

**Avinashilingam Institute for Home Science and Higher Education for Women
[Deemed to be University] Coimbatore-641 043**

Bachelor's Degree Examination – November 2018

III Semester

**Class : II UG
Major : Food Science and Nutrition**

**Time: 3 hours
Max. Marks: 100**

15BFNC07- Principles of Nutrition

Part-A

10 x 1=10

Choose the correct answer

1. SDA is also known as -----
a. Respiratory Quotient b. BMR c. Thermic effect of food d. Calorific value
2. The physiological fuel value of carbohydrate is ----- Kcal.
a. 3.10 b. 4.0 c. 4.10 d. 4.65
3. ----- is a disaccharide.
a. Galactose b. Fructose c. Lactose d. Dextrin
4. The proteolytic enzyme present in gastric juice is -----.
a. Pepsin b. Proteases c. Renin d. Peptidase
5. Fats and Oils are esters of fatty acids and -----.
a. Waxes b. Glycerol c. Glycol d. Lipids
6. The fluid present in saliva, pancreas and liver are-----.
a. ICF b. ECF c. Interstitial d. Trans cellular fluid
7. The active form of vitamin ----- increase the calcium absorption.
a. A b. D c. C d. K
8. ----- ppm of fluorine leads to fluorosis.
a. <1 ppm b. 1-2 ppm c. 2 ppm d. >2-3ppm
9. ----- are raised, muddy and dry triangular patches in eye.
a. Conjunctival Xerosis b. Bitot spot c. Keratomalacia d. Corneal scar
10. Deficiency of thiamine results in -----.
a. Pellagra b. Beriberi c. Dermatitis d. Stomatitis

Part B

5 X 6=30

Answer the following

Answer should not exceed 400 words or two pages

- 11.a. Explain the physiological fuel value of nutrients.
(or)
- 11.b. How do you estimate energy requirements during work?
- 12.a. Brief the functions of carbohydrates.
(or)
- 12.b. How will you evaluate the protein quality of foods?
- 13.a. Classify lipids.
(or)
- 13.b. Enlist the functions and sources of water.
- 14.a. Brief the functions and sources of sodium.
(or)
- 14.b. Explain about Zinc deficiency and give its requirements.
- 15.a. Give the functions and toxicity of vitamin D.
(or)
- 15.b. Write about the deficiency and sources of thiamine.

Part C

5 x 12=60

Answer the following

Answer should not exceed 800 words or four pages

- 16.a. How do you determine the energy value of foods?
(or)
- 16.b. Define BMR. Explain the factors that affecting BMR.
- 17.a. Define Dietary fiber and give the sources and physiological effects of fiber.
(or)
- 17.b. Enumerate the functions and requirements of protein.
- 18.a. Explain the process of digestion, absorption and metabolism of fat.
(or)
- 18.b. Describe the water balance and distribution of water in the body.
- 19.a. Enumerate the functions of calcium. Give the food sources and requirement for adults.
(or)
- 19.b. Elaborate on functions, requirement and toxicity of fluorine.
- 20.a. Explain in detail on functions of vitamin A and mention the deficiency symptoms.
(or)
- 20.b. Give an account on functions, deficiency, requirement and sources of folic acid.