.		Phosphoribosylpyrophosphate amidotransferase" a committed
	novo synthesis of purine metabolism?	
	98.70 m 197 grad	step of de novo biosynthesis of purines?
a.	Thiamine	a. Adenosine Monophosphate
b.	Biotin	b. Guanosine Monophosphate
C.	Folate	
d.	Flavin	
		d. Phosphoribosyl Pyrophosphate
	may a sure of the	8. A patient presented with cognitive disorders, behavioral
7.	Which of the following contribute nitrogen atoms to	 A patient presented with cognitive disorders, behavioral disturbances and an urge to bite his lips. Which of the following
	both purine and pyrimidine rings	disorders he must be suffering from
	- Ai 4 1/3	disorders he must be surrering from
a.	Aspartate	5 Made and decree
b.	Carbamoyl phosphate	a. Hurler syndrome
C.	Carbon dioxide Glutamate	b. Gouty arthritis c. Lesch-Nyhan syndrome
d.	Glutamate	
	1	d. Down syndrome
	±0.4.1	120 300 10007
_	at a second of the label and be a	10. The end product of purine degradation in humans is
9.	The enzyme xanthine oxidase is inhibited by	The cita product of partie degradation in training of
_	Alloputinol	a. Urea
	Corticosteroids	b. Allantoin
D,	Ibupralen	
-	and the second s	c. Xanthine d. Uric acid
đ.	Colchicine	
	3721	421
	The enzyme associated with hyperuricemia is	12. The enzyme defect with Lysch Nyhan syndrome is
•••	the chaptie associated manaperature	
	Glucose 6 phosphate	a. PRPP synthetase
Ь.	HGPRTase	b. HGPRTase
=	PRPP synthetase	c. Xanthine oxidase
d.	All of the above	d. 5 phosphoribosyl amidotransferase
-	The state of the s	S. Sprespilotiosy, aminoralise isse
13,	The enzyme xanthine oxidase catalyze the conversion of	14. Which of the following is the primary cause of gout
	Inosine to hypoxanthine	Deficiency of Xanthine oxidase
	b. Guanosine to guanine	b. Lactic acidosis
	c. Xanthine to uric acid	c. Lead toxicity

15	Cholesterol is the precursor of all the followings except	16	Deficiency of which of the following will lead to RDS?
	(a) Androstenedione (b) Estrone		(4)
	(c) Phenylbutazone		(b) Cephlains (c) Phosphotidyl serine
	(d) Testasterone		(d) Dipalmityl lecithin
17	The most significant source of stored energy is	18	Regulatory enzyme of Cholesterol biosynthesis is
	(a) Liver glycogen	10	(a) HMG-SCoA reductase
	(b) Muscle protein		(b) HMG-SCoA synthase
	(c) Liver proteins (d) Adipose tissue		(c) HMG-SCoA isomerase (d) HMG-SCoA decarboxylase
19	By decreased activity of lipoprotein lipase which change would	20	The metabolic function of LDL includes
	you expect? (a) Elevation of HDL		(a) To synthesize Apo-B48
	(a) Elevation of HDL (b) Elevation of LDL		(b) To transport cholesterol from liver to extranepatic ussues
	(c) Elevation of chylomicrons & VLDL		(c) To catabolize cholesterol
	(d) Elevation of chylomicrons only		(d) To synthesize bile acids
21	The 14 carbon chain fatty acid undergoes complete B- oxidation. How many B-oxidation cycles will be completed and how many acetyl SCoA molecules will be liberated?	22	Haximum amount of cholesterol is found in
	(a) 7 cycles and 8 acetyl SCoA		(a) Chylomicrons
	(b) 6 cycles and 7 acetyl SCoA		(b) YLDL
	(c) 5 cycles and 9 acetyl SCoA		(c) LDL
	(d) 4 cycles and 5 acetyl SCoA		(0) HDL
23	HDL is synthesized in	24	Steatorrhea is
	(a) Liver		(a) Absence of glucokinase (b) Malabsorption of carbohydrates
	(b) Kidneys (c) Spieen		(c) Malabsorption of proteins
	(d) Liver and intestine		(d) Malabsorption of fats
25	Adipose tissues are unable to synthesize glycerol-3-PO4 due to absence of	26	For entry of fatty acids into mitochondria carnitine is needed, which takes in
	(a) Glycerol phosphatase		(a) Long chain fatty acids
	(b) Glycerol dehydrogenase		(b) Glycogen
	(c) Glycerol kinase (d) Glycerol oxidase		(c) Short chain fatty acids
	(b) blyceroi baibase		(d) Both short and medium chain fatty acids
27	Ceramide is needed for the synthesis of glycosphingolipids and sphingophospholipids. It is synthesized from	28	Which of the following compounds is the common intermediate in ketogenesis & cholesterol biosynthesis
	(a) Glycerol and phosphate group	,	- (a) Acetone
	(b) Sphingosine and Clycerol		(b) Mevalonic acid
	(c) Sphingosine and phosphate group		(c) Lecithin
	(d) Sphingosine and fatty acids		(d) Acetoacetyl SCoA
29	Elcosanoids are synthesized from arachidonic acid which can be released from	30	Conversion of cholecalciferol to 1,25 dihydro- cholecalciferol takes place in
	(a) Dipalmityl lecithin		(a) Spleen and lungs
	(b) Sphingosine		(b) Liver and brain
			to a series and a series
	(c) Phosphotidyl inositol		(c) Kidney and small intestine

Marks obtained:	
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CLASS TEST ON G.I.T. - 2018 MBBS PART II- MCOs

Time Allowed: 30 20 minutes fotal marks: Select one best answer All of the following is true about Rennin except: Which of the following statement is incorrect Gastric juice is neutralized by pancreatic NaHCO1 It is involved in curdling of milk Trypsin, chymotrypsin and elastase are active at (a) Also called as chymosin (b) (b) neutral pH Amino acid serine is present in the active center of (c) It is not present in adults (c) trypsin only It converts calcium paracaseinate to casein Procarboxypeptidase is activated by trypsin. (d) (d) Regarding absorption of proteins all is false except: Which of the following is incorrect regarding absorption of amino acids Infants cannot absorb intact proteins right after birth (a) The transport of L-amino acids occurs by an active process Uptake of proteins is by special process endocytosis (b) **(b)** D-amino acids absorb by simple diffusion or pinocytosis in adults Macromolecular absorption in adults cannot cause (c) D-Amino acids are more rapidly absorbed than L-(c) food allergies amino acids Intact proteins absorption in infants is crucial for (d) D and L amino acids absorption is at ileum and (d) immunoglobulin transfer distal jejunum Regulation of saliva is by: Choose the correct statement about Hartnup's disease Unconditioned reflex Tryptophan absorption is the most effected (a) (a) **(b)** Conditional Reflex Tyrosine absorption is the most effected (b) Spontaneous secretion Phenylalanine absorption is the most effected (c) (c) All of the above Vitamin B12 is inadequate (d) Regarding saliva which of the following is incorrect: Gastric juice contains all of the following except (a) HCI (a) Contains amylase and lipase Pepsin Contains salivary proteolytic enzymes (b) (b) (c) Contains secretory IgA and lysozymes (c) Intrinsic factor ではない は 報送を定式 Contains peroxidases (d) Vitamin B 12 **(d)** Chyluria is the 10 Most Dietary TAG is absorbed from intestinal lumen after hydrolysis as Excretion of milky urine (a) Glycerol-P and FA Obstruction in transportation phase of lipid (p) Acyl CoA digestion in lacteals An abnormal connection between urinary tract and Acyl CoA and glycerol lymphatic drainage (d) All of above FA and 2 MAG 11 "Micelles" formed in intestine Lipase in presence of bile salts for its optimal activity combines with a protein co-enzyme called Contain mostly TAG (a) (a) Amylase (b) Are secreted by intestinal epithelial cells (p) Kinin Are mainly absorbed in stomach wall (c) Pepsin (c) (d) Are smaller than droplets of emulsified fats (d) Colipase Activation of fatty acids inside the intestinal mucosa 13 2-MAG is converted to 1-MAG by enzyme cells is by Apo-B48 (a) (a) Lipase Pepsin (b) Isomerase (p) Thickinase (c) (c) Cholesterol esterase (d) Lipase Phospholipase A2

PROTEINS & LIPID METABOLISM - 2019 SECOND YEAR MBBS - MCQs

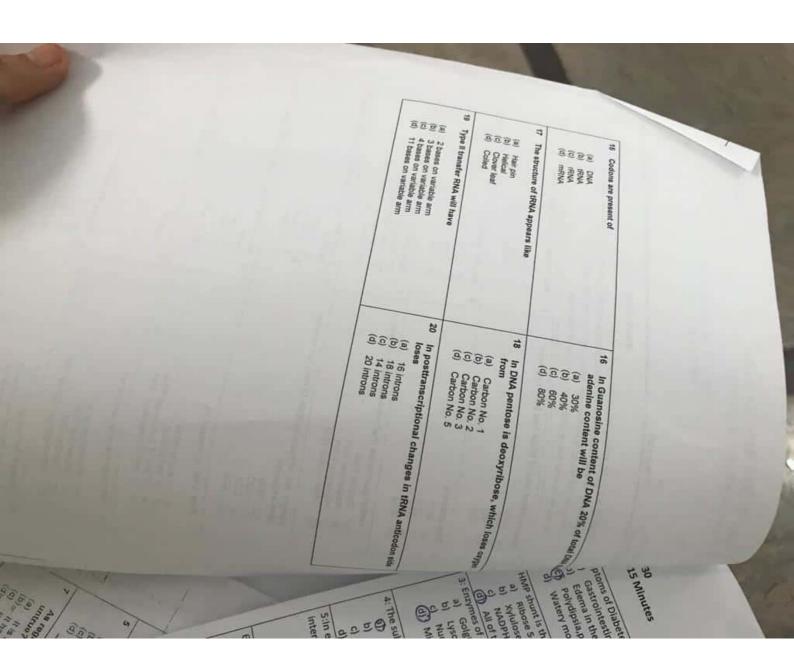
Harks	obtained:	
LINEE	DULANIEU.	

best answer.

Ling or overwriting will not be accepted and no marks will be given even if the answer is correct.

Total marks: 30 Time allowed 20 min.

- 4		
Î	a-oxidation of fatty acids occurs mainly in (a) Brain (b) Muscles (c) Liver (d) Adipose tissue	2 Activation of fatty acids requires all of the following except: (a) AIP (b) Coenzyme A (c) Thiokinase (d) Carnitine
3	Lovastatin, a cholesterol lowering drug is a (a) Competitive inhibitor of acetyl-SCoA carboxylase (b) Competitive inhibitor of acetyl-SCoA dehydrogenase (c) Competitive inhibitor of HMG-SCoA synthetase (d) Competitive inhibitor of HMG-SCoA reductase	4 Which of the following enzyme is inhibited by Aspirin (a) 5 lipoxygenase (b) 15 lipoxygenase (c) 12 lipoxygenase (d) Cyclo-oxygenase
5	As for the density of lipoproteins is considered, which one is the correct order from lowest to highest density? (a) LDL, VLDL, HDL, Chylomicrons (b) VLDL, LDL, HDL (c) Chylomicrons, VLDL, LDL, HDL (d) Chylomicrons, LDL, YLDL, HDL	6 Most of the reducing equivalents (NADPH-H-) utilized for the synthesis of fatty acids are generated from (a) Glycolysis (b) HMP shunt (c) Gluconeogenesis (d) Citric acid cycle
7	Hepatic lipogenesis is stimulated by (a) Epinephrine (b) Glucagon (c) Insulin (d) cAMP	8 Bile acids are formed from cholesterol in liver by losing: (a) 4 carbons (b) 5 carbons (c) 3 carbons (d) 2 carbons
9	- End product of B oxidation of 21 carbon fatty acid will be (a) Acetoacetyl-SCoA (b) Acetyl-SCoA (c) Propionyl-SCoA (d) Succinyl-SCoA	10 Which of the following enzyme is absent in liver (a) Thiophorase (b) Glycogen synthase (c) Phosphatase (d) Phosphorylase
11	Biosynthesis of sphingosine requires (a) Palmityl-SCo A · glycine (b) Palmityl-SCo A · serine (c) Palmityl-SCo A · tyrosine (d) Palmityl-SCo A · threonine	12 As regards salivary lipase (a) It converts (at into monoacylglycerol & 2 (atty acids (b) Diacylglyceerol and a fatty acid (c) Glycerol and three fatty acids (d) It has no effect on fat
13	Phosphatidic acid is precursor for the biosynthesis of (a) Cephalin (b) Cholesterol (c) Lipoxin (d) Leukotriene	14 LC Oxidation of fatty acids will yield (a) Palmityl-SCoA (b) Succinyl-SCoA (c) Dicarboxylic acids (d) Lecithin



Marks	obtained:	
	antwitter.	

