

Kishore Bharati Bhagini Nivedita College (Co-Ed.)
(Affiliated to the University of Calcutta)

2020

ZOOLOGY – HONOURS
(1+1+1 2009 Regulations)

Second Paper (Unit-I)

Full Marks : 50

Time : 2 Hrs.

The figures in the margin indicates full marks.

Candidates are required to give their answers in their own words as far as practicable.

Send PDF of the Answer Script to **kbbnczoology@gmail.com**

Answer **question no. 1** and **any three** questions from the rest.

1. Write short notes on **any four** from the following: 5×4
 - a) Fate map
 - b) Oogenesis
 - c) Fertilization in Sea-urchin
 - d) Cleavage types
 - e) Acrosome reaction
 - f) Morphogenetic movement
 - g) Extra embryonic membrane in chick
 - h) Cryopreservation

2. What do you mean by emboly and epiboly? What is spermiogenesis? Describe the process of spermatogenesis with proper diagram. 4+2+(3+1)

3. What is Placenta? Classify Placenta according to the number and distribution of chorionic villi. Mention two functions of placenta. 2+6+2

4. Describe in brief the major events of gastrulation in frog. Explain the molecular events that take place during capacitation. 6+4

5. Classify eggs on the basis of distribution of yolk. Discuss the role Dorsal Lip of Blastopore as organiser with the help of suitable experiment. 5+5

6. Describe the process of Primitive Streak formation in chick embryo. Draw and describe the structure of mature sperm. 4+(4+2)
7. Compare the blastula in frog and chick. Discuss egg activation during fertilization. 5+5
