

Q.4. A) Answer the following questions.

- (a) Short note/ Brief note (2x2)/ Fill in the blanks. (Each of 02 marks) **(04)**
1. During Griffith experiment of mice, it dies when he injected ____ strain.
 2. Introduction of DNA into cell by exposing them to high voltage electric pulse is ____ .
- (b) Describe life cycle of yeast. **(04)**

Q.4. B) Answer the following questions (Any two)

- (a) Short note/ Multiple choice questions. (Each of 01 marks) **(03)**
1. Bacterial conjugation is ____ transfer of genetic material.
 - a. Bidirectional
 - b. Unidirectional
 - c. Both a and b
 - d. None of the above.
 2. CAP in Lac operon is an example of
 - a. Positive regulator
 - b. Negative regulator
 - c. Constitutive expression
 - d. Attenuation
 3. Transfer of genetic material between bacteria through cell to cell contact is called
 - a. Conjugation
 - b. Transformation
 - c. Transduction
 - d. Transposon
- (b) Short note on lysogenic cycle. **(03)**
- (c) Short note on gene conversion. **(03)**