



HDY-1603120602030100 Seat No. _____

M. Sc. (Biochemistry) (Sem. III) (CBCS) Examination

November / December – 2017

BC-EBC-1 : Microbial Biochemistry

Time : 2½ Hours]

[Total Marks : 70

1 Answer the following : (Any seven out of Ten, **14**
each of 02 marks)

- (1) What is the role of CaCl₂ in transformation?
- (2) What is T even phage?
- (3) What is an antimicrobial drugs? Exemplify.
- (4) What is the main cause of swine flu?
- (5) What is Herps?
- (6) What is a nitrogen fixer and why are they important?
- (7) What happens in transduction?
- (8) What is the structure of the gene?
- (9) Why are introns present in DNA?
- (10) What are the basic components of nucleic acids?

2 Answer the following : (Any two out of Three, **14**
each of 07 marks)

- (a) Write a note on Trp operon.
- (b) What is catabolite repression? Describe.
- (c) What is conjugation? Briefly discuss its mechanism.

3 Answer the following ((a) and (b) - Both are compulsory, **14**
each of 07 marks)

- (a) What is an operon? Describe Lac operon.
- (b) Enlist properties of Plant and Animal viruses.

OR

3 Answer the following ((a) and (b) - Both are compulsory, **14**
each of 07 marks)

- (a) What is nitrogen fixation? Describe its process in brief.
- (b) Write a note on "Hepatitis B".

- 4 Answer the following : (Each of 07 marks) 14
- (a) Describe mechanism and regulation of utilization of Ammonia.
 - (b) What are Antiviral drugs? Discuss.
- 5 Answer the following : (Any two out of four, each of 07 marks) 14
- (a) Describe the mechanism of development of resistance to Antimicrobial drugs.
 - (b) Write a note on " β -lactam Antibiotics".
 - (c) Briefly describe "Arabinose Operon".
 - (d) Give classification of Bacterial viruses.
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