

V Semester B.Sc. Examination, Nov./Dec. 2016
 (Repeaters – Prior to 2016-17) (NS – 2013-14 and Onwards)
ZOOLOGY (Paper – VI)
Developmental Biology and Organic Evolution

Time : 3 Hours

Max. Marks : 70

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

PART – A

I. Answer **any five** of the following : **BMSCW**

(5×3=15)

- 1) Write a note on Von Baer's theory.
- 2) What is viviparity ? Give two examples.
- 3) Draw a neat labelled diagram of blastula of Amphioxus.
- 4) Mention three functions of 'Chorion'.
- 5) Explain regeneration in Amphibians.
- 6) Write a note on 'Gene frequency'.
- 7) What are Analogous Organs ? Give an example.

PART – B

II. Answer **any five** of the following :

(5×5=25)

- 1) Explain hormonal regulation of menstrual cycle.
- 2) Differentiate between mosaic and regulative eggs.
- 3) Give an account on planes of cleavage.
- 4) Describe structure of neurula of Frog.
- 5) What is regeneration ? Explain axial gradient theory.
- 6) With reference to chemical evolution of life, explain Stanley Miller's experiment.
- 7) What is 'Speciation' ? Explain allopatric and sympatric speciation.



PART - C

III. Answer **any two** of the following :

(10x2=20)

- 1) Explain mechanism of fertilization.
- 2) Describe structure of hen's egg. Add a note on egg-membranes.
- 3) Explain morphological types of placenta with suitable examples.
- 4) Give an account on isolation in evolution.

PART - D

IV. Describe gastrulation in frog.

(1x10=10)

OR

BMSCW

Mention salient features of

- a) Australopithecus.
- b) Neanderthal Man.