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Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Degree Examination, April 2018
First Degree Programme under CBCSS
Core Course IX
ZO 1641 : DEVELOPMENTAL BIOLOGY AND EXPERIMENTAL EMBRYOLOGY
(2015 Admission)

Time : 3 Hours Max. Marks : 80

I. Answer the following questions in **one** or **two** sentences. **Each** carries **one** mark.

1) What is Graafian follicle ?
2) What is arrhenotoky ? Give example.
3) What is Meroblastic cleavage ?
4) Fate map.
5) Epiboly.
6) Epigenesis.
7) Neural crest cells.
8) Scleotome.
9) Primary organizer.
10) Capacitisation of egg. **(10×1=10 Marks)**

II. Answer **any eight** of the following **not** exceeding **one** paragraph. **Each** carries **two** marks.

11) What is Coeloblastula ? Give example.
12) Give an account of Haemochorial placenta.
13) Explain Embryonic induction with example.
14) What is fertilisation membrane ?
15) Classify eggs based on yolk.
16) Explain Cell lineage.

17) Differentiate Epiboly and Emboly.

18) Explain Potency.

19) Tectum.

20) Explain Spemanns construction experiment.

21) What is Chorda mesodermal mantle ?

22) What is yolk plug ? **(8×2=16 Marks)**

III. Answer **any six** of the following (**not** to exceed **120** words. **Each** carries **4** marks).

23) Give an account of various egg envelopes with example for each.

24) Stem cells.

25) Give an account of 24 hour chick embryo.

26) Homeotic genes in development.

27) Explain parthogenesis with example.

28) Explain the process of cleavage in chick.

29) Describe spermatogenesis.

30) Give an account of neurogenesis in Amphioxis.

31) Explain bilateral symmetrisation of frog egg. **(6×4=24 Marks)**

IV. Answer **any two** of the following (**Each** carries **15** marks) :

32) Write an essay on placentation based on the distribution of the villi and on histological intimacy.

33) Explain with examples various types of morphogenetic movements.

34) Explain the development of extra embryonic membranes of chick.

35) Describe the development of eye in frog. **(2×15=30 Marks)**
