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G – 1419

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)**