CLASS TEST ON LIPIDS - 2018 FIRST YEAR MBBS PART I - MCO

FIRST YEA	R MBBS PART I - MCQs
Total marks: 30 Time Allowed: 20 minutes	
Select one best answer 7	
1 Ceramide is composed of (a) Fatty acid and glycerol (b) Fatty acid glycerol and phosphate (c) Fatty acid and sphingosine (d) Fatty acid and cholesterol	2 Which of the following has the lowest density? (a) Very low density lipoproteins (VLDL) (b) Low density lipoproteins (LDL) (c) Chylomicrons (d) High density lipoproteins (HDL)
3 Aceto acetic acid is (a) Bile acid (b) Bile salt (c) Bile pigment (d) Ketone body	4 Maximum energy is obtained by the oxidation of (a) Carbohydrates (b) Proteins (c) Fals (d) Both (a) & (b) are correct
5 Chylomicrons are rich in (a) Proteins (b) Phospholipids (c) Cholesterol (d) Triacylglycerol	6 Increased level of ketone bodies is observed in (a) Hypertension - (b) Diabetes mellitus (c) Hypoglycemia (d) Nephrotic syndrome
7 As regards ergosterol which of the following is untrue? (a) It is a steroid present in plants (b) = It has more double bonds than cholesterol (c) It is not present in enimals (d) — It has 27 carbon atoms	8 Which of the following nitrogenous alcohol is present in cephalin? (a) Choline (b) Serine (c) Threonine (d) Ethanolamine
9 PGE: will be derived from (a) Eicosatreinoic acid (b) Eicosatetranoic acid (c) Eicosapentanoic acid (d) Both (a) & (b) are correct	(a) Three double bonds (b) Four double bonds (c) Two double bonds (d) No double bond
(a) Soluble in water (b) Insoluble in organic solvents (c) Soluble in both water and organic solvents (d) Soluble in organic solvents	12 Which of the following is not an essential fatty acid? (a) Linoleic acid (b) Oleic acid (c) Linolinic acid (d) Arachidonic acid
13 Linoleic acid is	14 Which of the following lipoproteins has highest cholesterol content?

HDL

LDL

VLDL

Chylomicrons

(3)

(b)

(c)

(d)

Eighteen carbon with three double bonds

Eighteen carbon with four double bonds

Twenty carbon with four double bonds

Eighteen carbon with two double bonds

(a)

(b)

(c)

(d)

15	1,150	ions are present of	16	in Guanosine content of DNA 20% of total DNA then
	(a)	DNA	1	
	(0)	tRNA	ì	(a) 30%
	(c)	rRNA	- 1	(b) 40%
	(d)	mRNA		(c) 60% (d) 80%
17	The	structure of tRNA appears like	18	
		ii	1 ,	from
	(a)	Hair pin	- 1	
	(p)	Helical	1	(a) Carbon No. 1
	(c)	Clover leaf		(b) Carbon No. 2
	(d)	Coiled		(c) Carbon No. 3
			1	(d) Carbon No. 5
19	Type	II transfer RNA will have	-	
			20	In posttranscriptional changes in tRNA anticodon side
	(a)	2 bases on variable arm	1	loses to tRNA anticodon side
	(b)	3 bases on variable arm	1	(a) 16 introns
	(c)	3 bases on variable arm	1	(h) 10 l-1
	(d)	4 bases on variable arm	- 1	(b) 18 introns
	(0)	11 bases on variable arm		(c) 14 introns
			1	(d) 20 introns

Roll No:

CLASS TEST ON NUCLEOTIDES MBBS PART I - MCQs

Total marks:

20

Time Allowed:

20 minutes

Instructions

- All MCQs are to be attempted on the paper and returned to the invigilator within given time.
- 2. Any cutting or overwriting will not be accepted and no marks will be given even if the answer is correct.
- Write your roll no. only on the perforated portion of the title page.
- 4. Do not write your name or discuss your identity in any way

4. Do not write four new	
Pseudouridine arm of tRNA has base sequence	2 Non coding region of DNA is called
10.	(a) Exon
(a) GGU	(b) Intron
(b) CCC	(c) Codon
(c) TWC	(d) Neutron
(d) AGG	
Stop codon is	4 Initiation codon is
(a) AUG	(a) GAG
(b) CCU	(b) GAC
(c) UAA	(c) AGG
(d) AAG	(d) AUG
to trick could can be present of	on 6 Variable arm is present on
7 methyl guanosine triphosphate cap is present o	(a) Ribosomal RNA
(a) Transfer RNA	(b) Small nuclear RNA
(b) Messenger RNA	(c) Heterogenous nuclear RNA
(c) Ribosomal RNA	(d) Transfer RNA
(d) Small nuclear RNA	(0)
Longer arm of transfer RNA (3'end) has terminal	8 In posttranscriptional modifications, tRNA loses from
basa sequence	its 5'end
	(a) 13 bases
1-7	(b) 18 bases
(b) GGC (c) CCA	(c) 15 bases
(d) CCG	(d) 16 bases
Poly A tail is present on	10 Which of the following has maximum number of minor bases
	(a) tRNA
(a) 5' end of IRNA	(b) rRNA
(b) 3' end of tRNA (c) 5' end of messenger RNA	(c) mRNA
	(d) Small nuclear RNA
(d) 3' end of messenger KNA	
Anticodon arm is present on	12 Which of the following base pairs will have 3 hydrogen bonds?
(a) Messenger RNA	(a) A-T
(b) Ribosomal RNA	(b) A-U
(c) Transfer RNA	(c) G-T
(d) Heterogenous nuclear RNA	(d) G-C
When ATP changes to ADP	14 Pyrimidine nucleotide is
	(a) ADP
	1-1
(a) 14.3 K.Cal are released	(b) GMP

Total marks: 30 Time allowed 20 min. Z Amino acids without genetic code are (a) Hydroxyrsine (b) Hydroxyrsine (c) Seknocysteine (d) All of the above Which of the following amino acids participates in coencyme synthesis? (a) Sering (b) Hydroxyrsine (c) Seknocysteine (d) All of the above Which of the following amino acids participates in coencyme synthesis? (a) Sering (b) Hydroxyrsine (c) Histidine (d) User to Brain (d) Liver to Brain (d) Liver to Brain (d) Earl to Huscle (d) Histidine (d) Cysteine G Glutamate dehydrogenase is present in (e) Liver to Brain (f) Histidine (g) Hydroxyrsine (g) Hydroxyrsine (g) Hydroxyrsine (hydroxyrsine (g) Hydroxyrsine (g) Hyd	1	outed a content		Roll No:		
Total marks: 30 Time allowed 20 min. Z Amino acids without genetic code are (a) Hydroxyrsine (b) Hydroxyrsine (c) Seknocysteine (d) All of the above Which of the following amino acids participates in coencyme synthesis? (a) Sering (b) Hydroxyrsine (c) Seknocysteine (d) All of the above Which of the following amino acids participates in coencyme synthesis? (a) Sering (b) Hydroxyrsine (c) Histidine (d) User to Brain (d) Liver to Brain (d) Liver to Brain (d) Earl to Huscle (d) Histidine (d) Cysteine G Glutamate dehydrogenase is present in (e) Liver to Brain (f) Histidine (g) Hydroxyrsine (g) Hydroxyrsine (g) Hydroxyrsine (hydroxyrsine (g) Hydroxyrsine (g) Hyd	Sep.	PROTEINS ME	AR ME	BBS - MCQS		
Compared to provide the provided by an area of the provided by the provided	1	a preceded and no marks will be g	iven ev	Total marks: 30 Time allowed 20 p	nin.	
Commence of the commence of	1	onteline by	2	tanne acies michort deneric cone tis		-
### Which of the following amino acids participates in coenzyme synthesis? ### Pyreate	1	Grand and see		(b) Hydraxyproline (c) Selenocysteine		
(a) Ever & Brain (b) Brain & Mustle (c) Mustle & Liver (d) Intestine & Muscle (d) Intestine & Muscle (e) Mustle of Liver (d) Intestine & Muscle (e) Muscle of Liver (d) Intestine & Muscle (e) Mitochandria 7 Number of AIPs used in the urea cycle are (a) 1 (b) 2 (c) 3 (d) 4 (d) 4 (e) Active transport (b) Diffusion (c) Special transport system (d) Malate shuttle 8 Ornithine enters mitochandria in urea cycle by (a) Active transport (b) Diffusion (c) Special transport system (d) Malate shuttle 9 Ammonia is toxic because (a) Alpha-ketoglutarate is not converted into glutamic acid (b) Glutamate is not converted into cr-ketoglutarate (c) It blocks the urea cycle (d) It blocks glycolysis 10 In the blood, ammonia is transported in the form of (a) Alanine (b) Glutamine (c) Urea (d) All of the above 11 Enzyme involved in the synthesis of Ntric Oxide (NO) from Arginine is (a) NO synthetase (b) NO synthetase (c) NO transferase (d) NO carboxylase (d) All of the above 11 Homocystinuria is the outcome of defective metabolism of (a) Cysteine (b) Glycine (c) HCO's	1	parage transamination by alanine aminotransferases which of the following ketoacids can act as recipient of amino group? (a) Pyrovate (b) Pyrovate (c) Abha ketoglutarate (c) Ovaluacitate	1	synthesis? (a) Serine (b) Tyrosine (c) Histidine	es in coenzyme A	
(a) Active transport (b) C (c) 3 (d) 4 Ammonia is toxic because (a) Alpha-ketoglutarate is not converted into glutamic acid (b) Glutamate is not converted into cc-ketoglutarate (c) It blocks the urea cycle (d) It blocks glycolysis 10 In the blood, ammonia is transported in the form of (a) Alanine (b) Glutamine (c) Urea (d) All of the above 11 Enzyme involved in the synthesis of Ntric Oxide (NO) from Arginine is (a) NO synthetase (b) NO synthetase (c) NO transferase (d) NO carbonylase 12 Amino acid which is not degraded in liver (a) Leucine (b) iso leucine (c) Valine (d) All of the above 13 Homocystinuria is the outcome of defective metabolism of (a) Cysteine (b) Hethionine (c) Hyosine (d) HOC 3	5	(a) Liver & Brain (b) Brain & Muscle (c) Muscle & Liver	6	(a) Cytosol (b) Endoplasmic reticulum (c) Lysosomes		
(a) Alpha-ketoglutarate is not converted into glutamic acid (b) Glutamate is not converted into cc-ketoglutarate (c) It blocks the urea cycle (d) It blocks glycolysis Enzyme Involved in the synthesis of Mtric Oxide (NO) from Arginine is (a) NO synthetase (b) NO synthase (c) NO transferase (d) NO carboxylase 12 Amino acid which is not degraded in liver (a) Leucine (b) Iso leucine (c) Valine (d) All of the above 13 Homocystinuria is the outcome of defective metabolism of (a) Cysteine (b) Hothionine (c) Iyosine (d) Hothionine (e) Hyosine (f) Hyosine (g) Hyosine (h) Hyosine (g) Hyosine (h) Hyosine (g) Hyosine (g) Hyosine (h) Hyosine (g) Hyosine (g	7	(a) 1 (b) 2 (c) 3	8	(a) Active transport (b) Diffusion (c) Special transport system	у	-
Arginine is (a) NO synthetase (b) NO synthase (c) NO transferase (d) NO carboxylase (a) Leucine (b) Iso leucine (c) Valine (d) All of the above 13 Homocystinuria is the outcome of defective metabolism of (a) Cysteine (b) Hethionine (c) Lyrosine (c) HCO's)	(a) Alpha-ketoglutarate is not converted into glutamic acid (b) Glutamate is not converted into ca-ketoglutarate (c) It blocks the urea cycle	10	(a) Alanine (b) Glutamine (c) Urea	orm of	-
(a) Cysteine (b) Methionine (c) Lyrosine (d) Clucose (e) HCO3	11	Arginine is (a) NO synthetase (b) NO synthase (c) NO transferase	12	(a) Leucine (b) Iso leucine (c) Valine		
(d) Methionine	13	(a) Cysteine (b) Hethionine	14	(a) Glucose (b) Glycine (c) HCO	m	_

