Paper-5 Zoology - Missing. **NS – 335**

V Semester B.Sc. Examination, November/December 2016
(CBCS) (Freshers) (2016-17 & Onwards)
ZOOLOGY (Paper – VI)
Developmental Biology and Organic Evolution

Time : 3 Hours Max. Marks : 70

Instructions : *1) Draw diagrams **wherever** necessary.*
*2) Answer should be **completely** either in **Kannada** or **English**.*

PART – A

I. Answer **any five** of the following : **(5×3=15)**

1) List the important scopes of embryology.

2) State and explain preformation theory.

3) Mention the role of Sertoli cells.

4) Explain the structure of blastula of chick.

5) Draw and label neurula of frog.

6) What is atavism ? Mention its significance.

7) With respect to fossils, briefly explain moulds and casts.

PART – B

II. Answer **any five** of the following : **(5×5=25)**

1) With the help of illustrated diagram describe the fate map of blastula of frog.

2) Explain mosaic and regulative eggs with suitable examples.

3) Explain the process of oogenesis with a diagrammatic representation.

4) Describe gastrulation in Amphioxus.

5) Describe the structure and functions of allantois.

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6) State Hardy – Weinberg Law. Mention its significance.

7) With reference to isolation, explain :
   a) Zygotic mortality
   b) Hybrid sterility.

PART – C

III. Answer **any three** of the following : **(3×10=30)**

1) Describe the mechanism of fertilization in animals.

2) Define regeneration. Explain the same in the following animal forms :
   a) Planarians
   b) Amphibians.

3) Describe the histological types of placenta with suitable examples.

4) Enumerate the structural and physiological changes involved in the metamorphosis of tadpole of frog.

5) Mention the salient features of Ramapithecus and Cromagnon man.

6) Discuss briefly the embryological evidences in favour of organic evolution.
