

2022

M.Sc.

4th Semester Examination

ZOOLOGY

PAPER—ZOO-494

( *Practical* )

Full Marks : 50

Time : 5 Hours

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

Answer all questions.

1. Make match schematically (drawing arrows) of the following terminologies with respective animals :

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- |                                 |                                |
|---------------------------------|--------------------------------|
| (a) Phytoremediation            | (i) Chronomid larva of diptera |
| (b) Bioindicator<br>(sensitive) | (ii) Tiger                     |

(Turn Over)

- |                               |   |
|-------------------------------|---|
| (c) Key stone species         | (iii) Dolphin                                   |
| (d) Flagship species          | (iv) Water hyacinth                             |
| (e) Bioindicator<br>(olerant) | (v) Gastropod :<br><i>Bellamyia bengalensis</i> |

2. Apply appropriate statistical test to deduce significance from the data provided. 15
  
3. Draw the ultra-structure of insect neuroendocrine system with proper labelling. Write down the primary roles of the hormones released by three main endocrine glands in insects. 5+3
  
4. Extract, stain and display the chick embryo from the fertilized egg provided. Identify with reasons and draw a labelled diagram. 8+4
  
5. Laboratory Note Book. 5
  
6. Viva-voce. 5