15	Steatorrhea Is	16	Ubiquinone is:
	(a) Excretion of cholesterol in feces		(a) Present in complex III
	(b) Excretion of chylomicrons in feces		(b) Present in complex II
	(c) Excretion of large amount of fats in feces		(c) Is a part of complex V
	(d) Excretion of bile salts in urine		(d) Is a mobile electron carrier
17	2,4 DNP is:	18	Rotenone is:
٠٠	T\$3.77.10179745757	10	
	(a) An inhibitor of ETC (b) An uncoupler of ETC		(a) An inhibitor of complex I in ETC (b) An uncoupler of complex I in ETC
	(c) An antidote of cyanide poisoning	1	
	(d) An antidote of CO poisoning	1	(c) Is an inhibitor of ATP synthase in ETC (d) Is an inhibitor of cytochrome oxidase in ETC
		1	(a) is an amonor or externative extense in E1C
19	The reduced equivalents of tertiary metabolism that	20	In ETC autochooms a las
100	enter into the ETC are:	20	In ETC cytochrome c is:
	(a) NADPH & FAD	1	(a) Complex IV
	(b) NAD & FAD	1	(a) Complex IV (b) Complex III
	(c) NADH & FADH2	1	(c) A mobile electron carrier
	(d) O ₂ & H ₂ O	l	(d) It pumps protons out of mitochondrial matrix
		1	The state of the s
21	Complex IV in ETC:	22	ATPs are synthesized in ETC by:
	(a) Pumps out 4 protons out of the matrix		(a) Complex IV
	(b) Pumps in 4 proteins into the matrix	1	(b) Succinate dehydrogenase complex
	(c) Pumps out 2 protons out of the matrix	1	(c) Pyruvata dehydrogenase complex
	(d) Synthesizes ATP	1	(d) Complex V
		_	
23	In ETC an uncoupler:	24	Thermogenin is:
	(a) Stops the flow of electrons	1	(a) A natural inhibitor found in infants
	(b) Stops the pumping of protons (c) Uncouples the mobile carriers from ETC	1	(b) A natural uncoupler
	(d) Uncouples the mobile carriers from ETC (d) Uncouples the exidation from phosphorylation	1	(c) Only found in infants among humans (d) Both (h) & (c) are samong humans
	(d) Olicospies of discountries prosperory		(d) Both (b) & (c) are correct
	When energy from a high energy compound is	26	Which of the fall
25	directly transferred to nucleoside diphosphate to	1	Which of the following complexes in Electron Transport chain does not libe and library
	form a triphosphate without the help of electron	1	Transport chain does not liberate enough energy to pump protons out of the mitochondrial matrix?
	transport chain it is called:	1	matrix?
	(a) Redox potential	1	(a) Complex I
	(b) Redox couple	1	(b) Complex II
	(c) ATP synthase complex (d) Substrate level phosphorylation	1	(c) Complex III (d) Complex IV
	(d) Substrate level phosphorylation	1	(c) complex (v
	Electron transport chain in located:	28	Citric acid cycle (Krebs' cycle) takes place:
27	t man a tertam		(a) In the cytoplasm of cell
	(b) On the outer side of outer mitochondrial membrane	1	(b) In the cytoplasm of mitochands
	(c) On the inner side of outer mitochondrial membrane	1	(C) In the intermembranous appears of the
	(d) On the inner mitochondrial membrane	1	(d) In the matrix of mitochondria
		-	
29	Inner mitochondrial membrane is:	30	Cyanide combines with:
	Highly selective in permeability	1	(a) Iron in Fe ¹² state in complex IV (b) Iron in Fe ¹³ state in complex V
	permeable only to re-	1	(c) Iron in Fe ⁻³ state in complex IV
	(c) impermeable (d) Freely permeable		(d) CuA & CuB in complex IV
	(d) Freely permasses		* (* * * * * * * * * * * * * * * * * *

15 Steatorrhea is (a) Excretion of cholesterol in feces (b) Excretion of chylomicrons in feces (c) Excretion of large amount of fats in feces (d) Excretion of bile saits in unne 17 2.4 DNP is: (a) An inhibitor of ETC (b) An uncoupler of ETC	16 Ubiquinone is: (a) Present in complex III (b) Present in complex II (c) Is a part of complex V (d) Is a mobile electron carrier 18 Rotenone is: (a) An inhibitor of complex I in ETC (b) An uncoupler of complex I in ETC (c) Is an inhibitor of ATP synthase in ETC (d) Is an inhibitor of cytochrome oxidase in ETC
(c) An antidote of CO poisoning (d) An antidote of CO poisoning The reduced equivalents of tertiary metabolism enter into the ETC are: (a) NADPH & FAD (b) NAD & FAD	extochrome c is:
(d) O ₂ & H ₂ O 21 Complex IV In ETC: (a) Pumps out 4 protons out of the matrix (b) Pumps in 4 proteins into the matrix (c) Pumps out 2 protons out of the matrix (d) Synthesizes ATP	22 ATPs are synthesized in ETC by: (a) Complex IV (b) Succinate dehydrogenase complex (c) Pyruvate dehydrogenase complex (d) Complex V
(a) Stops the flow of electrons (b) Stops the pumping of protons (c) Uncouples the mobile carners from ETC (d) Uncouples the exidation from phosphorylation	(a) A natural inhibitor found in infants (b) A natural uncoupler (c) Only found in infants among humans (d) Both (b) & (c) are correct
25 When energy from a high energy compound is directly transferred to nucleoside diphosphate to form a triphosphate without the help of electron transport chain it is called: (a) Redox potential (b) Redox couple (c) ATP synthase complex (d) Substrate level phosphorylation	26 Which of the following complexes in Electron Transport chain does not liberate enough energy to pump protons out of the mitochondrial matrix? (a) Complex I (b) Complex II (c) Complex III (d) Complex IV
27 Electron transport chain in located: [a: In the sytopiasm [b: On the outer side of outer mitochondrial membrane [c: On the inner side of outer mitochondrial membrane [d: On the inner mitochondrial membrane	28 Citric acid cycle (Krebs' cycle) takes place: (a) In the cytoplasm of cell (b) In the cytoplasm of mitochondria (c) In the intermembranous space of mitochondria (d) In the matrix of mitochondria
Inner mitochondrial membrane is: Laj Highly selective in permeability (b) Permeable only to H* ions in impermeable [c) Freely permeable	30 Cyanide combines with: (a) Iron in Fe ⁻² state in complex IV (b) Iron in Fe ⁻³ state in complex V (c) Iron in Fe ⁻³ state in complex IV (d) CuA & CuB in complex IV

Marks	obtained:	

SEND UP EXAMINATION - 2018 SECOND YEAR MBBS PART II - MCQs

100	
100	Control of the said
40.00	BEATAS:
ARKET	
Market Co. L.	in the same or other

30

25 minutes

Select one best answer

	Coerczyme Q	2	Accidental Ingestion of 2,4 Dinitrophenol will result in
1	(a) Oxidizes glucose		(a) More ATP synthesis
	(b) Reduces glucose	1	(b) Thermogenesis
	(c) Transfers electrons	1	(c) Increased synthesis of uracil
	(d) Transfer phosphates	1	(d) Reduced reduction of NADH
3	Steatorrhea is caused by	4	Secondary bile acids are synthesized in
	(a) Malabsorption of fats	1	(a) Stomach
	(b) Malabsorption of proteins	1	(b) Liver
	(c) Lactose intolerance	1	(c) Pancreas
	(d) Malabsorption of carbohydrates	1	(d) Intestine
5	For glycogenesis, glucose should be first converted	6	For the continuity of citric acid cycle, which of the
	lo	1	following compounds should be regenerated?
	(a) UDP-glucose	1	(a) Malate
	(b) Sorbitol	1	(b) Oxaloacetate
	(c) Lactic acid	1	(c) Furnarate
	(d) Pyruvic scid	1	(d) Succinate
7	During starvation, the first reserve nutrient to be depleted is	8	All of the following statements about albinism are correct except
	(a) Triacylglycerol	1	
	(b) Glycogen	1	(a) Tyrosinase is deficient in melanocytes (b) Skin is hypo pigmented
	(c) Proteins	1	(c) Eyes are hypo pigmented
	(d) Cholesterol	1	(d) It results in mental retardation
9	Disbetes insipidus is caused by the deficient	10	Irritability, tremore, intolerance to heat and high blood
	secretion of	1	glucosa level are indications of
	(a) Insulin	1	(a) Hypothyroidism
	(b) Glucagon	1	(b) Cushing's syndrome
	(c) Oxytocin	1	(c) Addison's disease
	(d) Vasopressin		(d) Hyperthyroidism
11	Secretion of epinephrine will	12	Allopurinol, which is used for the treatment of gout, is a competitive inhibitor of
	(a) Stimutate glycolysis		(a) Glycogen synthase
	(b) Inhibit gluconeogenesis	1	(b) Catalase
	(c) Stimulate glycogenesis	1	(c) Xanthine oxidase
	(d) Stimulate glycogenolysis		(d) Alkaline phosphatase
13	Okazaki fragments are related to	14	In the biosynthesis of pyrimidines
	(a) DNA synthesis	1	
	(b) Protein synthesis		 (a) Tyrosine and serine are added up to form pyrimidine (b) Glycine & mathionine are added up to form
	4.4		Cyflmidine
	(c) mRNA synthesis (d) tRNA synthesis		pyrimidine (c) Aspartic acid is incorporated as a whole

Marks	obtained:	

TEST ON CARBOHYDRATE METABOLISM MBBS PART II - MCQs

Total marks:

30

Time Allowed:

20 minutes

February 06, 2018

Select one best answer

30	rect one best answer		
1	Which of the following step of TCA cycle will liberate	2	la chicagona de la la chicagona de la chicagon
1	CO:7	1	In gluconeogenesis, for the conversion of pyruvate to phosphoenol pyruvate enzymes required are
	(a) Citrate → cis-aconitate		(a) Hexokinase and glucokinase
	(b) Succinyl SCoA → succinate		(b) PFK-1 and PFK-2
	(c) Malate → exalencetate		(c) Pyruvate dehydrogenase and pyruvate carboxylase
	(d) a-ketoglutarate → Succinyl SCoA		(d) Pyruvate carboxylase & PEP carboxykinase
-			5. See . 1999 1
3	In TCA cycle reversible steps are	4	Gluconeogenesis takes place in
	(a) 2 and 3		(a) Mitochondria of hepatic cells
	(b) 7 and 8 (c) 1 and 6		(b) Cytosol of hepatic cells
	(c) 1 and 6 (d) 5 and 6		(c) In muscles
	(3) 3 and 6		(d) Both in mitochondria & cytosol of liver
5	Glycogen synthesis will be activated when	6	Which of the following statements about Von Gierke's disease is untrue?
	(a) Glycogen synthase is phosphorytated	1	(a) There will be hypoglycemia
	(b) Glycogen synthase is dephosphorylated	1	(b) There will be hyperglycemia
	(c) Phosphorylase is phosphorylated		(c) There will be hyperlipidemia
	(d) Debranching enzyme is activated		(d) There will be hepatomegaly
7	Fructose 1,6 bisphosphatase is the enzyme of	8	Transaldolase transfera
_	(a) Glycolysis	"	
	(b) Glycogenolysis		(a) Two carbons from ketosugar to aldesugar
	(c) Glycogenesia	1	(b) Three carbons from aldosugar to ketosugar
	(d) Gluconeogenesis		(c) Two carbons from aldosugar to ketosugar (d) Three carbons from ketosugar to aldosugar
	(2)		(d) Three carbons from ketosugar to aldosugar
9	Aldolase-B converts	10	As regards citric acid cycle which of the statements is . untrue?
	 (a) Fructose 1,6 bisphosphate to glyceraldehyde-3- PO₄ & Dihydroxyacetone phosphate 	100	(a) Three NADH + H* are formed
	(b) Glucose to Glucose-1-PO ₄		(b) One FAD* is formed
	(c) Fructose-1-phosphate to glyceraldehyde &		(c) One GTP is formed
	Dihydroxyacetone phosphate		
	(d) Fructose-1-phosphate to glyceraldehyde-3-PO ₄ &		(d) One NADPH + H* is formed
	Othydroxyacetone phosphate		•
11	As regards Glucagon which of the following statements is untrue?	12	Conversion of Glucose-5-phosphate to Glucose-1- phosphate requires
	(a) Glucagon stimulates gluconeogenesis		(a) Isomerase
	(b) Glucagon stimulates glycogenolysis		(b) Epimerase
	(c) Glucagon inhibits glycogenesis		(c) Mutase
	(d) Glucagon stimulates glycolysis		(d) Hydratase
13	Which of the following statements about insulin is true?	14	Glucose-6-phosphate dehydrogenase is the enzyme of
	(a) Stimulate glycogenesis		(a) Glycogenesis
	(b) Stimulate glycogenolysis		(b) Glycolysis
	(c) Inhibits glycolysis		(c) Uronic acid pathway
	(d) Stimulates gluconeogenesis		(d) Hexase monophosphate shunt

