# 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**

**Master's Degree Examination – June / July 2021**
**II Semester**

**Class : I PG** **Time : 3 Hours**
**Major : Food Science and Nutrition** **Max. Marks: 100**

## 20MFNC07 Physiological Basis for Nutrition

**PART A** **10 x 1 = 10**
**Choose the Correct Answer**

1. Recall the stage of anemia when the haemoglobin level is 9g/dl in blood CO1K1
   a. Mild b. Moderate c. Severe d. Very severe

2. Identify in which type of immunity both B-cells and T-cells are involved CO1K1
   a. Innate Immunity b. Active immunity c. Passive immunity d. Acquired immunity

3. The major cation in the intercellular fluid compartment is CO2K1
   a. Potassium b. Magnesium c. Calcium d. Sodium

4. Predict the duration of one cardiac cycle when the normal heart rate of 72 beats per minute CO2K2
   a. 0.4 Sec b. 0.6 Sec c. 0.8 Sec d. 10.0 Sec

5. Identify which of the following is absorbed by passive transport from the intestine CO3K1
   a. Galactose b. Fructose c. Glucose d. Amino acid

6. Show which of the following controls the secretion of gastric juice CO3K1
   a. Secretin b. Gastrin c. Cholecystokinin d. Ptyalin

7. Locate in which part of the lungs,gaseous exchange takes place. CO4K1
   a. Bronchi b. Bronchioles c. Capillaries d. Alveoli

8. Name the hormone that causes the kidneys to retain sodium and to excrete potassium. CO4K1
   a. Vasopressin b. Antidiuretic Hormone c. Insulin d. Aldosterone

9. Identify the master gland from the following. CO5K1
   a. Pituitary b. Adrenal c. Thyroid d. Pancreas

10. Name the point at which an impulse is transmitted from one neuron to another neuron. CO5K 1
    a. Dendrite b. Synapse c. Terminal plate d. Glial cell

**Part B** **5 x 6 = 30**

**Answer ALL questions**
**Each answer should not exceed 400 words or two pages**

11.a. Illustrate the functions of plasma proteins CO1K2

(or)

11.b. Explain about autoimmune diseases. CO1K2

12.a. Write a note on the composition of body fluids CO2K3

(or)

12.b. Relate the effect of exercise on cardiovascular system. CO2K3

13.a. Sketch the structure of the gastrointestinal tract and explain. CO3K3

(or)

13.b. Explain the role of hormones in digestive system CO3K3

14.a. Write on the mechanics of respiration CO4K3

(or)

14.b. Demonstrate the maintenance of acid base balance in the body CO4K3

15 a. Outline the disorders of endocrine glands CO5K4

(or)

15.b. Appraise on the role of neurotransmitters in the body. CO5K4

**Part C** **5 x 12 = 60**

**Answer ALL questions**
**Each answer should not exceed 800 words or four pages**

16.a. Illustrate the process of development of red blood cells and explain about anaemia. CO1K2

(or)

16.b. Explain in detail the different types of immunity. CO1K2

17.a. Write in detail on Lymphatic system and functions of lymph. CO2K3

(or)

17.b. Explain the various events and stages in the cardiac cycle. CO2K3

18.a. Demonstrate the mechanism of secretion and functions of salivary and gastric juice. CO3K3

(or)

18.b. Write a note on i. Liver function tests ii. Gastric function tests CO3K3

19.a. Outline the process of exchange of respiratory gases and regulation of respiration. CO4K4

(or)

19.b. Illustrate the process of urine formation. CO4K4

20.a. Explain the structure and functions of pituitary gland. CO5K3

(or)

20.b. Write on the general anatomy of nervous system and explain the different parts of the CNS. CO5K3

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