

RANI RASHMONI GREEN UNIVERSITY

M.Sc. 1st Semester Examination, 2024

Subject: NUTRITION AND PUBLIC HEALTH

Course code: GNPHT-12

(Unit 1-Anatomy and Physiology

Unit 2-Physiology of Digestive Glands and Endocrine Glands)

Time: 2 hrs

FM= 40

Answer any three from each unit and two from any unit of your choice from the following questions:

Unit:1

1. a) Differentiate between sensory, motor and interneurons.
b) Write down the major functions of temporal and occipital lobes of cerebrum. 2+3=5
2. a) Describe the anatomy of human Stomach.
b) Write in brief the absorption of lipid in the small intestine highlighting the role of micelles and chylomicrons in this process. 2+3= 5
3. Define cardiac cycle. Enumerate the different phases of cardiac cycle with diagram. 1+4= 5
4. a) Write a short note on BMR.
b) State the differences between anabolic and catabolic pathways. 2.5+2.5= 5
5. a) What is renal fascia?
b) Briefly describe the renal blood circulation process with diagram.
c) What are Juxtamedullary nephrons? 1+3+1= 5
6. Write short notes on any two of the followings: (2.5×2= 5)
 - a) Erythropoiesis
 - b) Sodium dependent Glucose transport
 - c) GFR
 - d) Neuroglia

Unit: 2

7. a) Differentiate between TRH and TSH.

b) Write in brief the role of thyroid peroxidase. $3+2=5$

8.a) Mention the cell types found in the gastric glands.

b) Describe in brief about HCl production in stomach. $2+3=5$

9.a) Mention the layers of adrenal glands.

b) Name the cells present in the adrenal cortex and adrenal medulla. Mention the functions of these cells. $1+2+2=5$

10.a) Name the three major pairs of salivary glands.

b) Write the composition of saliva.

c) What do you mean by peristalsis? $1+2+2=5$

11.a) Write down the composition of bile.

b) Explain the enterohepatic circulation in brief. $2+3=5$

12. Write short notes on any two of the followings: $(2.5 \times 2 = 5)$

a) Thyroid hormone degradation

b) Heterodont dentition in human

c) Hormones of adrenal cortex and adrenal medulla

d) Signal pathways