15 Glucose-6-phosphate dehydrogenase is the enzyme of	16 In hereditary fructose intolerance the
(a) Glycogenesis	(a) PFK-1
(b) Glycolysis	(b) PFK-2
(c) Uronic acid pathway	(c) Pyruvate carboxylase
(d) Hexose monophosphate shunt	(a) PFK-1 (b) PFK-2 (c) Pyruvate carboxylase (d) Aldolase-B
17 Which one of the following does not take part in gluconeogenesis?	18 Glycolysis is inhibited by the increased level of
(a) Glycerol	(a) ADP
(b) Pyruvate	(b) ATP
(c) Glucogenic amino acids	(c) Insulin
(d) Palmityl-SCoA	(d) PFK-2
19 HMP shunt and uronic acid pathway collectively provide	20 Increased level of restrict
protect	20 Increased level of sorbitol can lead to following complications except:
(a) 36 ATP (b) 15 ATP	(a) Cataract
(c) 9ATP	(b) Neuropathy
(d) NIATP	(c) Retinopathy
	(d) Albinism
21 Three different enzymes and five coenzymes are	
Tourid III	22 One statement about hormones is incorrect
(a) Glucose-6-Phosphate dehydrogenase	
(D) Galactose-1-Phosphate pyrophosphanics	(a) Insulin stimulates entry of glucose into the cell (b) Glucagon stimulates glucoses into the cell
(c) Grycogen synthase	(b) Glucagon stimulates entry of glucose into the cell (c) Epinephrine is hyperchae-
(d) Pyruvate dehydrogenase complex	(c) Epinephripe in the discourse genesis
	(d) Thyroid hormone is hypoglycemic
Which one of the following enzymes has no role in	
The state	24 Regulatory enzymes of citric acid cycle are
(a) Transketolase (b) Gluccse-6-phosphatase	(a) E
(c) Transaldolase	(a) Furnarase and citrate synthase (b) Thickinase and materials
(d) Glucose-6-phosphate dehydrogenase	(b) Thickinase and citrate synthase (c) a ketoglutarate dehydrogenase (d) Citratella dehydrogenase
, and an including	(d) Citrata sustaine dehydrogenase
	(c) o ketoglutarate dehydrogenase (d) Ckrate synthase and alpha ketoglutarate dehydrogenase complex
Citric acid cycle is activated by	
(a) Increased level of PFK-1	25 Which is the most appropriate statement about TCA cycle? (a) In TCA cycle 10 and
(b) Increased level of citrate	(a) In TCA
(c) Increased level of ATP	(b) in TCA and ID ATP are formed
(d) Increased level of NADH + H*	(b) In TCA cycle 6 ATP are formed (c) In Citric acid cycle 1 are formed
	(c) In Citric acid cycle 14 ATP are formed (d) In Citric acid cycle 14 ATP are formed
2.3 bisphosphoglycerate is formed in	are formed
Constant a basica and	28 Gluconeogenesis takes place in
Contact and make	(a) Liver
(c) Glucose-Alanine cycle	(b) Kidoeva
(d) Lactose intolerance	(C) Museles
	(d) Both (a) & (b) are correct
Substrate level ATP formation occurs in glycolysis	(a) and correct
	30 If cytosolic NADH • H+ sends its hydrogen ions into mitochondria through aspartate malate shutton production will be
when	mitochondria through aspartate malate shuttle the ATI (a) 2.5
	production will be
Exercise 1.6 bisphosphate is converted to	(a) 25
(a) Fructose 1,6 bisphosphate is converted to	
glyceraldehyde 3- PO4 6 Unydroxyacetone PO4	
glyceraldehyde 3- PO4 & Dhydroxyacetone PO4 3 phosphoglycerate is converted to 2-	(b) 1.5
glyceraldehyde 3- PO4 6 Unydroxyacetone PO4 3 phosphoglycerate is converted to 2- phosphoglycerate phosphoglycerate phosphoglycerate phosphoglycerate	(b) 1.5
glyceraldehyde 3- PO4 & Dhydroxyacetone PO4	

ι	ezsh	Ny	han syndrome is	16	The man	major catabolite product of pyrimida major catabolite pyrimida maj
(to the deficiency of hypoxanthine guanine		(a)	Urea E S
			sphoribosyl transferase		/51	Guanine
			osphoribosyl synthetase		(p)	Guanine
			rbamoyl phosphate synthetase	1	(c)	Guanine Uric acid
	(d)	P	osphorylase kinase	1	(d)	β–alanine
	Intro	on i		18	The	new DNA strand which is copied away from
		_		1	rep	lication fork is called
	(a)	C	oding strand on DNA	1		
	(p)	. 1	ion coding strand on DNA	1	(a)	
	(c)	9	Coding region on rRNA	1	(p)	Tripleto au al Iri
	(d)	,	ion coding region on tRNA		(c)	Leading strand
_					(d)	Lagging strand
9	Th	e d	evelopment of newsout			y remig
	dia	be	evelopment of neuropathy and retinopathy in tes mellitus is implicated to	20	F-	
	(a)		is implicated to	1 - 4	En/	d product of oxidation of odd chain fatty acids will
	(b)		Increased synthesis of fatty acids	1	100	of odd chain fatty acids will
	(c)		Increased breakdown of fatty acids Glycogenesis	1	1-,	ACRIMI SCAA
	(d)	`	Conversion of element	1	(p)	Majony Scan
	,-,	•	Conversion of glucose to sorbital	1	(c)	SUCCITIVI CO.
-		_		1	(d)	Propionyl SCoA
21	w	hic	h of the following amino acids is incorporated	-		
	In	to	purine molecule and becomes the atom number and seven of purine?	22	Th	e mutation in which changed base, codes for the
	٩,	5 :	and seven of purine?		84	me ami which che
	(a		Histidine			amino acids is called base, code
	(0		Citruline	- 1	(a)	todes for the
	(c		Hydroxy Proline Givoine	- 1	(b)	
	(u		Gyche	- 1	(c)	Missense Silent
_		-		-	(0)	Frame shift
2	3 W	hic	th of the following statement is untrue about	-		
	•			24	A!	of the far
	(4)	Insulin stimulates lipogenesis		0 x	cept:
	/		Insulin etimutatus ab aus		(a)	Urinan
	(0	-	Insulin stimulates glycogenesis Insulin inhibits glycogenolysis		The second	of the following about phenylketonuria are correct Urinary excretion of phenyl pyruvate It can be corrected
			Glucagon stimulates gluconeogenesis	1	(b)	Urinary excretion of phenyl pyruvate and phenyl lactate is increased it can be controlled by giving low dose of alanine catecholamine and melanus of the controlled by miving low dose of alanine catecholamine and melanus of the controlled by miving low dose of alanine catecholamine and melanus of the control by controlled by miving low dose of alanine catecholamine and melanus of the control by controlled by miving low dose of alanine catecholamine and melanus of the controlled by controlled by controlled by miving low dose of alanine catecholamine and melanus of the controlled by con
	,-		and a second series is	-	(0)	Phenylalaning by giving and phenyl
				-	,,,,	releads to decrease of the control be control by dose of
25	S A	mer	onia is transferred from muscles to liver in the	+		anine and synthesis and into the
	fo	m	of	26	Nie	It can be controlled by giving low dose of alanine Phenylalanine cannot be converted into tyrosine It leads to decreased synthesis of thyroid hormone, catecholamine and melanin menn-Pick disease results from the deficiency of Ceramidase Haxoseaminidase Sphingomystins
	(a)	Free ammonia			mone,
	(0	,	Glutamine		(a)	Corporate Com the
	(c		Alanine	1	(p)	Hexoseaming
	(đ)	Tyrosine		(c)	Sphingomyelinase
_		_			(4)	Arylaulphatase A
ZĮ	C	27	colored stools are due to absence of	25	Wh	ich of the following pathways is amphibolic in Citric soid cycle Glycofysis
					nati	ure?
	(4		Bile salts		(e)	Citric acid
	(b)		Bile pigments Vitamin D		(b)	Glycotysis Cycle
	(d		Vitamin A	1	(c)	
-		_		-		
21			orotein lipase hydrolyzes	30	Res	Piratory scidosis occurs due to
)	Triacylphycerol present in chylomicrons Methyl Malonyl SCoA to Succinyl SCoA	1	(a)	Retantion of CO ₂
	-)	Methyl Majoryl SUGA ID SUCCERN SUGA	1		
	(D)	(PGH ₂ to PGI ₂	1	(c)	Retention of HCO ₃ - Overdose of some drugs e.g. salicylates

ARTMENT OF BIOCHEMISTRY

Roll No. :	
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Marks	obtained:	
NIBER NA	ODUAINEUL	

TEST ON G.I.T. & BIOENERGETICS - JAN. 2019 SECOND YEAR MBBS - MCQs

me Allowed:

30

20 minutes

Select	one	hest	answ	ver
MEICUI	CHIC		44131	

	Which of the following statements regarding digestion and absorption is true?	2 The function of enzyme enterokinase is to	
	 (a) Pancreatic lipase emulsifies lipids (b) The products of lipid digestion are resynthetinto triacylglycerols in intestinal epithelial or 	(a) Cause bicarbonate secretion by the pancreas ized (b) Stimulate secretion of gastrin by the stomach	
	The products of lipid digestion are resynthe into micelles in intestinal cells.	ized (c) Activate trypsinogen into trypsin	
	(d) The products of lipid digestion are absorbe active transport	by (d) Activate pepsinogen into pepsin	
	The Gall bladder:	4 Which is the inhibitor of gastric juice secretion?	_
	(a) Synthesizes bile	(a) Corticosteroids	
	(b) Stores bile	(b) Caffeine	
	(c) is stimulated to contract by the hormone C		
	(d) B and C	(d) Secretin	
	1-6 glycosidic bonds is cleaved by which of t following enzyme?	6 Proteolytic enzymes are produced by	
	(a) Maltase	(a) Stomach	
	(b) Isomaitase	(b) Small intestine	
	(d) Lactase	(c) Pancreas	
	(o) Lacase	(d) All of above	
	Endopeptidases include all of following, exce	8 Which of the following regarding Pepsin is correct	7
	(a) Trypsin	(a) Secreted by oxyntic cells	
	(b) Carboxypeptidase	(b) Converted to pepsin by Trypsin	
	(c) Chymotrypsin (d) Pepsin	(c) It converts proteins to proteoses and peptones	
_	(o) repair	(d) Pepsin is an exopeptidase	
ł	Regulation of sallva is by:	10 Regarding saliva which of the following is incorrect	t:
	(a) Unconditioned reflex (b) Conditional Reflex	(a) Contains amylase and linase	
	(b) Conditional Reflex (c) Spontaneous secretion	(b) Contains salivary proteolytic enzymes	
	(d) All of the above	(c) Contains secretory IgA and tysozymes	
		(d) Contains peroxidases	
1	Gastric juice contains all of the following exc	pt 12 Chyluria is the	-
	(a) HCI (b) Pepsin	(a) Excretion of milky urine	
	107 Cyani	(b) Obstruction in transportation phase of ligid dinest	tion
	(c) Intrinsic factor	in lectoris	
		(c) An abnormal connection between urinary tract an	nd
	(d) Vitamin B 12	lymphatic drainage (d) All of above	
13	Activation of fatty acids inside the intestinal coils is by	ucosa 14 Calcium ions facilitate action of lipase by	_
	(a) Apo-B48	The state of the s	
	(b) Pepsin	(a) Facilitating the binding of the enzyme to the fats	
	(c) Thickinase	(b) Inhibition of emulsification	
	(d) Lipase	(c) Micelle formation	
		(d) True solution formation	

	16 Ubiquinone is:
15 Steatorrhea is	(a) Present in complex III (b) Present in complex II (c) Is a part of complex V (d) Is a mobile electron carrier
(a) Excretion of cholesterol in feces	(b) Present in complex II
(b) Excretion of chylomicrons in feces (c) Excretion of large amount of fats in feces	(c) Is a part of complex V
	(d) is a mobile electron carrier
(d) Excretion of bile saits in unite	\\$\langle \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
17 2.4 DNP is:	18 Rotenone is:
(a) An inhibitor of ETC	(a) An inhibitor of complex Lin FTC
(b) An uncoupler of ETC	(b) An uncoupler of complex Lin 570
(c) An antidote of cyanide poisoning	(c) Is an inhibitor of ATP synthago in trans
(d) An antidote of CO poisoning	(d) Is an inhibitor of cytochrome oxidase in ETC
The reduced equivalents of tertiary metabolism that enter into the ETC are:	122
(a) NADPH & FAD	2000
(b) NAD & FAD	(a) Complex IV
(C) NADH & FADH	(b) Complex III
(d) O: 8 H:O	(c) A mobile electron carrier
	(d) It pumps protons out of mitochondrial matrix
Complex IV in ETC:	- Intochondrial matrix
(a) Puttos and A median	22 ATPs are synthesized in ETC by:
	(a) Complex IV
The Court of Distriction and and and and and and and and and an	(b) Succinate debud
(d) Synthesizes ATP	
n FTC	(c) Pyruvate dehydrogenase complex (d) Complex V
in ETC an uncoupler:	
CILLS TOR TONE OF THE	24 Thermogenin is:
b) Stops the pumping of protons Uncouples the motions	(a) A natural labor
Uncouples the mobile carriers from ETC	(a) A natural inhibitor found in infants (b) A natural uncoupler
norn phosphorylation	(c) Only found in in-
Den energy	(c) Only found in infants among humans (d) Both (b) & (c) are correct
hen energy from a high energy compound is rectly transferred to nucleoside diphosphate to nucleoside diphosphate to naport chain it is	
m a triphosphate without the help of electron Reformation it is called:	28 Which of the following complexes in Electron Transport chain does not liberate anomaly
	Transport chain does not liberate enough energy to
Redox potential Redox couple	pump protons out of the mitochondrial matrix?
OIP Synthesis	The state of the s
ATP synthase complex Substrate level of	(a) Complex I (b) Complex II
Substrate level phosphorylation	(b) Complex II
ctron transport chal	(d) Complex IV
in the cytoplasm	20
On the code	28 Citric acid cycle (Kreba' cycle) takes place:
On the inner side of outer mitochondrial membrane On the inner side of outer mitochondrial membrane	(a) In the cytoplasm of cell (b) In the cytoplasm of mitochondria
membrane membrane	(c) In the intermembranous space of mitochondria
ner mitochondrial membrane is:	(d) In the matrix of mitochondria
in the state of th	
Highly selective in permeability	30 Cyanide combines with:
i) Highly selective in permeability D) Permeable only to H* ions C) Impermeable (d) Freely permeable	30 Cyanide combines with: (a) fron in Fe ⁻² state in complex IV (b) fron in Fe ⁻³ state in complex V (c) fron in Fe ⁻³ state in complex IV

