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School of Biomedical Science
Bachelor of Science in Clinical Nutrition and Dietetics
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem III - C2UH303C - Medical Physiology -II

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Classify the components of urine into major constituents and discuss their origins K2 (2)
- 2) Label the nephron and its various components, illustrating the path of urine formation and concentration in the kidney. K1 (3)
- 3) Differentiate between inhalation and exhalation in the mechanism of breathing, highlighting the key differences in muscle involvement and pressure changes. K2 (4)
- 4) Summarize the complex interactions between neural and chemical regulation in respiration, emphasizing their integrated roles in maintaining breathing patterns. K2 (6)
- 5) Identify and explain the factors influencing vital capacity of the lungs and how it impacts an individual's respiratory function and overall health. K3 (6)
- 6) Construct a detailed flowchart illustrating the renin-angiotensin system, depicting each step from stimulus to response. K3 (9)
- 7) Classify the hormones that impact both reabsorption and secretion processes within the renal system. K4 (8)
- 8) Distinguish between different pituitary hormones based on their functions and affected organ K4 (12)

OR

Analyse the mechanisms of gas transport and exchange in the human respiratory system, considering factors like diffusion gradients and solubility. Describe oxygen and carbon dioxide transport in blood, the oxygen-hemoglobin dissociation curve, and factors influencing gas exchange efficiency K4 (12)