



GAM-036018

Seat No. _____

B. Sc. (Sem. VI) Examination

March / April – 2019

**BSCC - 605 (B) : Advances in
Microbiology : Paper - 308**

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) Answer all questions in series.
(3) Mention answer number clearly.

- 1** Describe the commercial production of the following : **14**
(any **two**)
(a) Citric acid
(b) SCP
(c) Biofuel
(d) Steroid transformation
- 2** Describe the following in details : (any **two**) **14**
(a) Plant tissue culture
(b) Embryonic stem cell gene transfer
(c) Algal products
(d) Biosensors
- 3** Give details of the following : (any **two**) **14**
(a) Environmental genomics
(b) Whole genome shotgun sequencing
(c) Introduction to bioinformatics
(d) Proteomics
- 4** Write a note on the following : (any **two**) **14**
(a) Micro satellites and Macro satellites
(b) VNTRS
(c) PCR
(d) Frye test

5 Answer the following in short :

14

- (1) Which organism produces lysine at a commercial scale ?
 - (2) Give two examples of edible mushrooms.
 - (3) What is Bioplastic ?
 - (4) What is callus ?
 - (5) What is nanobiotechnology ?
 - (6) Which products are produced using plant bioreactors ?
 - (7) What is aquaculture ?
 - (8) What are biopolymers ? Give two examples.
 - (9) What is aqua culture ?
 - (10) What is the difference between repetitive DNA and Satellite DNA ?
 - (11) Give the use of Digital DNA typing.
 - (12) What is Somaclonal variation ?
 - (13) Draw the structure of Penicillin.
 - (14) What is gene transfer ?
-