



Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2019
First Degree Programme under CBCSS
ZOOLOGY
Core Course – X
ZO 1642 – Developmental Biology and Experimental Embryology
(Common for 2013 & 2014 Admission)

Time : 3 Hours

Max. Marks : 80

I. Answer all questions (1 mark each).

- 1) Acrosome.
- 2) Organizer.
- 3) Blastokinin.
- 4) Entelechy.
- 5) Neurula.
- 6) Gap genes.
- 7) Liquor folliculi.
- 8) Diffuse placenta.
- 9) Primitive groove.
- 10) Hayflick limit.

(10×1=10 Marks)

II. Answer any eight questions. (2 marks each).

- 11) Wolffian body.
- 12) Exogastrulation.
- 13) Inductor.
- 14) Transfection.
- 15) Autolysis.
- 16) Stem cell.
- 17) Corpus allatum.
- 18) Hyaluronidase.



- 19) Functions of allantois.
- 20) Fate map.
- 21) Preformation theory.
- 22) Cryopreservation of embryo.

(8×2=16 Marks)

III. Answer **any six** questions. (4 marks **each**).

- 23) Based on different criteria, classify eggs with examples.
- 24) Sketch and label 24 hr. chick embryo.
- 25) Briefly explain different types of blastulae.
- 26) Explain physiological and biochemical changes during fertilization.
- 27) Mention major steps involved in IVF and ET.
- 28) Briefly write on homeotic genes.
- 29) Give a brief account on morphogenetic movements.
- 30) Describe different patterns of cleavage.
- 31) Explain hormonal control of menstrual cycle.

(6×4=24 Marks)

IV. Answer **any two** questions. (15 marks **each**).

- 32) Write an essay on the plasticity of the nuclei in their developmental fate as demonstrated in the Newt egg.
- 33) List out larval forms of invertebrates and add a note on evolutionary significance.
- 34) Give an account on hormonal regulation of metamorphosis in frog.
- 35) Describe different types of placentae in mammals. Add a note on their functions.

(2×15=30 Marks)
