

FOURTH SEMESTER EXAMINATION 2021-22

M.Sc. ZOOLOGY

Paper - II

Environmental Physiology

Time : 3.00 Hrs.

Max. Marks : 80

Total No. of Printed Page : 03

Mini. Marks : 29

Note: Question paper is divided into three sections. Attempt question of all three section as per direction. Distribution of Marks is given in each section.

Section - 'A'

Very short answer questionss (in few words)

Q.1 Attempt any six question from the following :

6x12=12

- (i) Define acclimation.
- (ii) What do you understand by thermo-neutral zone.
- (iii) Define meditation.
- (iv) What is stress tolerance.
- (v) Liebig - Blackman law of limiting factor.
- (vi) Define stenobathic and eurybathic.
- (vii) Write the basic differences between mutualism and commensalism.
- (viii) What do you understand by ecotone and edge effect.
- (ix) Define retrogressive succession.
- (x) Role of temperature on body size.

(2)

Section - 'B'

Short answer questions (in 200 words)

- Q.2 Attempt any four question from the following questions : **4x5=20**
- (i) Describe with appropriate examples about the ecological aspects of competition.
 - (ii) Write the characters of community.
 - (iii) What is ecological succession ?
 - (iv) Define stress. Describe how animal physiologically respond to oxygen deficiency.
 - (v) Write about the concept of homeostasis.
 - (vi) What is acclimatization ? Explain.
 - (vii) Write the biological effects of temperature.

Section - 'C'

Long answers/Essay type questions.

4x12 = 48

- Q.3 Attempt any four question from the following :
- (i) What do you understand by limiting factor ? Write the concepts of limiting factors.
 - (ii) Write about the physiological adaptation to the parasitic habitat.
 - (iii) Write note on basic concept of environmental stress and strain, stress resistance and stress avoidance.
 - (iv) What is endothermy ? Write the physiological mechanism of regulation of body temperature.
 - (v) What is osmoregulation ? Explain it in aqueous environment.

(3)

(vi) Write about the physiological response to body exercise.

(vii) Write about the different type of meditation and their effects on body.

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