

C 60087

(Pages : 2)

Name.....

Reg. No.....

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2019**  
(CUCBCSS)

Zoology

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

Time : Three Hours

Maximum : 80 Marks

**Part A**

I. One Word Questions. Answer all questions. Each question carries 1 mark.

- 1 The science that studies the causes, mechanisms and patterns of abnormal development is \_\_\_\_\_.
- 2 \_\_\_\_\_ hormone inhibits ovulation.
- 3 During the first two or three days of lactation, the fluid that comes from the mammary gland is called \_\_\_\_\_.
- 4 A baby conceived by in-vitro fertilization is called \_\_\_\_\_.
- 5 Theory of Recapitulation was proposed by \_\_\_\_\_.
- 6 The type of parthenogenesis in which females are produced from unfertilized egg is called \_\_\_\_\_.
- 7 In *Amphioxus*, the process of proliferation and extension of ectodermal area over the other parts is called \_\_\_\_\_.
- 8 The twisted membranous stripes joining the yolk to the ends of the egg shell in chick is called \_\_\_\_\_.
- 9 In frog, the embryo between 16 and 64 cell stages is called \_\_\_\_\_.
- 10 The most important hormone involved in amphibian metamorphosis is \_\_\_\_\_.

(10 × 1 = 10 marks)

**Part B**

II. Short Answer Questions. Answer any *ten* questions. Each question carries 2 marks :

- 11 Write on the effects of alcohol on development.
- 12 Distinguish between semiparity and iteroparity.
- 13 What is corpus albicans ?
- 14 Write briefly on surrogacy.
- 15 What is PNDT Act ?

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- 16 Write briefly on grey crescent.
- 17 Distinguish between totipotency and pluripotency.
- 18 Comment on primitive streak in chick embryo.
- 19 Distinguish between determinate and indeterminate types of development.
- 20 What is a fate map ?
- 21 Comment on blastulation in *Amphioxus*.
- 22 Comment on egg membranes ?

(10 × 2 = 20 marks)

### Part C

III. Paragraph questions. Answer any *five* questions. Each question carries 6 marks :

- 23 Write on Assisted Reproductive Techniques.
- 24 Briefly explain different methods of fertility control.
- 25 Explain the male reproductive system in human beings.
- 26 Explain different types of parthenogenesis.
- 27 Write on different types of cleavage.
- 28 Classify animal eggs with examples.
- 29 Explain gene action during development.
- 30 What are organizers ? Write on organizers in amphibian development.

(5 × 6 = 30 marks)

### Part D

IV. Essay questions. Answer any *two* questions. Each question carries 10 marks.

- 31 Elaborate on the reproductive cycles and their hormonal control in mammals.
- 32 Explain the development of man up to the formation of germ layers.
- 33 Explain the organogeny of brain in frog.
- 34 Explain cleavage, blastulation and gastrulation in chick.

(2 × 10 = 20 marks)