

A-244

Total Pages : 3

Roll No.

MSCZO-602

M.Sc. ZOOLOGY (MSCZO)

(Developmental Biology)

3rd Semester Examination, 2024 (June)

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) 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) 2×19=38

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

- Q. 1. Write in details about the Primary, secondary and tertiary organizers with suitable examples.
- Q. 2. Classify with examples the various type of eggs found in vertebrates.
- Q. 3. Explain the mechanism of regeneration of amphibian limbs and lens.
- Q. 4. What do understand by gastrulation ? Describe the process of gastrulation in mesolecithal and polylecithal egg.
- Q. 5. Describe the process of oogenesis in details. Also state the differences between orgenesis and spermatogenesis.

Section–B

(Short Answer Type Questions) 4×8=32

Note :- Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

- Q. 1. Explain the morphology of a typical spermatozoon with diagram.
- Q. 2. Explain environmental teratogens in details.

- Q. 3. Explain the process of gastrulation in frogs.
- Q. 4. Write in detail about the development of the brain.
- Q. 5. What is emboly ? How does it differ from epiboly ?
- Q. 6. Explain different types of cleavage met within animal groups.
- Q. 7. Write an essay on hormonal control of amphibian metamorphosis.
- Q. 8. Write the detailed note on metaplasia.
