

# CUET PG 2026 Microbiology Question Paper(Memory Based)

Time Allowed :1 Hours 30 min	Maximum Marks :300	Total Questions :75
------------------------------	--------------------	---------------------

## General Instructions

1. The exam lasts 90 minutes (1 hour 30 minutes).
2. There are 75 Multiple Choice Questions (MCQs) to be answered.
3. +4 marks for every correct answer. -1 mark (negative marking) for every incorrect answer. 0 marks for unanswered or un-attempted questions.
4. For any discrepancy in questions, the English version is considered final (except for language-specific papers).
5. Click one of the four options to choose an answer.
6. You must click "Save & Next" to confirm your response. Only saved answers are considered for evaluation.
7. Use "Mark for Review & Next" to flag a question for later. You can unselect or change your answer using the "Clear Response" button.
8. All calculations must be done on the Rough Sheets provided at the centre. These must be returned to the invigilator after the exam.

**1. Which scientist is known as the "Father of Microbiology" for first observing "animalcules"?**

- (A) Louis Pasteur
- (B) Robert Koch
- (C) Antonie van Leeuwenhoek
- (D) Edward Jenner

---

**2. What is the primary component of the bacterial cell wall that is absent in Archaea?**

- (A) Cellulose
- (B) Peptidoglycan
- (C) Chitin
- (D) Glycogen

---

**3. Which staining technique is used specifically to identify *Mycobacterium tuberculosis*?**

- (A) Gram Staining
- (B) Acid-fast Staining
- (C) Capsule Staining
- (D) Endospore Staining

---

**4. In the Lac Operon, which molecule acts as an inducer?**

- (A) Glucose
  - (B) Lactose
  - (C) Galactose
  - (D) Maltose
- 

**5. Which type of antibody is the only one capable of crossing the human placenta?**

- (A) IgA
  - (B) IgM
  - (C) IgG
  - (D) IgE
- 

**6. What is the name of the process by which bacteria take up naked DNA from their environment?**

- (A) Transduction
  - (B) Conjugation
  - (C) Transformation
  - (D) Translation
- 

**7. Which enzyme is responsible for the synthesis of RNA from a DNA template?**

- (A) DNA polymerase
  - (B) RNA polymerase
  - (C) Ligase
  - (D) Helicase
- 

**8. What is the typical pore size of a membrane filter used to sterilize heat-sensitive liquids?**

- (A) 1.0  $\mu\text{m}$
  - (B) 0.45  $\mu\text{m}$
  - (C) 0.22  $\mu\text{m}$
  - (D) 5.0  $\mu\text{m}$
- 

**9. Which microorganism is primarily used in the commercial production of Citric Acid?**

- (A) *Saccharomyces cerevisiae*
- (B) *Aspergillus niger*
- (C) *Lactobacillus acidophilus*
- (D) *Penicillium chrysogenum*

---

**10. The Baltimore Classification system categorizes viruses based on which characteristic?**

- (A) Shape of the virus
  - (B) Type of host infected
  - (C) Nature of genetic material and replication strategy
  - (D) Size of the virus
- 

**11. Which nitrogen-fixing bacteria forms a symbiotic relationship with the water fern Azolla?**

- (A) Rhizobium
  - (B) Azotobacter
  - (C) Anabaena
  - (D) Clostridium
- 

**12. What is the net yield of ATP molecules produced during the glycolysis of one glucose molecule?**

- (A) 2 ATP
  - (B) 4 ATP
  - (C) 6 ATP
  - (D) 8 ATP
- 

**13. Which class of MHC molecules is found on the surface of all nucleated cells?**

- (A) MHC Class I
  - (B) MHC Class II
  - (C) MHC Class III
  - (D) MHC Class IV
- 

**14. What is the main structural protein that forms the capsid of a virus?**

- (A) Glycoprotein
  - (B) Capsomere
  - (C) Nucleoprotein
  - (D) Lipoprotein
- 

**15. Which method is used to determine the Minimum Inhibitory Concentration (MIC) of an antibiotic?**

- (A) Disk diffusion method
- (B) Broth dilution method
- (C) Gram staining
- (D) Streak plate method