	The state of the s	16 End product of Odd chair
15	Increased level of glucagon will stimulate (a) Glycogenesis (b) Glycolysis (c) Lipogenesis (d) Gluconeogenesis	(a) Malonyl-SCoA (b) Methyl Malonyl-SCoA (c) Propionyl-SCoA (d) Succinyl-SCoA (e) Acetyl-SCoA
17	(e) Both (a) and (b) are correct Regulatory step in cholesterol biosynthesis is	18 Which of the following compounds is consistence in ketogenesis & cholesterol
12	(a) HMG-SCoA reductase (b) HMG-SCoA synthase (c) HMG-SCoA synthetase (d) Thiolase (e) Phosphorylase	(d) Acetoacetyl-SCoA (e) Palmityl-SCoA
19	All of the following statements about ketone bodies are correct except	20 All of the following statements about eicosanoids are
	Synthesis of ketone bodies is increased in diabetes mellitus These are synthesized in mitochondria Increased level of ketone bodies can deplete alkali reserve Synthesis of ketone bodies is deceased in starvation	(a) Eicosanoids are twenty carbon compounds (b) Lipoxygenase is inhibited by aspirin (c) All prostaglandins have OH group at 15 position except PGG (d) Leukotrienes have three double bonds
21	(e) Liver cannot use ketone bodies for energy purpose	(e) Lipoxins have four alternate double bonds
	Energy liberated from palmitic acid & palmito-oleic acid will be (a) Equal (b) Palmito-oleic acid will give more energy than palmitic acid (c) Palmitic acid will give more energy than Palmito-oleic acid (d) Unsaturated fatty acids give more energy than saturated fatty acids (e) Both (a) and (b) are correct	22 In Nie Mann Pick disease there is deficiency of (a) Ceramidase (b) Gangliosidase (c) Arylsulfatase (d) Spingomyelinase
23	Apo-848 is the protein present in	(e) Lipoxygenase
	(a) Chylomicrons (b) HDL (c) LDL (d) Gangliosides (e) Cerebrosides	24 Apo C, Apo E, Apo A, and Apo D are present in (b) HDL (c) LDL
25	During starvation the first nutrient depleted is	(d) IDL (e) Chylomicrons
	b) Glycogen c) Protein d) Cholesterol	All of the following statements about urea are com-
	e) Phospholpids Vitrogen atom of second amino group of urea comes a) Pyruvate	(c) Its blood level is 20-40 grams
-0	c) Arginine d) Malate e) Aspartate Deficiency of dopamine is brain	(a) It is detoxified to urea (b) Hyperammonemia can lead to come
- 3	a) Parkinsonism b) Phanylketonuria c) Alkuptonuria (3) Ciabetes mellitus	(e) None of the above is true 30 Which of the following amino acid takes part in the synthesis of Coenzyme-A? (a) Serine (b) Alanine (c) Glycine (d) Glutamic acid (e) Cystein

30 d marks: me Allowed: 20 minutes Select one best answer In oxidative phosphorylation, oxidation of one molecule of The vitamin acting as the component of respiratory chain is: FAD yields: (a) 3 ATP Tocopherol (a) (b) Ascorbic acid (b) 2 ATP (c) Niacin (c) 5 ATP (d) Folic acid (d) 7 ATP Which of the following is the inhibitor of complex IV Maltose and isomaltose are of electron transport chain Rotenone Salivary enzymes Carbon monoxide (b) Gastric enzymes (b) Barbiturates (c) Pancreatic enzymes (C) Penicillin Intestinal enzymes In which of the following organs glucose-6-phosphatase 5 By the action of alpha amylase, starch is converted is absent (a) Maltose (a) Liver Glucose

(b)

(c)

Sucrose

(d) Lactose

Kidneys

Muscles

Both (a) & (b)

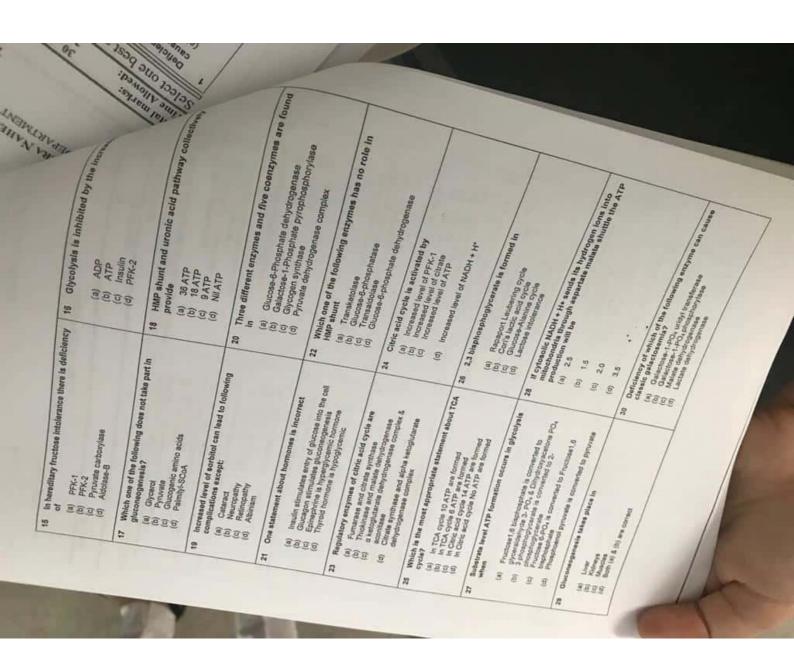
(b)

(c)

19	HDL (High Density Lipoprotein) is rich in	20 Which of the following is an essential fatty acid?
	(a) Cholesterol (b) Triacylglycerol (c) Cholesterol ester (d) Protein	(a) Palmitoleic acid (b) Oleic acid (c) Linolinic acid (d) Stearic acid
21	By the action of lipoxygenase on Arachidonic acid, which of the following compounds will be formed?	22 When one fatty acid from 2 position of lecithin is removed by phospholipase Az, the remaining part is known as: (a) Ethanolamine
	(a) Lecithin & cephain (b) Prostacyclins & thromboxanes (c) Leukotrienes & lipoxins (d) Bile acids & bile pigments	(b) Phosphoinositol (c) Plasmalogen (d) Lysolecithin
23	Which of the following is derived lipid? (a) Isoprenoid (b) Plasmalogen (c) Phosphoinositol (d) Phosphotidyl serine	24 Rancidity of fat can be prevented by addition of (a) Lead (b) Copper (c) Iron (d) Vitamin E
25	Which of the following is a water soluble fatty acid? (a) Arachidonic acid (b) Linoleic acid (c) Stearic acid (d) Butyric acid	26 Gangliosides and cerebrosides are (a) Glycerophospholipids (b) Glycosphingolipids (c) Elcosanoids (d) Steroids
27	Waxes are (a) Esters of fatty acids with glycerol (b) Esters of fatty acids with sphingosine (c) esters of fatty acids with high molecular weight (d) esters of fatty acids with methyl alcohol	Which of the following are secondary bile acids? (a) Chelic acid & Lithocholic acid (b) Chenodeoxycholic acid & Lithocholic acid (c) Cholic acid & Chenodeoxycholic acid (d) Deoxycholic acid & Lithocholic acid

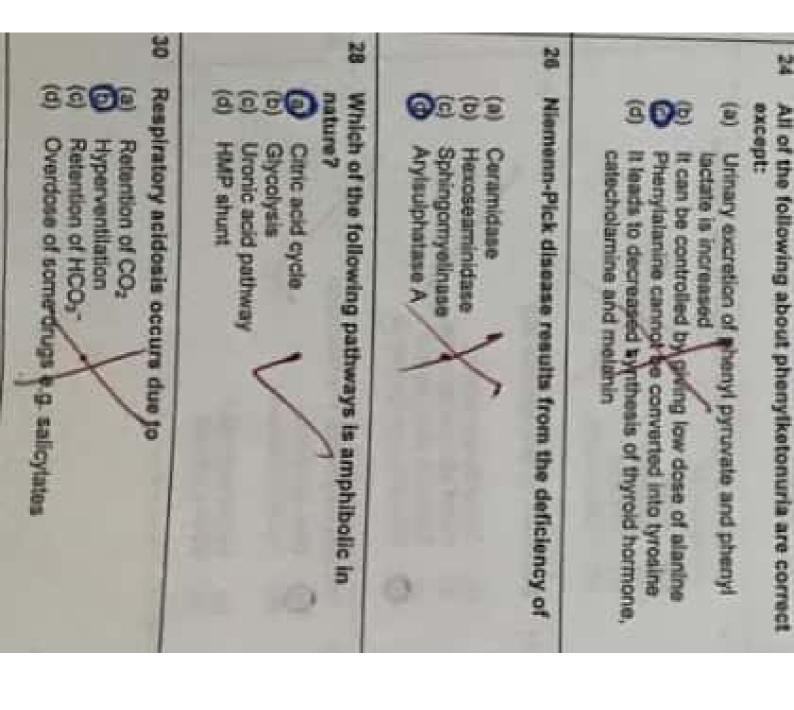
-	Deficiency of which of the following enzyme can cause classic galactosemia? (a) Galactose-1-POs unityl transferase (b) Galactose-1-POs phosphorylase (c) Maiste dehydrogenase (d) Lactate dehydrogenase	2 Which of the following step of TCA cycle will liberate CO:7 (a) Citrale cis-aconitate (b) Succinyl SCoA succinate (c) Maiste oxaloacetate (d) a-ketoglutarate Succinyl SCoA (d)
_	In gluconeogenesis, for the conversion of pyruvate to phosphoenol pyruvate enzymes required are (a) Hexokinase and glucokinase (b) PFK-1 and PFK-2 (c) Pyruvate dehydrogenese and pyruvate carboxylase (d) Pyruvate carboxylase & PEP carboxykinase	4 in TCA cycle reversible steps are (a) 2 and 3 (b) 7 and 8 (c) 1 and 6 (d) 5 and 6
	Gluconeogenesis takes place in (a) Mitochondria of hepatic cells (b) Cytosol of hepatic cells (c) In muscles (d) Both in milochondria & cytosol of liver	6 Glycogen synthesis will be activated when (a) Glycogen synthese is phosphorylated (b) Glycogen synthese is dephosphorylated (c) Phosphorylate is phosphorylated (d) Debranching enzyme is activated
	Which of the following statements about Von Gierke's disease is untrue (a) There will be hypoglycemia (b) There will be hyperlipidemia (c) There will be hyperlipidemia (d) There will be hepatomegaly	Fructose 1,6 bisphosphatase is the enzyme of (a) Glycogenolysis (b) Glycogenesis (c) Glycogenesis (d) Gluconeogenesis
	Transaldoluse transfers (a) Two carbons from ketosugar to aldosugar (b) Three carbons from aldosugar to ketosugar (c) Two carbons from aldosugar to ketosugar (d) Three carbons from ketosugar to aldosugar	Aldolase-B converts (a) Fructose 1,6 bisphosphate to glyceraldehyde-3- PO ₄ & Dihydroxyacetone phosphate (b) Glucose to Glucose-1-PO ₄ (c) Fructose-1-phosphate to glyceraldehyde & Dihydroxyacetone phosphate (d) Fructose-1-phosphate to glyceraldehyde-3-PO ₄ & Dihydroxyacetone phosphate
1	As regards citric acid cycle which of the statements is untrue? (a) Three NADH + H* are formed (b) One FAD* is formed (c) One GTP is formed (d) One NADPH + H* is formed (d)	12 As regards Glucagon which of the following statements is untrue? (a) Glucagon stimulates gluconeogenesis (b) Glucagon stimulates glycogenolysis (c) Glucagon stimulates glycogenesis (d) Glucagon stimulates glycolysis
1 2	Conversion of Glucose-6-phosphate to Glucose-1- phosphate requires (a) Isomerase (b) Epimerase (c) Mutase (d) Hydralase	Which of the following statements about insulin is true (a) Stimulate glycogenesis (b) Stimulate glycogenolysis (c) Inhibits glycolysis (d) Stimulates gluconacgenesis

