



K24P 3160

Reg. No. :

Name :

III Semester M.Sc. Degree (C.B.C.S.S. – O.B.E. – Regular)
Examination, October 2024
(2023 Admission)
ZOOLOGY
MSZGY03C13 : Developmental Biology and Animal Ethics

Time : 3 Hours

Max. Marks : 60

PART – A

I. Answer **any five** of the following. **Each** question carries **3** marks.

- 1) Explain pluripotency with examples.
- 2) What are teratogenic agents ?
- 3) What is embryonic field ?
- 4) Give an outline of Hox code hypothesis.
- 5) Compare embedding and sectioning.
- 6) Define homeotic selector genes.

(5×3=15)

PART – B

II. Answer **any three** of the following. **Each** question carries **6** marks.

- 7) Discuss environmental influences on sex determination with examples.
- 8) Elaborate the structure and function of primitive streak in various stages of chick development.
- 9) Develop systematically the steps involved in the differentiation of neurons.
- 10) Combine the contributions of Hans Spemann and Hilde Mangold in the field of constriction and transplantation experiments.
- 11) Comment on CCSEA. Summarize its ethical principles and functions. (3×6=18)

P.T.O.

K24P 3160



PART – C

III. Answer **any three** of the following. **Each** question carries **9** marks.

- 12) Categorize regeneration. Give an account of the histological processes taking place during regeneration.
- 13) Examine the gastrulation and specification of germ layers in Amphibia.
- 14) Analyze the environmental influences on normal development using examples.
- 15) Identify the mammalian pattern of sex determination in detail.
- 16) Analyze the animals in research. Add a short note on legislation in animal experimentation. (3×9=27)