

EXAMINATIONS  
Institute of Indigenous Medicine  
11 SEP 2018  
University of Colombo

INSTITUTE OF INDIGENOUS MEDICINE, UNIVERSITY OF COLOMBO.

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BUMS LEVEL I – FIRST SEMESTER EXAMINATION – AUGUST 2018

PHYSIOLOGY – I

COURSE CODE – AS 1102

Time: 2 ½ hour  
11.09.2018  
1.45 p.m. – 4.15 p.m

Index No

Answer all questions.

**Part I - Structured Questions**

1.

A. Name the steps of urine production (02Marks)

- I. ....
- II. ....
- III. ....
- IV. ....

B. Briefly explain the above mentioned steps (02 Marks)

- I. ....
- II. ....
- III. ....
- IV. ....

C. Name five molecules / substances which can pass through the filtration membrane of the kidney (2.5 Marks)

- I. ....
- II. ....
- III. ....
- IV. ....
- V. ....

D. (i) Define the term Glomerular Filtration Rate (GFR) (01Mark)

.....  
.....

(ii) What is the normal amount for an average adult? (01Mark)

.....

E. List hormones which are secreted by the kidney? (1.5 Marks)

I .....

II .....

III .....

2.

A. Name the two components of the enteric nervous system and mention where they are found in the GIT (03 Marks)

I .....

II .....

B. List four hormones which act on GIT and mention their origin and function (04 Marks)

I .....

II .....

III .....

IV .....

C. List the stomach glands and their functions (1.5 Marks)

I .....

II .....

III .....

D. Mention three functions of colon (1.5 Marks)

I .....

II .....

III .....



## Part – II Essay Questions

01.

I Define the following terms.

(a) Pulmonary ventilation (1.5 Marks)

(b) Alveolar ventilation (1.5 Marks)

II List the functions of haemoglobin? (02 Marks)

III How O<sub>2</sub> is carried in the arterial blood? (01 Mark)

IV (a) What is Asthma? (01 Mark)

(b) What are the main three abnormalities seen in bronchial asthma? (1.5 Marks)

V Define the term pneumothorax? (1.5 Marks)

VI Write short notes on

(a) Central chemoreceptors (05 Marks)

(b) Peripheral chemoreceptors (05 Marks)

02.

I. Write the physiology of swallowing (10 Marks)

II. Explain the physiology of defecation (10 Marks)

03.

I. What is renal auto regulation? (03 Marks)

II. How nephron prevent drastic changes in Glomerular Filtration Rate (GFR) when blood pressure rises? (04 Marks)

III. What is transport maximum? (03 Marks)

IV. Explain micturition reflex. (10 Marks)

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