

THE OPEN UNIVERSITY OF SRI LANKA  
FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF BASIC SCIENCES  
ACADEMIC YEAR 2020/2021 – SEMESTER 01  
BACHELOR OF PHARMACY HONOURS



BSU3431 – HUMAN PHYSIOLOGY – LEVEL 03  
FINAL EXAMINATION  
DURATION: THREE HOURS

THREE HOURS

DATE:16.03.2022

TIME:9.30 am to 12.30 pm

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**Part B – STRUCTURED ESSAY QUESTIONS**

*(40 marks)*

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Write answers in the space provided.

1. A) Draw and name the layers of the 'Respiratory membrane'. (6 marks)

- B) What is surfactant and state the importance of it in the lungs? (4 marks)

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2. A) List **four (04)** changes that occur during aging in the digestive system (4 marks)

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B) Explain the basis of respiratory distress syndrome in a new-born baby. (6 marks)

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3. List the **one (01)** major **function** of following organelles. (10 marks)

a) Ribosomes

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b) ER

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c) Golgi apparatus

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d) Mitochondria

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e) Nucleus

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4. **Define** the followings

i. Blood pressure (2 marks)

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ii. Systolic blood pressure (2 marks)

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iii. Diastolic blood pressure (2 marks)

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iv. Pulse pressure (2 marks)

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v. Mean Arterial Pressure (MAP) (2 marks)

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INDEX NO: .....

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**Part C – ESSAY QUESTIONS***(30 marks)*

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1.
  - i. What is a motor unit (2 marks)
  - ii. Explain the structure of a typical neuromuscular junction (7 marks)
  - iii. Name hormones secreted by the adrenal cortex and one function for each of the hormones (6 marks)
  
2.
  - i. List **three (03)** functions of the human liver (3 marks)
  - ii. State **two (02)** common disorders in the liver and mention their causes (4 marks)
  - iii. Describe the adaptations in the small intestine for absorption of nutrients (8 marks)

