

Sona

40
70

[SZ+ S 235B]³³

M.Sc. DEGREE EXAMINATION
ZOOLOGY

Second Semester

GENERAL AND COMPARATIVE PHYSIOLOGY
(Effective from the admitted batch of 2022 -2023)

Time : 3 Hours

Max. Marks : 70

*Answer One Question from each unit.
All questions carry equal marks.*

de
pulmonary
rapid
slow
fast

UNIT - I

- 5 1. (a) Give an account on digestion and absorption of food materials.
5 (b) Write notes on BMR and its significance.

(OR)

2. (a) Explain the transport and exchange of gases.
(b) Describe the neural and hormonal control of breathing.

UNIT - II

3. (a) Write an account on comparative anatomy of heart structure.
(b) Write notes on hemoglobin and its function.

(OR)

- 7 4. (a) What is cardiac cycle? Discuss heart as a pump.
(b) Explain the neural and chemical regulation of heart.

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UNIT - III

5. ~~(a)~~ Describe the kidney and its renal units.
~~(b)~~ Write an account on physiology of urine formation.
(OR)
6. (a) Discuss the formation of excretory products.
(b) Explain the role of kidney in acid - base balance.

UNIT - IV

7. (a) Give an account on fundamentals of nerve impulse.
(b) What are the different types of synapses? Discuss their significance.
(OR)
8. ~~(a)~~ Describe the ultra structure of striated muscle.
~~(b)~~ What are different muscle proteins? Add a note on their function.

UNIT - V

9. (a) Write briefly about the Homoeostatic mechanisms of the body.
(b) Explain the concepts of elastic and plastic strain.
(OR)
3. 10. ~~(a)~~ Describe the process of hearing and its mechanism.
~~(b)~~ Write notes on thermoregulation.

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