

# AE-779

M. Sc. (Previous)  
Term End Examination, 2016-17

## ZOOLOGY

Paper - III

Endocrinology and Gamete Biology

*Time : Three Hours] [Maximum Marks : 100*  
*[Minimum Pass Marks : 36*

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**Note** : Answer from **both** the Sections as directed. The figures in the right-hand margin indicate marks.

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### Section-A

1. Answer any **five** of the following short answer type questions. Answer should not be more than two pages : *6×5*

- (a) What is neuroendocrine system ?
- (b) Why are hormones called messengers ?
- (c) Write on the action of Steroid hormones.
- (d) How are hormones responsible for reproduction ?

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- (e) Describe the seasonal breeders with examples.
- (f) What are pre and pro-hormones ? Explain with examples.
- (g) Explain the events of post-fertilization.
- (h) What is MOET ?
- (i) Describe the GIFT.
- (j) How is behaviour regulated by hormones ?

**Section-B**

2. Answer the following long answer type questions :

- (a) Write an essay on hormonal regulation of carbohydrate, nitrogen and lipid. 17½

***OR***

Explain the relation between hormones and homeostasis.

- (b) Give detail about biosynthesis of T4 and epinephrine. 17½

***OR***

Explain the metabolism of hormones.

(3)

(c) Write an essay on Heterogamy in Eukaryotes. 17½

**OR**

Explain the function of Leydig cells and its regulation in spermatogenesis.

(d) Explain the events of fertilization. 17½

**OR**

Explain the process of Cloning with its merit and demerit.