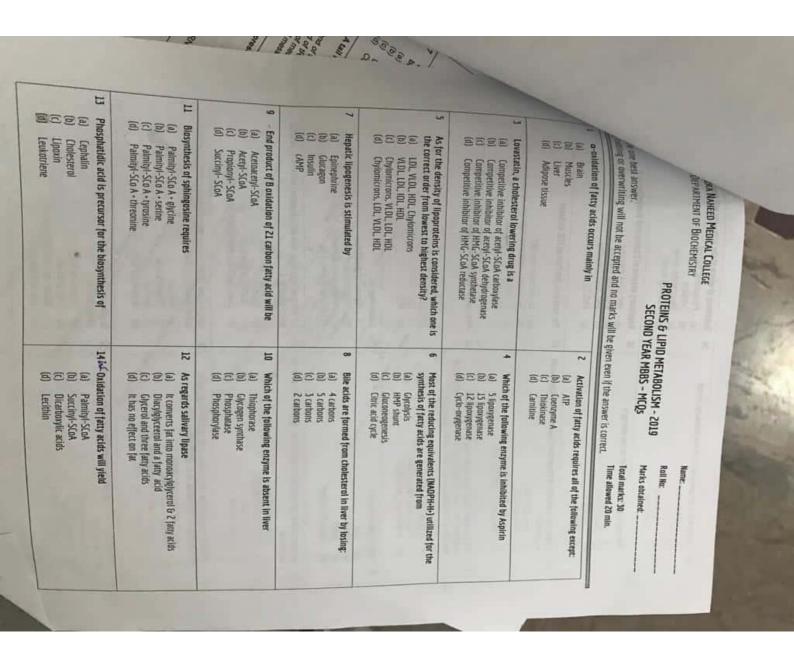
-	Deficiency of which of the following enzyme can cause classic galactosemia? (a) Galactose-1-PO, unityl transferase (b) Galactose-1-PO, phosphorylase (c) Melate dehydrogenase (d) Lactate dehydrogenase	2 Which of the following step of TCA cycle will liberate CO ₂ ? (a) Citrate — cis-acontate (b) Succiryl SCoA — succinate (c) Malate — oxaloscetate (d) a-ketoglutarate — Succiryl SCoA
	In gluconeogenesis, for the conversion of pyruvate to phosphoenol pyruvate enzymes required are (a) Hexdkinase and glucokinase (b) PFK-t and PFK-2 (c) Pyruvate dehydrogenase and pyruvate carboxylase (d) Pyruvate carboxylase & PEP carboxykinase	4 in TCA cycle reversible steps are (a) 2 and 3 (b) 7 and 8 (c) 1 and 6 (d) 5 and 6
	Gluconeogenesis takes place in (a) Mitochondria of hepatic cells (b) Cytosol of hepatic cells (c) In muscles (d) Both in milochondria & cytosol of liver	6 Glycogen synthesis will be activated when (a) Glycogen synthese is phosphorylated (b) Glycogen synthase is dephosphorylated (c) Phosphorylase is phosphorylated (d) Debranching enzyme is activated
	Which of the following statements about Von Gierke's disease is untrue (a) There will be hypoglycemia (b) There will be hyperlipidemia (c) There will be hyperlipidemia (d) There will be hepatomagaly	Fructose 1,6 bisphosphatase is the enzyme of (a) Glycolysis (b) Glycogeneolysis (c) Glycogeneols (d) Gluconeogeneols
	Transaldolase transfers (a) Two carbons from ketosugar to aidosugar (b) Three carbons from aidosugar to ketosugar (c) Two carbons from aidosugar to aidosugar (d) Three carbons from ketosugar to aidosugar	40 Aldolase-B converts (a) Fructore 1.6 bisphosphate to glyceraldehyde-3- PO ₄ & Dihydroxyacetone phosphate (b) Glucose 10 Glucose-1-PO ₄ (c) Fructore-1-phosphate to glyceraldehyde & Dihydroxyacetone phosphate (d) Fructore-1-phosphate to glyceraldehyde-3-PO ₄ & Dihydroxyacetone phosphate (d) Fructore-1-phosphate to glyceraldehyde-3-PO ₄ & Dihydroxyacetone phosphate
=	As regards citric acid cycle which of the statements is untrue? (a) Three NADH + H* are formed (b) One FAD* is formed (c) One GTP is formed (d) One NADPH + H* is formed (d)	12 As regards Glucagon which of the following statements is untrue? (a) Glucagon stimulates glycogenolysis (b) Glucagon stimulates glycogenolysis (c) Glucagon stimulates glycobnesis (d) Glucagon stimulates glycobysis
2	Conversion of Glucose-6-phosphate to Glucose-1-phosphate requires (a) Isomerase (b) Epimerase (c) Mutase (d) Hydratase	Which of the following statements about insulin is true Stimulate glycogenesis Stimulate glycogenesis Inhibits glycolensis Stimulates gluconeogenesis Stimulates gluconeogenesis



100	ircle the best answer		Company of the last of the las
1	Chotelithiasis is (a) Formation of stones in kidneys (b) Formation of stones in gall bladder (c) Formation of stones in liver (d) Absence of gall bladder (e) Absence of bile secretion	2	Steatorrhea is (a) Malabsorption of fat (b) Malabsorption of cysteine (c) Malabsorption of glucose (d) Malabsorption of starch (e) Malabsorption of nucleic acids
3	Postprandial lipemia is due to (a) Malabsorption of fat (b) Malabsorption of proteins (c) Presence of chylomicrons in blood after meal (d) Some abnormal condition (e) Absence of phospholipase A ₂	4	Carboxypeptidase is (a) Needed is digestion of fat (b) Needed is digestion of starch (c) Endopeptidase (d) Exopeptidases (e) Present in bile
5	Electron transport chain is present in (a) Liver only (b) Lungs only (c) In mitochondrial matrix (d) In mitochondrial outer membrane (e) In mitochondrial inner membrane	6	NADP is derived from (a) Acetic acid (b) Pantothenic acid (c) Nicotinic acid (d) Nitric oxide (e) Riboflavin
	Which statement is true about bile? (a) Bile has glucokinase (b) Bile has hexokinase (c) Bile has necleotidase (d) Bile has nucleosidase (e) Bile has no enzyme	8	Which of the following does not take part in gluconeogenesis? (a) Lactate (b) Pyruvate (c) Alanine (d) Serine (e) Acetyl-SCoA
	Phosphofructokinase-2 converts (a) Fructose to fructose 1,6 bisphosphate (b) Pyruvate to Acetyl-SCoA (c) Fructose to fructose 2,6 bisphosphate (d) Fructose to glucose-6-phosphate (e) Glucose-6-phosphate to glucose	10	Aldolase – B converts (a) Fructose 1,6 bisphosphate to Glycerol-3-phosphate and Dihydroxyacetone phosphate (b) Fructose -1- phosphate to Glycerol and Dihydroxyacetone phosphate (c) Fructose-6-phosphate to fructose (d) Fructose to Fructose 1,6 bisphosphate (e) Fructose to Galactose-6-phosphate
1	In muscles glucose-6-phosphate is not converted to glucose due to the absence of (a) Glycogen synthase (b) Phosphorylase (c) Glucokinase (d) Glucose-6-phosphatase (e) Phosphohexose mutase	12	(a) It transfers one carbon from Ketosugar to Aldosugar (b) It transfers one carbon from Aldosugar to Ketosugar (c) It transfers 3 carbons from Aldosugar to Ketosugar (d) It transfers 2 carbons from Aldosugar to Ketosugar (e) It transfers 2 carbons from Ketosugar to Aldosugar
13	Glycogen synthase is inactivated by (a) Dephosphorylation (b) Phosphorylation (c) Deamination (d) Deamidation (e) Acetylation	14	Erythrocytes derive energy from (a) Citric acid cycle (b) HMP shunt (c) Uronic acid pathway (d) Glycolysis (e) Glycogenolysis

Azra Naheed Med	dical College, Lahore.
15 Minutes Test on Carbohydrates N	Metabolism (2 nd YEAR MBBS) 11: Glycogenolysis is the process in which glycogen in muscles in which glycogen of muscles in the produce.
	11: Glycogenolysis is produce:
Sections of Diabetes Mellitus are:	finally proxet
e-straintestinas disorders	cturate-P04
a) Edema in the limbs	at Glucose or or
el Edema il dic Polydiptia,polphagia and polyuria	Lactic acid Lactic acid Lactic acid Lactic acid
Watery mouth	Lactic acid
MP shunt is the process in which :	a) Brain
MP shunt is the process in a) Ribose 5-Po4 is formed	60 Uver
a) Ribose 5-Po4 in formed b) Xylulose 5-Po4 in formed	c) Pancreas d) Lungs 13: Which of the following energy related activities does not occur in
ALABOM IN FORMED	d) Lungs the line energy related activities does not
A THE FARM SHOWS AFR TILE	13: Which of the following
neymes of citric acid cycle are present in:	mitochondria:
	a Idative Phosphoryies
b) Lysosomes	hi succion de la
c) Nucleolus	cl Glycolysis
Mitochondria	A PHYLE BOID CYCLE
	- shoughofructokinase - chisphosphate
The substrate for Aldolase B is :	fructose of sectore 2.6 bisphosphate
© Glucose 6-Po4	b) Fructose 6-Po4 to fructose 6-Po4 c) Glucose 6-Po4 to fructose 6-Po4
13 Emiliona ScP04	d) None of the above is true
e) Eructose 1-6-bisphesphare	d) None of the above is true 15: At low blood glucose concentration brain but not liver will take
d) Glucose 1-Po4 a erythrocytes 2,3 bisphosphoglycerate in derived from which a erythrocytes 2,3 bisphosphoglycerate in derived from which	
a erythrocytes 2,3 bisphosphogrycerate in	1 AND THE DESIGNATION OF THE PROPERTY OF THE P
THE REPORT OF STVENIOR PRINTERS	tow Km of glucokinase
a) Glyceraldehydes 3-Po4	a blood brain partier
b 1.3 bisphosphoglycerate c) 3- Phosphoglycerate	
d) Dihrdoxyacetone-Po4 d) Dihrdoxyacetone-Po4 b) of the following enzymes?	16: All of the following patriways occur
d) Dihrdoxyacetone-Po4 The HMP-shunt includes which of the following enzymes?	a) Glycolysis
	b) Uronic acid pathway
b) Pyruvate dehydrogenase complex	Citric acid cycle d) HMP-shunt and to chucose due to the
c) Hexokinase (Gi-PD) Glucose 6-PO4 dehydrogenase (GG-PD)	d) HMP-shunt 17: In muscles glucose 6-PO4 is not converted to glucose due to the
(d) Glucose 6-PO4 dehydrogenase (Go Fo) Which of the following is not the intermediate of citric acid	absence of:
	a) Hexokinase
cle: a) Oxaloacetate	b) Glucokinase
hi Malate	@ Phosphorylase
Phosphocenol pyruvate	d) Glucose 6- phosphatase
d) d-keto glutarate	18: Which of the following statement about insulin is incorrect:
Regarding transketolase: a) It transfers one carbon from aldosugar to ketosugar	a) It increase the entry of glucose into the cells
the same services from ketosuker to endowers	b) It stimulates glycogenesis (c) It inhibits glycogenolysis
a second or three carbons from ketosukai to allowings.	The state of the second and the seco
A is seprefer three carbons from aldosugar to secosoger	to to citric acid cycle CO2 is released when
Chemical energy required for synthetic processes is provided	d-ketoglutarate is converted to suscinyi-s-con
	b) Succinyl-s-coA changes to succinate
a) Phosphorylation of AMP	c) Succinate changes to furnarate
b) Phosphorylation of ADP c) Phosphorylation of ATP	d) Furnarate changes to Malate
Phosphorylation of ATP Hydrolysis of ATP	the state of the s
0: Which is the true statement about glycolysis:	20: Stress trauma, sever exercise and secretion of epinephrine will:
(a) In glycolysis, two steps generate ATP	a) Increase the secretion of insulin
b) In glycolysis three steps generate ATP	b) Decrease the secretion of insulin
c) in glycolysis four steps generate ATP	Will have no effect on insulin secretion
d) None of the above is true	d) All of the above are true





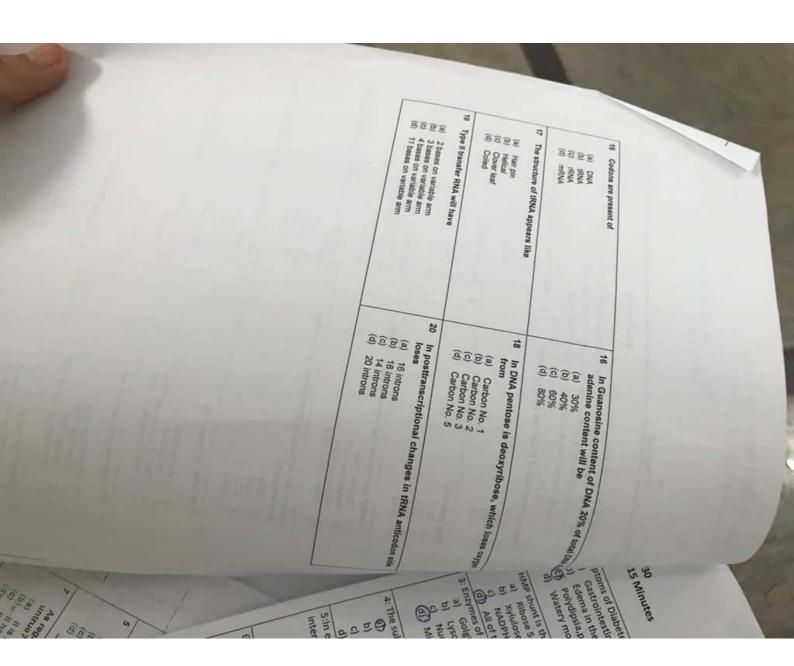
And marks: 30 25 minutes	
Select one best answer	
(a) Oxidizes glucose (b) Reduces glucose (c) Transfers electrons (d) Transfers phosphates	Accidental ingestion of 2,4 Dinitrophenol will result in (a) More ATP synthesis (b) Thermogenesis (c) Increased synthesis of uracil (d) Reduced reduction of NADH
Steatorrhea is caused by (a) Malabaorption of fats (b) Malabaorption of proteins (c) Lactose intolerance (d) Malabsorption of carbohydrates	4 Secondary bile acids are synthesized in (a) Stomach (b) Liver (c) Pancreas (d) Intestine
5 For glycogenesis, glucose should be first converted to to UDP-glucose (a) UDP-glucose (b) Sorbital (c) Lactic acid (d) Pyruvic acid (d) Pyruvic acid	6 For the continuity of citric acid cycle, which of the following compounds should be regenerated? (a) Malate (b) Oxaloscetate (c) Fumarate (d) Succinate
7 During starvation, the first reserve nutrient to be depleted is (a) Triacylg/ycerol (b) Glycogen (c) Proteins (d) Choiesterol	All of the following statements about sibinism are correct except. (a) Tytosinase is deficient in melanocytes (b) Skin is trypo pigmented (c) Eyes are trypo pigmented (d) it results in mental retardation

