

M-6532

M.Sc. (IIIrd Semester) Examination, 2020

ZOOLOGY

(Developmental Biology)

Time Allowed : Three Hours

Maximum Marks : 70

Minimum Pass Marks : 28

Note : Attempt any five questions, selecting one question from each unit.

Unit - I

Q. 1. Describe the mutation & identification of developmental genes. **14**

Or

Q. 2. Describe the mitosis cell division. Write the importance of crossing over. **14**

Unit - II

Q. 3. What is morphogenesis ? Explain the process of morphogenesis. **14**

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P.T.O.

(2)

Or

Q. 4. Write note on any two of the following : **7+7=14**

- (i) Formation of blastula
- (ii) Segment polarity genes

Unit - III

Q. 5. What is organogenesis ? Explain the development of proximal distal & dorso-ventral axis formation. **14**

Or

Q. 6. Write notes on : **7+7=14**

- (i) Insect compound eye,
- (ii) Development of butterfly wing

Unit - IV

Q. 7. What is regeneration ? Explain the regeneration of salamander limb. **14**

Or

Q. 8. Describe the growth hormones. **14**

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(3)

Unit - V

Q. 9. Explain the gene expression and human disease. **14**

Or

Q. 10. Write short note : **7+7=14**

- (i) Teratogenic agents like alcohol
- (ii) Phenotypic variability

