

University of Calcutta

City College Centre (Code 112)

BSc Part I (1+1+1, 2009 regulations) Examination 2020

ZOOA

Paper I

Unit II

(Full Marks 25)

1. Answer any FOUR questions: -

4 x 5 = 20

- a) Write down the principle of phase contrast microscopy.
- b) What is liposome?
- c) What is the function of F_0F_1 particle?
- d) What is Shine-Dalgarno sequence?
- e) Mention the role of EF-G?
- f) Define multiple allele.
- g) Distinguish between transition and transversion mutation.
- h) What do you mean by complete and incomplete linkage?
- i) What is ori-C?

2. Answer any ONE question: -

1 x 5 = 5

- a) Mention the salient features of fluid mosaic model of plasma membrane. Distinguish between SEM and TEM. 3+2 = 5
- b) Write a note on telomeric DNA replication in eukaryotes. What is the significance of 5'-capping? 3+2 = 5
- c) What do you mean by interference and co-incidence? Write a note on shell-coiling in snail as an example of cytoplasmic inheritance. 2+3 = 5