

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University), Coimbatore-641 043
Bachelor's Degree Semester Examination, November 2018
I Semester**

**Major: Food Science and Nutrition
Class: I B.Sc.**

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

18BFNC02 Fundamentals of Human Physiology

PART A

10x1=10

Circle the correct answer

1. The lifespan of WBC ranges from _____
 - a. 13 to 20 days.
 - b. 20 to 40 days
 - b. c. 10 to 20 days
 - d. 40 to 60 days
2. The process of formation of RBC is called as _____
 - a. regeneration
 - b. amalgamation
 - c. oxidation
 - d. Erythropoiesis
3. The exchange of gases at tissue level is called _____
 - a. peripheral gas exchange
 - b. ventral gas exchange
 - c. diffusion
 - d. absorption
4. Cells in our body combine glucose and _____ to make ATP and CO₂.
 - a. Argon
 - b. nitrogen
 - c. oxygen
 - d. neon
5. The function of insulin is to regulate _____
 - a. blood sugar
 - b. blood lipids
 - c. blood creatinine
 - d. blood urea
6. The functional unit of the kidney is _____
 - a. Neuron
 - b. nephron
 - c. ohms
 - d. calorie
7. _____ is the "master gland" of the body.
 - a. Adrenal
 - b. pituitary
 - c. para-thyroid
 - d. thyroid
8. Steroid hormones are produced by _____ glands
 - a. Para-thyroid
 - b. pituitary
 - c. adrenal
 - d. thyroid
9. _____ hormone is responsible for milk letdown.
 - a. insulin
 - b. steroid
 - c. oxytocin
 - d. thyroid
10. Menstrual cycle and period are controlled by hormones like estrogen
 - a. insulin
 - b. steroid
 - c. oxytocin
 - d. progesterone

Part B
Answer the following
Answer should not exceed 400 words or two pages

5 x 6 = 30

- 11.a. Explain the functions of plasma proteins.
Or
- 11.b. Discuss about blood coagulation.
- 12.a. Illustrate the structure of human heart and label the parts.
Or
- 12.b. Sketch the properties of cardiac muscle.
- 13.a. Explain the structure of nephron and list out its functions.
Or
- 13.b. Discuss the functions and absorption of carbohydrates.
- 14.a. Illustrate the structure of adrenal gland with its functions.
Or
- 14.b. Describe the functions of pancreas.
- 15.a. Explain the role of placenta.
Or
- 15.b. Sketch the male reproductive organ and explain its functions.

Part C
Answer the following
Answer should not exceed 800 words or four pages

5 x 12=60

- 16.a. Discuss about blood transfusion and blood groups.
Or
- 16.b. Enumerate the composition and functions of WBC.
- 17.a. Illustrate the events involved in cardiac cycle.
Or
- 17.b. Explain the physiological anatomy of respiratory tract.
- 18.a. Describe about the digestion and absorption of proteins.
Or
- 18.b. Discuss the mechanism of urine formation.
- 19.a. Explain the salient features of thyroid gland with structure.
Or
- 19.b. Express the role of pituitary gland with structure.
- 20.a. Explain the role of mammary gland and lactation.
Or
- 20.b. Discuss about the physiology of menstruation.
