

**Avinashilingam Institute for Home Science and Higher Education for Women  
Coimbatore-641 043  
Bachelor's Degree Examination – November 2017  
III - Semester**

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

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

**15BFNC07 Principle of Nutrition  
Part-A  
Choose the correct answer**

**10 x 1=10**

1. \_\_\_\_\_ is used to measure calorific value of food stuffs  
a. Bomb calorimeter                      b. Atwater-Rosa- Benedicts respiration calorimeter  
c. benedicts –Roth apparatus              d. Max-Planck respirometer
2. The basal metabolic rate for female is \_\_\_\_\_ males  
a. Slightly higher than                      b. Slightly lower than  
c. Same as                                      d. very high than
3. \_\_\_\_\_ are formed when two hexoses are combined together with a loss of one water molecule.  
a. Monosaccharides    b. Disaccharides    c. Oligosaccharides    d. Polysaccharides
4. Based on the chemical composition the albumins are classified as  
a. Simple protein    b. conjugated protein    c. Coagulated protein    d. derived protein
5. One gram of fat yields \_\_\_\_\_ kilocalories of energy  
a. 4                      b. 3                      c. 1                      d. 9
6. The water derived through metabolism of carbohydrate is  
a. 107g                      b. 55g                      c. 41g                      d. 70.1g
7. Deficiency of \_\_\_\_\_ mineral results is endemic goiter  
a. Selenium                      b. iodine                      c. Fluorine                      d. Iron
8. Excessive intake of iron leads to  
a. fluorsis    b. anaemia    c. Goitre    d. Siderosis
9. Vitamin \_\_\_\_\_ protect lipid molecule from oxidation and there by protect cell membranes against oxidising free radicals  
a. B1                      b. B12                      c. E                      d. K
10. Angular stomatitis is due to deficiency of  
a. Riboflavin    b. Thiamine    c. Niacin    d. cobalamin

**Part B**

**5 X 6=30**

**Answer the following**

**Answer should not exceed 400 words or two pages**

- 11.a. Explain determination of energy value of food using bomb calorimeter  
(or)
- 11.b. Enumerate on relation between oxygen required and calorimeter value
- 12.a. Explain the functions of carbohydrate.  
(or)
- 12.b. Give the ICMR's RDA of protein for different age group
- 13.a. Discuss briefly on the classification of lipids.  
(or)
- 13.b. Explain the distribution of water in the body.
- 14.a. Enlist the sources of iron  
(or)
- 14.b. Write on the functions of zinc

