



**Avinashilingam Institute for Home Science and Higher Education for Women**  
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India

**Bachelor's Degree Examination – June 2021**  
**VI Semester**

**Class : III UG**  
**Major : Biochemistry and Biotechnology**

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

**18BBCC16 Nutritional Biochemistry**

**Part A**

**10 x 1 = 10**

**Choose the Correct Answer**

1. Which of the following is an example of body building foods?  
a. Fruits  
b. Meat  
c. Green leafy vegetables  
d. Vegetables. CO2 K1
2. Preventive foods are those that  
a. cause decay  
b. are tasty  
c. are Hot and spicy  
d. are Immune rich food CO2 K2
3. Energy yielding food examples are  
a. Rice  
b. Leafy vegetables  
c. Fruits  
d. Banana CO3 K2
4. RQ represents  
a. retired quote  
b. Resorted quote  
c. Respiratory quote  
d. Respiratory quotient CO1 K3
5. Which is a water soluble vitamin?  
a. Vitamin E  
b. Vitamin K  
c. Ascorbic acid  
d. Ratinol CO2 K2
6. Which of the following criterion is needed to calculate BMR?  
a. Height  
b. Apoprotein  
c. Sugar level  
d. Holoenzyme CO3 K2
7. BMI is determined by using the height and \_\_\_\_ of an individual  
a. color  
b. Serum level  
c. mass  
d. Blood pressure CO2 K2
8. NPU stands for \_\_\_\_ protein utilization  
a. normal  
b. net  
c. neutral  
d. negative CO5 K2
9. NAP stands for nucleosome assembly  
a. parameters  
b. proteins  
c. parts  
d. properties CO4 K1
10. Kwashiorkor is associated with \_\_\_\_ malnutrition  
a. protein  
b. glucose  
c. proteinases  
d. carbohydrate CO5 K1

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 11.a. Recall the role of nutrition in maintaining good health. CO1 K1  
(or)
- 11.b. How do you determine the basal metabolic rate of an individual? CO1 K1
- 12.a. Describe the nutritional significance of carbohydrates. CO2 K2  
(or)
- 12.b. Explain the role of proteins in the human body. CO3 K2
- 13.a. Write a note on amino acids. CO4 K2  
(or)
- 13.b. Give an account on NPU as a nutritionist. CO5 K2
- 14.a. Discuss any 2 protein deficiency disorders. CO3 K2  
(or)
- 14.b. Highlight on single cell proteins. CO1 K2
- 15.a. Write the nutritional therapy. CO4 K3  
(or)
- 15.b. Discuss about effects of drugs on food. CO5 K2

**Part C**

**5 x 12 = 60**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

- 16.a. Distinguish BMI and BMR and the factors that influence both. CO1 K2  
(or)
- 16.b. Describe the basic concepts of energy expenditure and unit of energy. CO4 K2
- 17.a. Write an essay on significance of the types of vitamins. CO2 K3  
(or)
- 17.b. Outline the metabolism of carbohydrates. CO3 K1
- 18.a. Discuss NAP of animal and plant proteins. CO1 K2  
(or)
- 18.b. Summarize the biological values of animal and plant proteins. CO2 K2
- 19.a. Explain the composition of a balanced diet and RDA for adult males. CO4 K2  
(or)
- 19.b. Discuss the diet for lactating women. CO5 K2
- 20.a. Highlight the role of diet in prevention and treatment of diabetes. CO3 K1  
(or)
- 20.b. Explain the means of dietary measures to be followed for kidney disorders. CO5 K3

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