

NEELIMA INSTITUTE OF MEDICAL SCIENCES

Department of Microbiology

EVENT REPORT: GAMIFICATION IN MEDICAL MICROBIOLOGY

Dates: 07 June 2025 & 11 July 2025

Venue: Lecture Hall – II

Microbiology Teaching through Gamification

In alignment with the Competency-Based Medical Education (CBME) framework and our ongoing efforts to innovate teaching methodologies, the Department of Microbiology successfully organized **two interactive gamified learning activities** for second-year MBBS students

These sessions aimed to shift the paradigm from traditional didactic lectures to active, engaging, and student-centered learning experiences. The activities were conceptualized and facilitated by the faculty of the Department of Microbiology and received enthusiastic participation and feedback from students.

Activity 1: Word Hunt-Based Learning Experience

Date: 07/06/2025

Topic: *Pseudomonas aeruginosa – Clinical and Microbiological Features*

Introduction:

To develop engagement and conceptual clarity, a **Word Hunt Game** was designed to introduce students to the key characteristics of *Pseudomonas aeruginosa*.

Highlights:

- **12 Envelopes** containing letters of the word **P. AERUGINOSA** were pre-hidden under student desks in the lecture gallery.
- During the session, students were instructed to locate the envelopes, creating an atmosphere of curiosity and collaboration.

- The students arranged themselves in order to form the mnemonic **P.AERUGINOSA**, and each letter was used as a prompt to revise an important aspect of the pathogen.
- This mnemonic-driven discussion covered features like pigment production, antibiotic resistance, opportunistic infections, and more.
- Participants were rewarded with chocolates, adding a fun incentive for active involvement.

Impact:

- Promoted **active recall** and **mnemonic-based learning**
- Encouraged **peer interaction and collaboration**
- Introduced a **fun, low-cost, and scalable** educational model



Activity 2: Passing the Toy & Spotters Identification

Date: 11/07/2025

Topic: *Microbiology Spotters Revision*

Introduction:

To prepare students for the practical examinations and to revise spotters, a playful yet educational game — “**Passing the Toy**” — was conducted.

Highlights:

- Music played in the background as a toy was passed among students
- When the music stopped, the student holding the toy had to **identify and describe a Microbiology spotter** presented to them.
- The activity was informal, yet highly educational, testing visual identification and spontaneous recall.

Impact:

- Created a **positive, low-stress environment**
- Encouraged **confidence in spotter recognition**
- Reinforced **active participation**, aligned with experiential learning principles

Student Feedback & Institutional Vision

The gamification initiatives received overwhelming appreciation from students. The joy and laughter during the sessions reflected increased motivation and engagement. The activities also echoed the **vision of the administration & management**, who advocate for **vibrant, inclusive, and student-centric education**.

Conclusion:

These gamified sessions demonstrate that **Medical Microbiology can be taught in a fun, engaging, and impactful way**, breaking away from the monotony of traditional lecture formats. With minimal resources and maximum creativity, the Department of Microbiology continues to lead innovations in teaching methodologies.

“Gamification is not just about fun — it's about learning that lasts.”

