



Faculty of Medicine, University of Ruhuna
Medical Laboratory Science Degree Programme

Year end examination Year 1 – June 2015
6th atch – Human Biology MLS 1103 - theory – structured esay

Tuesday 30th June 2015 Time: 10.15 a.m. to 11.15 a.m.

Index Number:

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Answer one question from PART A and one question from PART B in the spaces given.

PART A- Physiology

1. 1.1 State the names of two main inspiratory muscles. (10 marks)

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1.2 Explain how the two muscles stated above help in inspiration. (10 marks)

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1.3 What is dead space? (10 marks)

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1.4 State three places where chemoreceptors are located. (15 marks)

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1.5 Explain the role of chemoreceptors in regulation of respiration. (15 marks)

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In respiratory centre depression, hypoxia occurs along with hypercapnoea, but in thickening of alveolar-capillary membrane hypoxia occurs with normal PaCO₂. Explain this difference. (20 marks)

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7 Explain what happens to PaCO₂, serum HCO₃⁻ and blood pH if somebody hyperventilates voluntarily. (20 marks)

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2.1 List five functions of calcium in the body. (10 marks)

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2 Name three hormones important for calcium homeostasis in the body. (15 marks)

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3 Briefly state the role of two hormones in calcium homeostasis named in 2.2. (20 Marks)

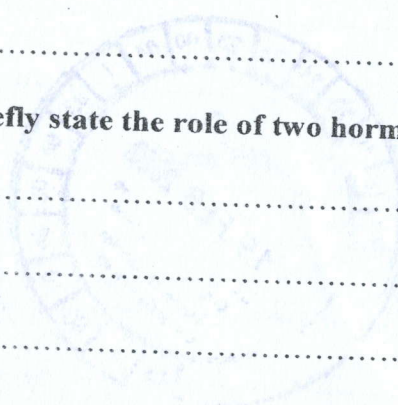
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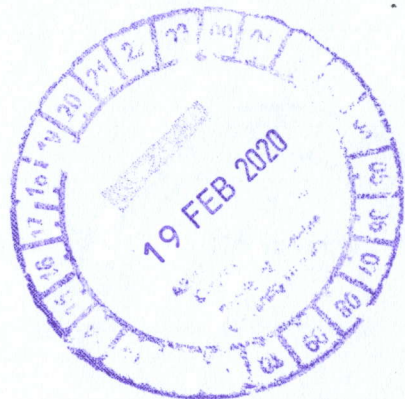
the hormones regulating menstrual cycle.

(20 Marks)

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Describe the menstrual cycle relating the hormonal changes, ovarian changes and uterine changes.

(35 Marks)



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