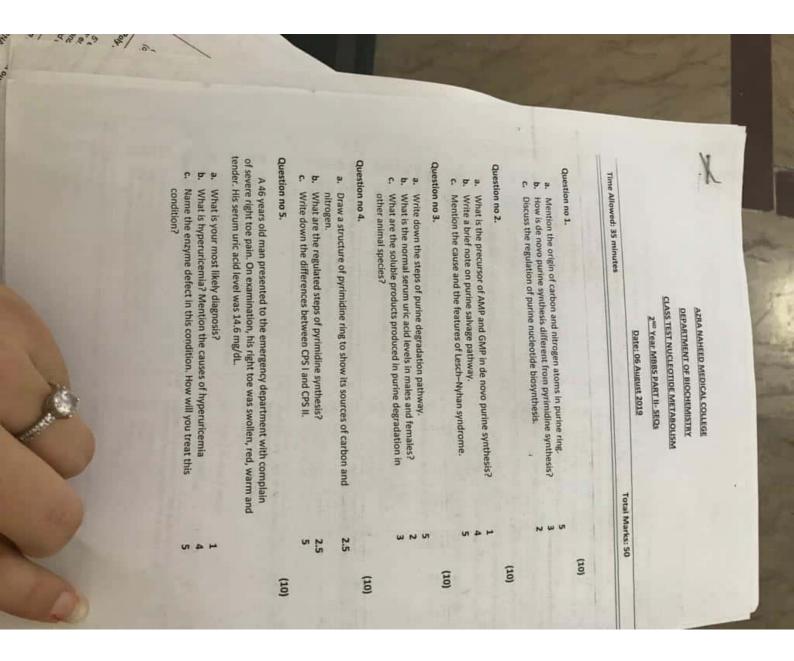
7.	75% of the gastric secretion is secreted by a. Cardiac end b. Pyloric end c. Surface epithelium d. None of the above	a. Pancreatic juice b. Gastric juice c. Mucosal lining of upper Jejunum d. Mucosal lining of lieum
		10. Five major pancreatic protesses are activated by
14	And the Bastur laws rander moun	9
		b. Elastase
	0, 910	c. Trypsin
	d. It is always above 7	d. Carboxypeptidase A and 8
12	Which one is the function of gastric juice HCL	12. Steatorrhea is caused by lack of
j	a. It converts Pepsinogen to pepsin	a. Gastric juice
	b. It converts ferric into ferrous from	c. Pancreatic enzyme
	d. All of the above	d. All of the above
0	Control limate angroups is inactivated by	14. The dietary lipids consists of 90% of
3	- HO	a. Cholesterol
	b. Pepsin	b. Phospholipids
	c. Trypsin	
	d. Lactic acid	d. Cholesterylesters
15	intrinsic factor is	16. Emulsification of dietary lipids occur in
	a. A polypeptide	
	b. It's an estryme	
	d. It's a glycoprotein	d. Heum
13	in the formation of hije acids, hydrocarbon chain of	18. In bile salts giveing or tauring is attached with cholesterol through
40	cholesterol is shortened by	
	a 5 carbons	b. Covalent bond
	b. 4 carbons	c. Vander waals forces
	c. 3 carbons	d. None of the above
	d. 6 carbons	The state of the s

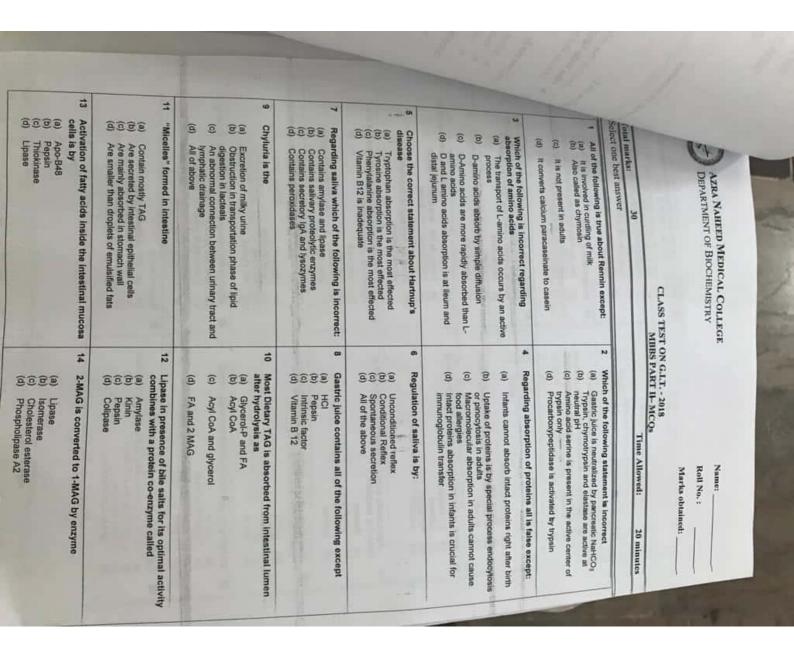
14. The dietary lipids consists of 90% of a. Cholesterol b. Phospholipids c. Triacylglycerol d. Cholesterylesters	Gastric lipase enzyme is inactivated by a. HCI b. Pepsin c. Trypsin d. Lactic acid
12. Steatorrhea is caused by lack of a. Gastric Juice b. Bile c. Pancreatic entryme d. All of the above	Which one is the function of gastric juice HCL a. It converts Pepsinogen to pepsin b. It converts ferric into ferrous from c. It stimulates the release of secretin d. All of the above
10. Five major pancreatic proteases are activated by a. Chymotrypsin b. Elastase c. Trypsin d. Carboxypeptidase A and B	9. PH of the gastric juice ranges from a. 1.5-3.0 b. 0-1.0 c. S-7 d. It is always above 7
B. Disaccharidases and oligosacchridases are present in a. Pancreatic juice b. Gastric juice c. Mucosal lining of upper Jejunum d. Mucosal lining of ileum	2. 75% of the gastric secretion is secreted by a. Cardiac end b. Pyloric end c. Surface epithelium d. None of the above
a. Both starch and glycogen b. In the presence of cf c. At PH (6.6-6.8) d. All of the above are true	Among the inorganic constituents, saliva is saturated with to K+ C Ca++ d Mg++

Gastric lipase enzyme is inactivated by a. HCL b. Pepsin c. Trypsin d. Lactic acid	Gastric lipase en a. HCL b. Pepsin c. Trypsin d. Lactic acid	ij.
Which one is the function of gastric juice HCL a. It converts Pepsinogen to pepsin b. It converts ferric into ferrous from c. It stimulates the release of secretin d. All of the above	Which one is the funda. a. It converts Peps b. It converts ferric c. It stimulates the d. All of the above	#
sbove 7	d. It is always above 7	
uice ranges from	0	9 p p
75% of the gastric secretion is secreted by a. Cardiac end b. Pyloric end c. Surface epithelium d. None of the above	% of the gastric secret Cardiac end Pyloric end Surface epithelium None of the above	4 C 4 5 75
	Mg+	PPF
the parameter of Parise ferring	Na+	7 !

out glycolysis: nerate ATP nerate ATP		Chem	c) It transfer three carbons from alcover	a) It transfers one carbon from ketosugar to aldosugar	3	b) Malate c) Phosphocenol pyruvate		7: Which of the following is not the intermediate of cure socie:	d) Glucose 6-PO4 dehydrogenase (G6-PD) d) Glucose 6-PO4 dehydrogenase (G6-PD)	b) Pyruvate dehydrogenase complex	The HMP-shunt includes which of the houseway company Fumerase	5	c) 3- Phosphoglycerate	a) Glyceraldehydes 3-Po4 b) 1.3 bisphosphoglycerate	intermediate of glycoltic pathway:	5:In erythrocytes 2,3 bisphosphoglycerate in derived from which	c) Fructose 1-6-bisphosphate d) Glucose 1-Po4		a) Glucose 6-Po4	4: The substrate for Ald-land	d) Mitochondria		b) Lysosomes	a. Enzymes of citric acid cycle are present in	d) All of the above are true	b) Xydyd s formed	2: HMP shunt is the process in which	d) Watery mouth	Polydipsia polnhani	Gastrointestinal disor	Test on Carbohyd	Azra Naheed	-		118	
increase the rec- j increase the secretion of insulin b) Decrease the secretion c) will have no effect on insulin secretion c) will have no effect on insulin secretion d) All of the above are true	d) Full sever exercise and secretion of spinephine and secretion and sec	b) Succingle-coA changes to sumarate c) Succinate changes to sumarate d) Succinate changes to Malate	19: In citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released to suscinys - cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cos in citric acid cycle CO2 is released which cycle CO2 is rel	c) it inhibits glycogenolysis	This is a series of the series of success and the series The sumulates glycogenesis	d) Glucose 6- phosphatase d) Glucose 6- phosphatase as which of the following statement about insulin is incorrect:	b) Glucokinase c) Phosphorylase	a) Hexokinase	d) HMP-shuns 17: In muscles glucose 6-PO4 is not converted to glucose due to the		a) Glycolysis b) Uronic acid pathway	0	Blood brain barrier Specificity of glucokinase	a) Low Km of hexokinase b) Low Km of glucokinase	-	15:		b) Fructose 6-Post to fructose 1-6 blisphosphate	- 2	c) Glycolysis d) Other and colo	a) Oxidative Phosphonylation b) Electron transport	mitOchondria: energy related activities for	13. Which of the following	c) Pancreas	p) ther	d) lactic stop	p) Greenstern services and a services	a) Commission of the second of	11: GHOSpend YEAR Made	tus are: "Yorates Metabolism (Lahore, ders	riedical College	Azra Naheed Modi	THE REAL PROPERTY.	THE PARTY OF THE P	11/2/19	1000



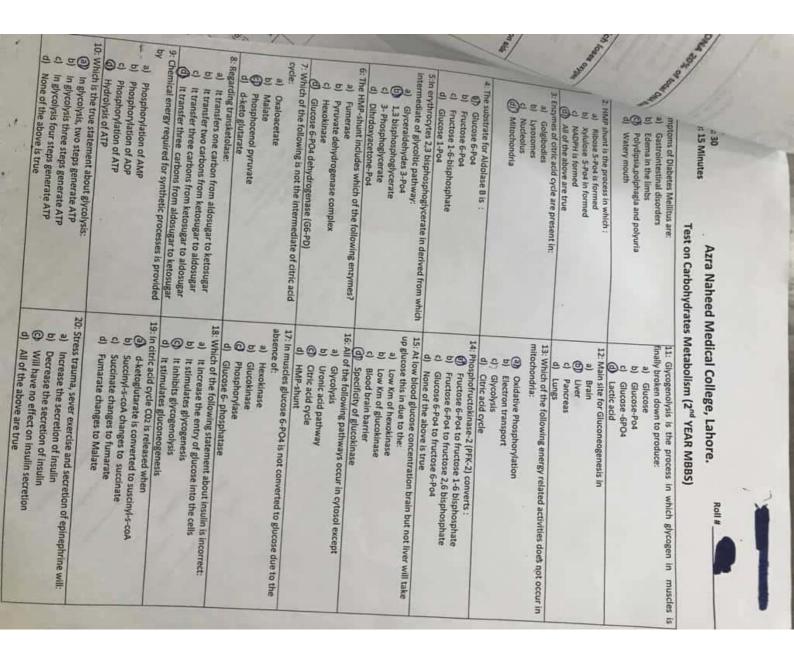


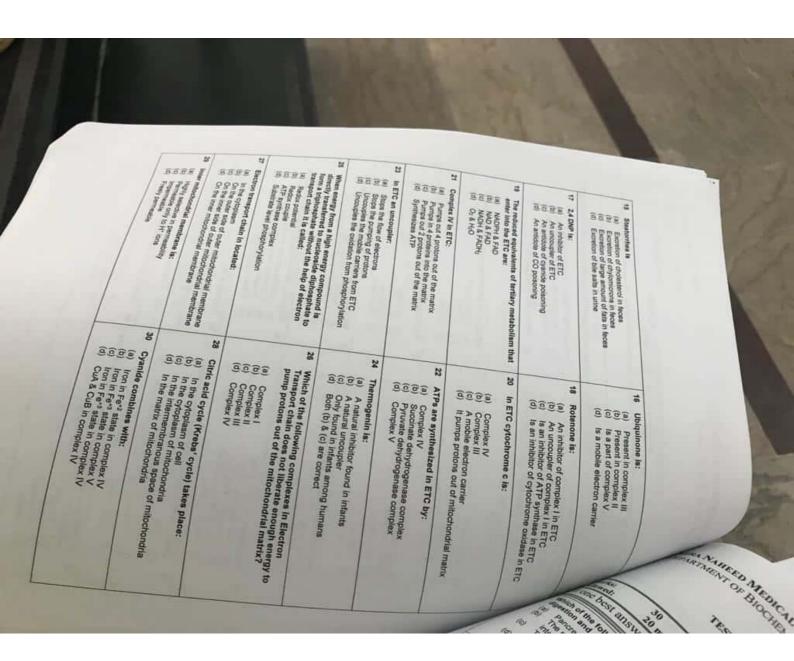


11	=	(2)	7
SEPE #	SECE	EDEE Amm	SEEE N
Homocystimuria is the outcome of defective metabolism of [a] Cysteine [b] Methionine [c] Tyrosine [d] Olycine	Enzyme involved in the synthesis of Ntric Oxide (NO) from Arginine is [a] NO synthesese [b] NO synthase [d] NO transferase [d] NO carbonylase	Ammonia is toxic because (a) Alpha-ketoglutarate is not converted into glutamic acid (b) Glutamate is not converted into α-ketoglutarate (c) It blocks the urea cycle (d) It blocks glycolysis	Number of AIP's used in the urea cycle are a) 1 b) 2 c) 3 d) 4
7	₽ E	5	00
ECEE	SEEE	52525	SCEE OF
Source of carbon of urea synthesis comes from (a) Glucose (b) Glycine (c) HCO's (d) Methionine	Amino acid which is not degraded in liver (a) Leucine (b) Iso leucine (c) Valine (d) All of the above	In the blood, ammonia is transported in the form of (a) Alanine (b) Glutamine (c) Urea (d) All of the above	Ornithine enters mitochondria in urea cycle by (a) Active transport (b) Diffusion (c) Special transport system (d) Malate shuttle

		23			12	2			19
(d) Liver and intestine	(b) Kidneys (c) Spileen	HDL is synthesized in	(d) 4 cycles and 5 acetyl SCoA	(b) 7 cycles and 8 acetyl SCoA (b) 6 cycles and 7 acetyl SCoA	oxidation. How many B-oxidation cycles will be completed and how many acetyl SCoA molecules will be liberated?		(d) Elevation of chylomicrons & VLDL (d) Elevation of chylomicrons only	(b) Elevation of HDL (b) Elevation of LDL	By decreased activity of lipoprotein lipase which change would you expect?

