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RNLKWC/B.Sc.-CBCS/IIIS/PHY/H/C6T/22

2022

Physiology

[HONOURS]

(CBCS)

(B.Sc. Third Semester End Examination-2022)

PAPER-C6T

[Respiratory System]

Full Marks: 40

Time: 02 Hrs

*The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as
far as practicable
Illustrate the answers wherever necessary*

1. Answer any five questions of the following: 5x2=10
- a) What are carbamino compounds?
 - b) What do you mean by vital capacity?
 - c) What do you mean by airway resistance?
 - d) What is Bohr effect
 - e) What do you mean by transpulmonary pressure?
 - f) What is total lung capacity (TLC)?
 - g) Discuss the symptoms of asthma and emphysema.
 - h) Where are respiratory chemoreceptors located?

(2)

2. Answer any four questions of the following: $4 \times 5 = 20$

- a) Briefly explain the ways in which oxygen is transported in the blood. 5
- b) Discuss the factors that affect the lung compliance. Name the different muscles involved in inspiration and expiration. 2+3
- c) Discuss about the chemical regulation of respiration. What is cyanosis? 4+1
- d) Discuss the factors that shift the oxygen haemoglobin dissociation curve to the left. 5
- e) State the non-respiratory functions of lungs. 5
- f) Differentiate between static and dynamic compliance. What is FRC? 3+2

3. Answer any one question: $1 \times 10 = 10$

- a) i) What is chloride shift?
ii) Explain the nervous regulation of respiration.
iii) Discuss the different types of hypoxia with symptoms. 2+4+4
 - b) i) Write the peculiarities of pulmonary circulation.
ii) Define ventilation – perfusion ratio.
iii) What do you mean by lung surfactant? 5+3+2
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