**IDA REGISTERED DIETITIAN EXAMINATION**

**November 2014 - Paper I**

**Physiology, Microbiology, Biochemistry**

**Time: 2 Hrs Max. Marks: 100**

**Answer All Questions**

**SECTION A**

1. **Multiple Choice Questions (10 x 2 =20 marks)**
2. Pepsin is secreted by
3. Zymogen cells of stomach
4. Zymogen cells of duodenum
5. Paneth cells
6. None of these
7. Stool of a person is whitish grey due to the malfunction of the following organ
8. Liver
9. Kidney
10. Pancreas
11. Spleen
12. The Nissl granules of nerve cells are made up of
13. Ribosomes
14. Proteins
15. RNA
16. DNA
17. RBC cast in the microscopic examination of the urine is an indicator of
18. Acute glomerulonephritis
19. Acute pyelonephritis
20. Chronic glomerulonephritis
21. Nephritic syndrome
22. The occurrence of hyperthyroidism following administration of supplemental iodine to subjects with endemic iodine deficiency goiter is known as
23. Jod – Basedow effect
24. Wolff – Chaikoff effect
25. Thyrotoxicosis factitia
26. De Quervain’s thyroiditis
27. H. Pylori is known to cause all of the following except
28. Gastric ulcer
29. Duodenal ulcer
30. Gastric lymphoma
31. Fundal gastritis
32. During fasting in what sequence are the following organic compound used by the body
33. First fat, next carbohydrates and lastly proteins
34. First carbohydrates, next proteins and lastly lipids
35. First proteins, next lipids and lastly carbohydrates
36. First carbohydrates, next lipids and lastly proteins
37. The movement of chloride ions into erythrocytes from the plasma to maintain osmotic balance during transport of gases is known as
38. Chlorination
39. CO2 transport
40. Hamburger phenomenon
41. Passive transport
42. Salmonellosis involves
43. An enterotoxin and exotoxin
44. An enterotoxin and cytotoxin
45. An exotoxin and cytotoxin
46. A cytotoxin only
47. A patient had the following blood biochemical values: Calcium 6 mg/dl, uric acid 13 mg/dl, phosphorus 12 mg/dl, creatnine 6 mg/dl. Which could be the possible diagnosis
48. Krait bite
49. Uric acid nephropathy
50. Hypercalcemic nephropathy
51. Rickets

**SECTION B ( 50 Marks)**

1. **Explain the following terms in one or two sentences ( 5 x1 =5 marks)**
2. Rhabdomyolysis:
3. Refeeding syndrome
4. Food borne disease outbreak
5. Putrefaction
6. Anaphylaxis
7. **Write the name of the condition / disorder caused by the following ( 5 x 1 = 5 marks)**
8. Accumulation of large quantities of phytanic acid
9. Alkapton deposition in connective tissue, bones and various organs, coke coloured urine.
10. β glucosidase deficiency
11. Defect in the enzyme sphingomyelinase
12. Elevated plasma levels of uric acid
13. **State whether the following statements are**

**True or False ( 5 x 1=5 marks)**

1. Acrodermatitis enterpopathica is triad of diarrhoea, dementia and dermatitis.
2. Appertization process involves heating food above 100 degree Centigrade.
3. True microaerophiles grow in an atmosphere with a concentration of oxygen lower than atmospheric oxygen.
4. Hemodynamics is the study of energy changes in biochemical reactions.
5. Iron in the mucosal cells binds with the protein hemosiderin.
6. **Match the following ( 6 x 1 = 6 marks)**
7. Candling a. Tongue
8. β hydroxybutyrate dehydrogenase b.Copper absorption
9. Inulin c. Bronze Diabetes
10. Metallothionein d. Lipid metabolism
11. Schwebach test e. Ear
12. Hemochromatosis f. Carbohydrate metabolism

g. GFR

h. Egg

1. **Name one organism / Toxicants involved in each of the following ( 5 x 1 = 5 marks)**
2. Botulism
3. Lathyrism
4. Potato blight
5. Epidemic dropsy
6. Pufferfish poisoning
7. **Fill in the blanks ( 5 x 1 = 5 marks )**
8. \_\_\_\_\_\_\_\_\_\_\_\_\_is the process of stiffening of the meat, immediately after the slaughter.
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the master coordinator of hormonal action.
10. The zinc containing protein in the saliva involved in taste sensation is \_\_\_\_\_\_\_\_\_\_\_
11. Disorders characterized by decreased synthesis or total absence of globin chains of haemoglobin are collectively known as \_\_\_\_\_\_\_\_\_\_\_\_\_
12. The serum enzyme elevated in alcoholic cirrhosis of liver is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. **Give any two differences between (3 x 2 = 6 marks)**
14. Reducing and non reducing sugars
15. Blood and lymph
16. Mitospores and Meiospores
17. **Expand the following and give one significance of the same ( 5 x 2 = 10 marks )**
18. PFA
19. Hb A1C
20. PET
21. ERH
22. UPC
23. **Illustrate the Cori cycle ( 3 marks)**

**SECTION C**

**XII. Answer any TWO Questions ( 2 x 15 = 30 marks)**

1. Explain

a.)Pathogenesis of atherosclerosis 8 marks

b.) Schematically depict calcium regulation in the body. 7 marks

2.Discuss the role of B vitamins in the metabolic pathway. 15 marks

3. Define HACCP and briefly explain the principles involved. 15 marks

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