

U.G. 4th Semester Examination - 2024**PHYSIOLOGY****[HONOURS]****Course Code : PHYSIOL-H-CC-T-10**

Full Marks : 40

Time : 2½ Hours

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

1. Answer any five questions:

2×5=10

- a) What do you mean by pleura?
- b) State the functions of lung surfactant.
- c) How smoking damage the respiratory system?
- d) What do you mean by work of breathing?
- e) Define functional residual capacity.
- f) What do you mean by hyperventilation?
- g) What is respiratory quotient?
- h) What do you mean by pulmonary edema?

[Turn Over]

2. Answer any two from the following questions:

5×2=10

- a) Write a short note on artificial respiration. 5
- b) Write a brief note on apnea. 5
- c) List the components of the upper and lower respiratory tracts and mention their functions. 5
- d) Write a short note on oxygen-hemoglobin dissociation curve. 5

3. Answer any two from the following questions:

10×2=20

- a) What do you mean by pulmonary ventilation? Write short notes on anatomical and physiological dead space. What is ventilation-perfusion ratio? 2+6+2=10
- b) What is PEFV? State the significance of determining PEFV. Write a short note on restrictive and obstructive pulmonary disease. 2+2+6=10
- c) What do you mean by total lung capacity? How do you measure the total lung volume and total lung capacity? Which diseases appear if the volume of vital capacity is reduced? 2+6+2=10
- d) Write a short note on mechanics of work of breathing. 10