IDA REGISTERED DIETITIAN EXAMINATION

PAPER I (Human Physiology, Microbiology, Nutritional Biochemistry)

Date: 9th February 2019

Ti 10	me: 2 Hours		Marks:
No	ote: 1. All Questions are compulsory		
	2. Draw diagrams wherever necessary		
	SECTIO	<u> </u>	<u>A</u>
I.	Choose the correct answer:		(10x2= 20 Marks)
1.	Serum amylase increases in the following co	ondit	ion.
a.	Burns	c.	Pregnancy
b.	Hepatitis	d.	Both A and B
2.	Major Histocompatibility antigens are prese	nt on	this
a.	Erythrocyte	c.	Stem Cell
b.	Leukocytes	d.	Thrombocytes
3.	Tyrosine is involved in synthesis of the follow	wing i	important biological compounds.
a.	Epinephrine	c.	Melanin
b.	Thyroid Hormones	d.	All of the above
4.	What is the percentage of albumin as part of	f total	l proteins in blood?
a.	7%	c.	54%
b.	38%	d.	12%
	Which is the most common specimen collector fections?	ed in	suspected cases of lower respiratory
a.	Saliva	c.	Breath
b.	Sputum	d.	Throat Swab
6.	In ECG, QRS complex indicates:		
a.	Atrial depolarization	b.	Ventricular repolarization

0	A trial repolarization	A	Ventricular denologization
C.	Atrial repolarization	a.	Ventricular depolarization
7.	The cycle involving synthesis of glucose from l	acto	ose in liver is known as.
a.	Glycolysis	c.	HMP Shunt Pathway
b.	Cori's cycle	d.	TCA Cycle
ha	An individual who has received all three doses d hepatitis B virus (HBV) infection would be e ologic marker(s)?		-
a.	HBsAb	c.	HBsAg
b.	HBeAb	d.	HBsAg and HBsAb
9. 9	Sleep cycle is maintained by this hormone of p	ine	al gland.
a.	Melanin	c.	Melatonin
b.	Serotonin	d.	ACTH
10.	The inhibition of glycolysis by oxygen is know	vn a	ns.
	a. Pasteur effect		c. Inhibition effect
	b. Crabtree effect		d. Anaerobic effect
	SECTION- B		(50 Marks)

II. Explain the following terms:

(5x1=5 Marks)

- 1. Cyanosis
- 2. Feedback regulation
- 3. Malaise
- 4. Syncope
- 5. Wernicke Korsakoff syndrome

III: Name the following agent/ disorder/disease.

(10x1 Marks)

- 1. Parsi community is deficient in this enzyme leading to their increased susceptibility to haemolytic anaemia. Name the enzyme.
- 2. Indication of presence of anti-citrullinated peptide antibody in blood along with low ESR
- 3. Positive Mantoux test
- 4. Fecal occult blood test with sloughed off epithelial cells in stool may indicate this disorder.
- 5. C-peptide deficiency leads to this disorder
- 6. Synthesis of urea occurs in this organ.

- 7. Excess hormonal production by the pituitary gland produces this disorder with abnormal growth in children.
- 8. Respiratory alkalosis is caused by decrease in plasma concentration of this substance.
- 9. A 30-year-old woman has non-bloody diarrhoea for the past 14 hours. Which organisms are likely to cause this illness?
- 10. Carbohydrate associated with flatulence caused by ingestion of leguminous seeds.

IV: State whether the following statements are true or false, if false give the reason (5x1=5 Marks)

- 1. Severe exercise cannot cause haematuria.
- 2. Lingual lipase activity starts in mouth
- 3. Gram negative organisms have extensively crossed linked peptidoglycan.
- 4. Alkaptonuria occurs due to deficiency of the enzyme alanine oxidase.

1. FADH

3. IGF

2. PYY (3-36)

. Match the following:	(5x1=5 Marks)
1. High serum phosphate levels	a. Wheat
2. ADH	b. Vasodilation
3. Lysine	c. Aquaporin 2
4. NO	d. Dengue
5. Aedes aegypti	e. Large doses of cod liver oil
T. Elliss de Dissels	
1. Fill in the Blanks	(6x1 = 6 Marks)
Cirrhosis of liver causes reversal of	
Cirrhosis of liver causes reversal of from the atria of the	ratio.
Cirrhosis of liver causes reversal of from the atria of the Negative nitrogen balance is a condition	ratio. heart helps maintain blood volume. on in which the nitrogen output isthan
Cirrhosis of liver causes reversal of from the atria of the Negative nitrogen balance is a condition output. Stepladder fever is caused by	ratio. heart helps maintain blood volume. on in which the nitrogen output isthan

4.BCG

5. THF

VIII. Give any two differences between:

(3x3 = 9 Marks)

- 1. Slow twitch and Fast twitch muscle fibers
- 2. Endotoxin and Exotoxin
- 3. Soluble and insoluble fibre

SECTION - C

IX. Answer any two questions

(2x15 = 30 Marks)

- 1. A. Describe the Renin Angiotensin Aldosterone pathway (8 Marks)
 - B. Explain the digestion and absorption of proteins. (7 Marks)
- 2. A. Write a short note on role of microorganisms in nosocomial infections. (5 Marks)
 - B. Outline the factors leading to food spoilage. Discuss the conditions that favour microbial spoilage of food. (10 Marks)
- 3. A. Give an overview of biosynthesis of cholesterol (no structures). (5 Marks)
 - B. Write a short note on functions of phospholipids. (5 Marks)
 - C. Give a brief on four major lipoproteins in blood serum. Discuss the factors affecting the levels of each in the blood stream. (5 Marks)
