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Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Degree Examination, April 2017

First Degree Programme Under CBCSS

Core Course – X

ZO 1642 : DEVELOPMENTAL BIOLOGY AND EXPERIMENTAL EMBRYOLOGY

(For 2013 and 2014 Admission)

All Saints' College Trivandrum

Time : 3 Hours Max. Marks : 80

I. Answer **all** questions (1 mark **each**) :

1) Yolk plug.
2) Nucleus of pander.
3) Hunch back.
4) Vital stains.
5) Follicular atresia.
6) ZIFT.
7) Splanchnopleure.
8) Discoidal cleavage.
9) Unipotency.
10) Phocomelia.

(10×1=10 Marks)

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

11) What is primitive streak ?
12) Give the importance of Grey crescent.
13) Sketch and label human sperm.
14) Differentiate between holoblastic and mesoblastic cleavage.
15) What are germ layers ? Mention its functions.

P.T.O.

16) Write a note on homoetic genes.

17) What is implantation ?

18) Mention about amniocentesis.

19) Comment on embryotransfer.

20) What is ultrasound scanning ?

21) How alcohol act as a teratogen ?

22) What are the physiological changes occurs during amphibian metamorphosis ?

(8×2=16 Marks)

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

23) What are fate maps ? Draw and label fate maps of frog.

24) Explain spermatogenesis.

25) Explain Arrehenotoky and Thelytoky with examples.

26) Describe different types of blastulae with examples.

27) Briefly explain morphogenetic movements.

28) What are stem cells ? Mention its significance.

29) Describe neurulation in amphioxus.

30) Write a short notes on teratogens.

31) Explain hormonal mechanism in foetal ejection reflex. **(6×4=24 Marks)**

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

32) Describe the development of eye in frog.

33) Describe the features of chick-24 Hrs. with help of diagram.

34) What is placentation ? Mention the different types of placenta with examples.

35) Discuss the contribution of Spemann to the science of embryology.

(2×15=30 Marks)

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