Total Pages : 3

Roll No.

MZO-509

Development Biology

M.Sc. Zoology (MSCZO)

2nd Semester Examination, 2023 (Dec.)

Time : 2 Hours]

[Max. Marks : 35

Note : This paper is of Thirty Five (35) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

SECTION-A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only. (2×9½=19)

- 1. Explain the developmental pattern in Metazoans.
- 2. Differentiate between spermatogenesis and oogenesis.
- **3.** What do you understand by the term Gastrulation? Explain in detail.
- 4. Discuss the process of Neurulation in detail.
- 5. Explain the genetics of axis specification in Drosophila.

SECTION-B

(Short Answer Type Questions)

- **Note :** Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only. (4×4=16)
- 1. What is the cellular basis of differentiation?
- **2.** Write about cleavage.
- **3.** Write a short note on post fertilization events.
- 4. What do you understand by the Proximate tissue interactions?

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- 5. What is Aging and Senescence?
- **6.** Write a short note on abnormal development.
- 7. Give brief account of history of developmental biology.
- **8.** What do you understand by the term segmentation in developmental biology?