

Physiology [Minor]
[NEP]

B.Sc. First Semester End Examination-2024
[Regular and Supplementary Paper]
PAPER-PHY MI 1T

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.

Group-A

1. Answer any FIVE questions of the following: 5x2= 10

- a. Define all or none law of cardiac muscle.
- b. What is residual volume?
- c. Differentiate between plasma and serum.
- d. What is pacemaker potential? Which one is known as secondary pacemaker? 1+1
- e. Define active transport and passive transport. 1+1
- f. What is liposome?
- g. What is tracheobronchial tree?
- h. What do you mean by the autorhythmicity property of cardiac muscle?

Group-B

2. Answer any FOUR questions of the following: $4 \times 5 = 20$
- a. Describe the function of plasma proteins. 5
 - b. What are absolute and relative refractory period of cardiac muscle? What is 1st degree heart block? $2+2+1$
 - c. Discuss the ultra structure of mitochondria. 5
 - d. Write the name of the muscles involved in inspiration. What are inspiration reserve volume and expiratory reserve volume? $3+2$
 - e. Write the function of peroxisome. Why Lysosome is known as suicidal bag? Why ribosome is known as protein factory? $2+2+1$

Group-C

3. Answer any ONE question of the following: $1 \times 10 = 10$
- a. Describe the fluid mosaic model of cell membrane. Distinguish between RER and SER. Why mitochondria is known as 'power house of cell'. $5+2+3$
 - b. Describe briefly about the classification of simple epithelial tissue. What is the significance of plasmapheresis? Define Oedema. $5+3+2$
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