

Date of Exam: 05.12.2020

Kishore Bharati Bhagini Nivedita College (Co-Ed.)

(Affiliated to the University of Calcutta)

2020

ZOOLOGY – GENERAL

(1+1+1 2009 Regulations)

First Paper

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. Answer any **any four** questions from the following: 5×4
 - a) Role of microfibrils in amoeboid movement
 - b) Nervous system of Apple snail
 - c) Metagenesis in *Obelia*
 - d) Pulmonary sac of *Pila*
 - e) Extra embryonic membranes in chick
 - f) Cleavage in *Amphioxus*
 - g) Sex determination in *Drosophila*
 - h) Fluid mosaic model of plasma membrane

2. Classify Mollusca upto class according to Ruppert and Barnes (1994) with their characteristic features. 10

3. Describe the feeding and digestion mechanism in a macrophagy animal. 5+5

4. Classify placenta based on the arrangement of villi and describe it with diagram. 5+5

5. Distinguish between (**any two**): 5×2
 - a) Spermatogenesis and Oogenesis
 - b) Cilia and Flagella

- c) Holoblastic and Meroblastic cleavage
- d) Microphagy and Macrophagy
- 6. Briefly describe the replication process *E. coli*. *10*
- 7. “DNA as a genetic material” – explanation with experiment. *10*
