



UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE

ALLIED HEALTH SCIENCES DEGREE PROGRAMME

FIRST BPHARM PART II EXAMINATION – NOVEMBER 2015

PH 1254: HUMAN BIOLOGY II (SEQ)

TIME: THREE (03) HOURS

INSTRUCTIONS

- Answer all questions.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.
- Use illustrations where necessary.

1.

1.1 What is an endocrine gland? **(05 marks)**

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1.2 State **two** anatomical features common to all endocrine glands. **(06 marks)**

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1.3 Name **three** organs that perform endocrine function in addition to their regular function. **(09 marks)**

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1.4 How would you classify the nervous system? **(15 marks)**

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3.5 Name **two** drugs used as diuretics.

(10 marks)

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3.6 Describe briefly the effect of these two diuretics on the kidney.

(30 marks)

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4.

4.1 What is the difference between a sensory receptor and a sensory organ? **(10 marks)**

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4.2 Describe briefly different types of pain. **(20 marks)**

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4.3 What is referred pain? **(10 marks)**

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4.6 List **five** different methods of pain relief. **(10 marks)**

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4.7 Compare the action potentials of a skeletal muscle fiber and a cardiac muscle fiber. **(20 marks)**

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5.1

5.1.1 What is menopause? (10 marks)

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5.1.2 List **five** symptoms / features of menopause. (15 marks)

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5.1.3 A girl who attained puberty at the age of 10 years was taller than another girl of the same age at the age of 12 years. However when she was 20 years of age she was shorter than the other girl mentioned above.

Explain the physiological basis for

(i) her being taller than other girl at 12 years of age (10 marks)

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(ii) her being shorter than other girl at 20 years of age (10 marks)

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5.2

5.2.1 What are the lung measurements that can be obtained using a spirometer (ventilometer)? (10 marks)

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5.2.2 What will be the changes in above measurements in lung fibrosis?

(25 marks)

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5.2.3 Describe briefly **one** clinical condition where peak expiratory flow rate is reduced.

(20 marks)

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6.

6.1 Name the hormones secreted by pituitary gland.

(15 marks)

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6.2 Describe briefly "Dwarfism."

(15 marks)

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6.3 List **five** actions of thyroxin.

(10 marks)

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6.4 Describe briefly the regulation of thyroxin secretion.

(20 marks)

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