

**Exercise 1: Multiple Choice Questions (MCQ – 10 questions)**

Choose the correct answer for each question.

**1. What is the main characteristic of bacteria?**

a) Presence of a nucleus	c) Linear DNA
b) Absence of membrane-bound organelles	d) Nuclear membrane

**2. What is the average size of bacteria?**

a) 0.1 - 10 $\mu\text{m}$	c) 50 - 100 $\mu\text{m}$
b) 10 - 50 $\mu\text{m}$	d) 100 - 500 $\mu\text{m}$

**3. Which type of bacteria has a spherical shape?**

a) Bacilli	c) Coccii
b) Vibrios	d) Spirochetes

**4. Which structure is essential in all bacteria?**

a) Capsule	c) Plasmid
b) Ribosome	d) Pili

**5. Which staining technique differentiates Gram + and Gram - bacteria?**

a) Ziehl-Neelsen	c) Gram
b) India Ink	d) Methylene blue

**6. What is the main function of flagella?**

a) Protection against phagocytosis	c) Reproduction
b) Mobility	d) DNA storage

**7. Which bacterium has a spiral shape?**

a) <i>Staphylococcus</i>	c) <i>Escherichia coli</i>
b) <i>Vibrio cholerae</i>	d) <i>Clostridium</i>

**8. What is the main component of the Gram + bacterial cell wall?**

a) Lipopolysaccharides	c) Cholesterol
b) Peptidoglycan	d) Proteins

**9. Which element allows bacteria to resist extreme conditions?**

a) Ribosomes	c) Spores
b) Plasmids	d) Pili

**10. Which bacterium has a capsule?**

a) <i>Mycobacterium tuberculosis</i>	c) <i>Staphylococcus aureus</i>
b) <i>Escherichia coli</i>	d) <i>Bacillus</i>