10	10	60	0	4
Which of the following base pairs will have 3 hydrogen bonds? (a) A-T (b) A-U (c) G-T (d) G-C	Which of the following has maximum number of minor bases (a) tRNA (b) rRNA (c) mRNA (d) Small nuclear RNA	In posttranscriptional modifications, tRNA loses from its 5'end (a) 13 bases (b) 15 bases (c) 15 bases (d) 16 bases	Variable arm is present on (a) Ribosomal RNA (b) Small nuclear RNA (c) Heterogenous nuclear RNA (d) Transfer RNA	Initiation codon is (a) GAG (b) GAC (c) AGG (d) AUG

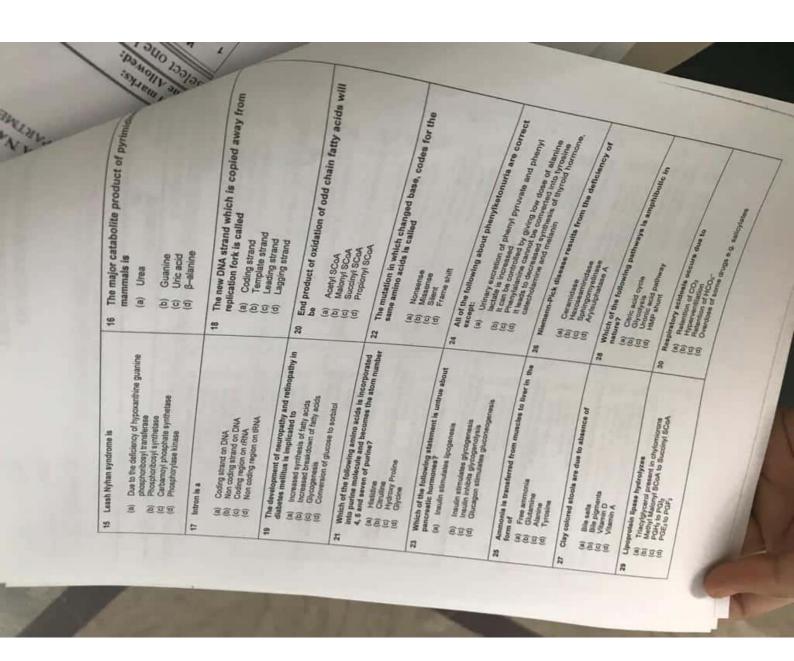


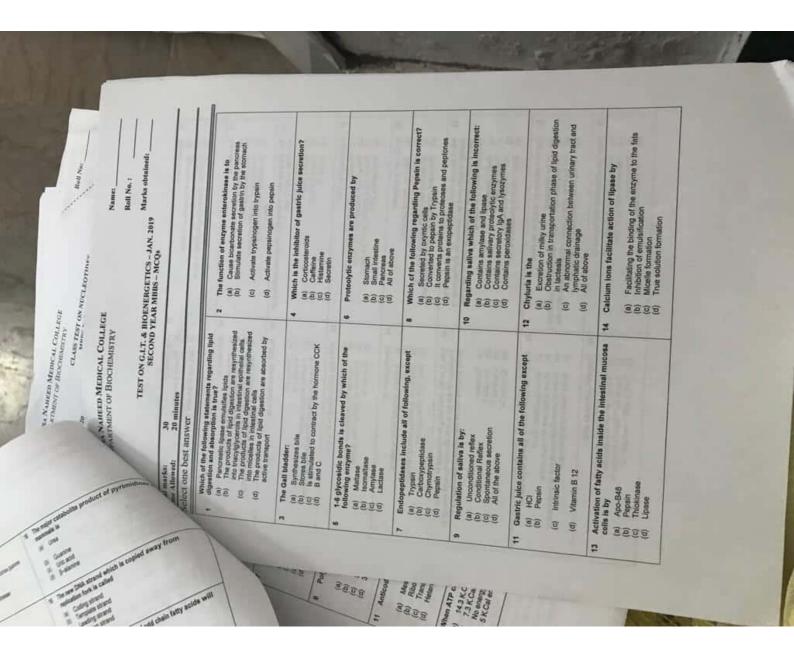


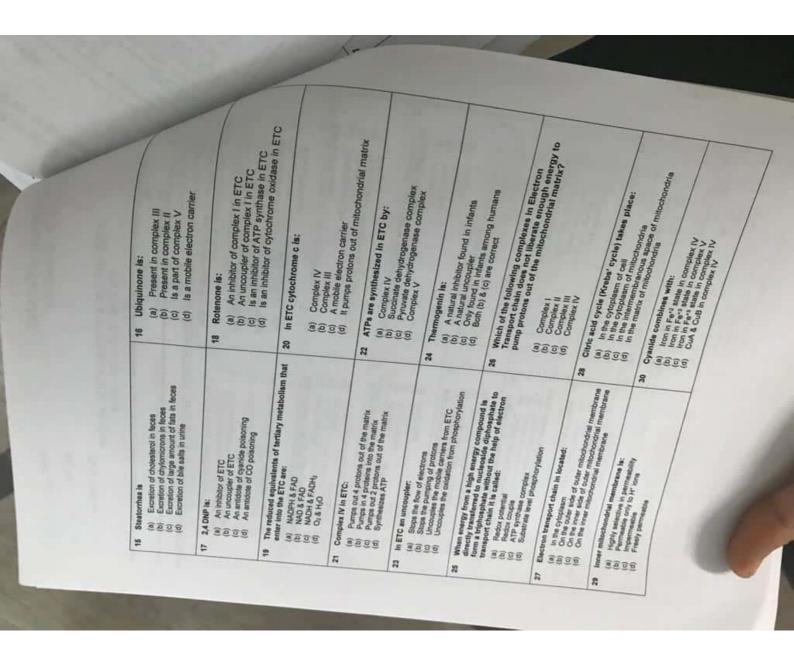
be released from (a) Dipalmityl (b) Sphingesir (d) Cholestero	(a) Palmi (b) Palmi (d) Palmi	11 Biosynthesi	(a) Acetoacetyl- (b) Acetyl-SCoA (c) Propionyl-S (d) Succinyl-SC	9 End product	(a) Sphing Sphing Sphing (b) Sphing Sphing (c) Sphing (c) Sphing Sphing (c) Sphing Sphing Sphing (c) Sphing Sphi	and sphingor
Elcosanoids are synthesized from arachidonic acid which can be released from (a) Dipalmityl lecithin (b) Sphingosine (c) Phosphoddyl inositol (d) Cholesterol	Palmityl-SCo A • glycine Palmityl-SCo A • serine Palmityl-SCo A • tyrosine Palmityl-SCo A • threonine	Biosynthesis of sphingosine requires	Acetya-SCoA Acetyl-SCoA Propionyl- SCoA Succinyl- SCoA	End product of B oxidation of 21 carbon fatty acid will be	Sphingosine and Glycerol Sphingosine and phosphate group Sphingosine and phosphate group Sphingosine and fatty acids	and sphingophospholipids, it is synthesized from

Increased level of sorbitol can lead to following complications except: (a) Cataract (b) Neuropathy (c) Retinopathy (d) Albinism	22 One statement about hormones is incorrect (a) Insulin stimulates entry of glucose into the ceil (b) Glucagon stimulates gluconeogenesis (c) Epinephrine is hyperglycemic hormone (d) Thyroid hormone is hypoglycemic
forms (c) (c) (c) (c) (c) (c) (c) (c) (c) (c)	0 3900
50	a
HMP shunt and uronic acid pathway collectively provide (a) 36 ATP (b) 18 ATP (c) 9 ATP (d) NII ATP (d) NII ATP	Three different enzymes and five coenzymes are found in (a) Glucose-6-Phosphate dehydrogenase (b) Galactose-1-Phosphate pyrophosphorylase (c) Glycogen synthase (d) Pyruvate dehydrogenase complex
	-

Seasonthes is concessing in foces Expression of concession in foces Expression of baye amount of fats in faces Expression of baye amount of fats in faces	16 Ubiquinone is: (a) Present in complex III (b) Present in complex I (c) is a part of complex V (d) is a mobile electron carrier
2.4 DNP le: 3) An inhibitor of ETC 5) An annicolate of ETC 7 An anticolate of Camide poleoning An anticolate of CO poleoning	(a) An inhibitor of complex I in ETC (b) An uncoupler of complex I in ETC (c) Is an inhibitor of ATP synthase in ETC (d) Is an inhibitor of cytochrome oxidase in ETC
The reduced equivalents of tertiary metabolism that enter into the ETC are: 31 NADRY & FAD. 31 NADRY & FAD. 31 NADRY & FAD. 32 NADRY & FAD. 32 NADRY & FAD.	(a) C(C) A II D
(a) Pumps out 4 protons out of the matrix (b) Pumps out 4 protons out of the matrix (c) Pumps out 2 protons out of the matrix (d) Synthesizes ATP (e) Se succepted	22 ATPs are synthesized in ETC by: (a) Complex IV (b) Succinate dehydrogenase complex (d) Complex IV (c) Pyruvate dehydrogenase complex (d) Complex I
(i) Supar the pumping of protons (ii) Supar the pumping of protons (iii) Lincouples the mode carriers from ETC When exergy from a high energy comploint from a high energy compound to mode carriers from a high energy compound to mode energy compou	24 Themogenin is: (a) A natural inhibitor found in infants (c) Only found in infants among Both (b) & (c) in infants
(a) Record chain it is called: the help of electron (b) Record copies (c) ATP synthese complex (d) Substitute the well prosphory lation (e) In the cytopies (i) In the cytopies (ii) In the cytopies (iii) In the cytopies (iiii) In the cytopies (iiii) In the cytopies (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Which of the following correct '9 numans Transport chain does not liberate enough energy to (a) Complex! (b) Complex! (c) Complex! (d) Complex! (d) Complex!
drial membrane drial membrane ine	
	(a) From in Fer's state in complex IV (b) From in Fer's state in complex IV (c) From in Fer's state in complex V (d) Curd & Curd in romplex IV







The function of enzyme enterokinase is to (a) Cause bicarbonate secretion by the pancreas (b) Stimulate secretion of gastrin by the stomach nal epithelial cells. (c) Activate trypsinogen into trypsin tion are absorbed by (d) Activate pepsinogen into pepsin	4 Which is the inhibitor of gastric juice secretion? (a) Corticosteroids (b) Caffeine (c) Histamine (d) Secretin	eaved by which of the (a) Stomach (b) Small intestine (c) Pancreas (d) All of above	Endopeptidases include all of following, except (a) Trypsin (b) Carboxypeptidase (c) Chymotrypsin (d) Pepsin is an exopeptidase (d) Pepsin is an exopeptidase	reflex reflex (a) Contains amylase and lipase (b) Contains salivary protective enzymes (c) Contains salivary protective enzymes (d) Contains secretory los and liverymes
which of the following statements regarding lipid digestion and absorption is true? (a) Pancreatic lipase emutalities lipids (b) The products of lipid digestion are resynthesized into triacylglycerols in intestinal epithelial cells. (c) The products of lipid digestion are resynthesized into micelles in intestinal cells. (d) The products of lipid digestion are absorbed by active transport.	The Gall bladder; (a) Synthesizes bile (b) Stores bile (c) Is stimulated to contract by the hormone CCK (d) B and C	1-6 glycosidic bonds is cleaved by which of the following enzyme? (a) Mattase (b) Isomaltase (c) Amylase (d) Lactase	T Endopeptidases include (a) Trypsin (b) Carboxypeptidase (c) Chymotrypsin (d) Pepsin	Regulation of saliva is by: (a) Unconditioned reflex (b) Conditional Reflex (c) Sportaneous secretion