

2017

Time : 3 hours

Full Marks : 40

Answer all questions

*The figures in the right-hand margin indicate marks*

Draw neat labelled diagrams wherever necessary

**( BIOTECHNOLOGY )**

1. What is cloning vector? Give an account of different types of cloning vectors. 14

Or

Write notes on any two : 7 × 2

- (i) Rules for restriction enzymes nomenclature
- (ii) Southern Blotting
- (iii) Model cloning experiments.

( Turn Over )

( 2 )

2. What is C-DNA? How they are synthesized? Add a note on its use. 13

Or

Write notes on any two :  $6\frac{1}{2} \times 2$

- (i) Gene transfer
- (ii) Molecular probes
- (iii) Importance of gene sequencing.

3. Give an account of production of transgenic plants. Mention its role in agriculture. 13

Or

Write notes on any two :  $6\frac{1}{2} \times 2$

- (i) MAbs
- (ii) DNA fingerprinting
- (iii) Application of protoplast fusion.