

C 21112

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2017

(CUCBCSS—UG)

Zoology

**ZOL 6B 13—REPRODUCTIVE BIOLOGY, DEVELOPMENTAL BIOLOGY AND
TERATOLOGY**

Time : Three Hours

Maximum : 80 Marks

A. Answer *all* questions. Each carries 1 mark :

- 1 What is parturition ?
- 2 What is cleidoic egg ?
- 3 What is teratology ?
- 4 What is ontogeny ?
- 5 Who proposed the Theory of Preformation ?
- 6 What are cortical granules ?
- 7 What is blastopore ?
- 8 What is archenteron ?
- 9 How many pairs of somites are present in 24 hours chick embryo ?
- 10 What is endometrium ?

(10 × 1 = 10 marks)

B. Answer any *ten* questions in two or three sentences each. Each carries 2 marks :

- 11 What is corpus luteum ?
- 12 What is capacitation ?
- 13 What is surrogacy ?
- 14 What is gestation ?
- 15 What is GIFT ?
- 16 Name any two types of cells in the testis and their functions.

Turn over

17 Explain primary, secondary and tertiary egg membranes with examples.

18 What is cell lineage?

19 What is a fate map?

20 What is primitive streak?

21 What is morula?

22 Citing one example, describe how environmental factors cause teratogenic effects.

(10 × 2 = 20 marks)

C. Answer any *five* questions in not more than a *paragraph* each. Each carries 6 marks.

23 Describe the structure of a Graafian follicle with the help of labelled sketch.

24 With the help of a diagram, describe oogenesis.

25 Write notes on in vitro fertilization and embryo transfer.

26 What is prenatal diagnosis? Briefly describe amniocentesis.

27 Explain recapitulation theory.

28 What are germ layers? Name the types of germ layers and their derivatives.

29 Explain radial cleavage and spiral cleavage with diagrams and examples.

30 Describe different types of blastula.

(5 × 6 = 30 marks)

D. Write essays on any *two* of the following. Each carries 10 marks.

31 With the help of labelled diagrams describe the development of eye in frog.

32 Describe reproductive cycles in mammals and their hormonal control.

33 With the help of diagrams describe the embryonic development of man up to implantation. Add a note on pregnancy and parturition.

34 With the help of labelled sketches, classify different types of eggs with suitable examples.

(2 × 10 = 20 marks)