

KANYASHREE UNIVERSITY

M.Sc. 1st Semester Examination-2024

Subject: Food & Nutrition

Course- CC 3

Applied Physiology

Full Marks-40

Time-2.00 Hours

Group A

[Answer **any four** of the following]

(5×4=20)

1. How is HCl secretion regulated inside the stomach by different gastro-intestinal hormones?
2. Differentiate innate immunity and adaptive immunity.
3. Write a short note on glucose transport across cell membrane.
4. What are cytokines and state their mode of action?
5. How do peptide hormones differ from steroid hormones? Give examples.
6. What are the different types of ELISA reactions?
7. Why pancreas is called a mixed gland?

Group B

[Answer **any two** of the following]

(10×2=20)

1. What are the hormones responsible for hunger and satiety? What is the main role of MALT in the digestive system? Explain in detail about the different physiological phenomena occurring during starvation. [2+3+5]
2. What are membrane phospholipids? What is the 'Fluid Mosaic model' of plasma-membrane? Explain with a diagram. [4+6]
3. What are dietary fats? Name one primary and one secondary bile acid? Explain the process of absorption of fat through intestinal mucosa. [2+2+6]
4. Differentiate cytotoxic T-Cells from Natural Killer Cells. Describe the mechanism of antigen-antibody interactions. [3+7]
