#### 2019

## B.Sc. (Honours)

# 5th Semester Examination

#### ZOOLOGY

Paper - DSE2-P

Full Marks: 20

Time: 2 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

## Animal Biotechnology

- 1. (a) Write down the principle and procedure of genomic DNA isolation from E. coli. 5+5
  - (b) In E. coli four Hfr strain donate the following genetic markers shown in order donate

Strain 1: M Z X W C

Strain 2: LANCW

Strain 3: A L B R U

Strain 4: Z M U R B

[Turn Over]

## Microbiology

 Prepare a stained slide of the bacterial culture provided using Gram staining method. Write the principle of the methodology used. Identify and draw a labelled diagram of a bacterium from the prepared slide.

Procedure : 5

Observation: 3

Principle : 4

Identification: 1

Drawing & labelling : 2 (1+1)

2. Viva-voce.

3. Laboratory Note Book. 2

What is the order of these markers on the circular chromosome of the original F<sup>+</sup>?

2.	Laboratory Note Book.	2
3.	Viva-voce.	3