

Step Academy official

Model Town Grw PH: 03016652757

STUDENT NAME	
PAPER CODE	39167
TIME ALLOWED	60
Paper Date	02-02-2026



CLASS	New 1st Year (FSC/ICS)
SUBJECT	Biology
TOTAL MARKS	40
Paper Type	

Q1. Choose the correct answer.

5X1=5

1. Which group of bacteria is known as a good source of antibiotics?

- (A) Omnibacteria (B) Spirochaetes (C) Pseudomonads (D) Actinomycetes

2. Gram-positive bacteria have:

- (A) Thin peptidoglycan and high lipid content (B) Thick peptidoglycan and low lipid content (C) No peptidoglycan (D) No lipid content at all

3. In bacteria that lack a cell wall, which structure forms the outermost layer?

- (A) Cytoplasm (B) Capsule (C) Cell membrane (D) Nucleoid

4. Amphitrichous bacteria possess flagella:

- (A) Only on one pole (B) On all sides (C) On both sides (D) Only internally

5. The enzyme responsible for converting HIV RNA into DNA is:

- (A) RNA polymerase (B) Reverse transcriptase (C) DNA helicase (D) Integrase

Q2. Write short answers of the following questions.

5X2=10

- 1 . What are mesosomes and their functions?
- 2 . What components are found in bacterial cytoplasm?
- 3 . Describe the ribosomes in bacteria.
- 4 . Write about the role of endospores in bacterial survival.
- 5 . Outline the steps involved in sporulation (endospore sporulation).

Q3. Write detailed answers of the following questions.

2X5=10

- 1 . Explain different methods of movement in bacteria.
- 2 . Explain the structure of a model bacteriophage and HIV.