

**INSTITUTE OF INDIGENOUS MEDICINE, UNIVERSITY OF COLOMBO, RAJAGIRIYA**

**BUMS LEVEL I – FIRST SEMESTER EXAMINATION – AUGUST 2017**

**PHYSIOLOGY – I**

**COURSE CODE – AS1102**

INDEX NO:

**Time: 2 ½ hours**

**12.09.2017**

**1.45 p.m. – 4.15 p.m.**

**Answer all questions.**

**Part I - Structured Questions**

1. (A) Explain the **physiological basis** in the following conditions ?

i. Generalised oedema in chronic pancreatitis.

(1.5 Marks)

ii. Confusion following head injury

( 1.5 Marks)

(B) i. What is elevated **JVP**?

(01 Mark)

ii. What are the clinical important of elevated JVP ?

(02 Marks)

( C ) Explain the physiological basis of bilateral ankle oedema in severe mitral stenosis ? (04 Marks)

02. A. i. What is hypoxic hypoxia?

(01 Mark)

ii. Give three characteristic features of above hypoxia ?

(1.5 Marks)

iii. Give three causes for above hypoxia ?

(1.5 Marks)

B. i. What is dehydration ?

(01 Mark)

ii. What is volume depletion ?

(01 Mark)

iii. Give 5 important clinical signs of dehydration ?

(02 Marks)

C. Give 4 important endocrine causes for diarrhoea ?

(02 Marks)

## Part II – Essay Questions

01. A. i. What is oxygen dissociation curve ( explain with diagram ) (04 Marks)
- ii. What are the factors will change this curve (03 Marks)
- B. List out the important functions of the respiratory system (03 Marks)
- C. Explain the clinical important of pulmonary ventilation – perfusion matching in pulmonary embolism (10 Marks)
02. A. Explain the clinical important of intrinsic factors in maintaining RBCs (06 Marks)
- B. A 26 year old young female patient presented to his GP with the complain of shortness of breathing on exertion. On examination she was found to be severe pale. She was underwent terminal ileal resection due to intestinal TB causing intestinal stricture one year back.
- i. What would be the cause for her shortness of breathing? (04 Marks)
- ii. Explain the pathophysiology for the above problem? (10 Marks)
03. A. i. What is respiratory acidosis? (02 Marks)
- ii. What are the conditions which would cause the above acidosis? (04 Marks)
- B. Explain the clinical physiology of hyperventilation? (06 Marks)
- C. A 70 year old chronic smoker was presented with difficulty in breathing and loss of weight for 3 months . On examination, his chest antero posterior diameter and lateral diameter were more or less equal and he was thin built.
- i. What could be your most possible physiological diagnosis? (02 Marks)
- ii. Explain the pathophysiology for the above problem? (06 Marks)