



The Oxford College of Science

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DBT-STAR Scheme 2026

REPORT ON HANDS-ON TRAINING ENTITLED “DIFFERENTIAL COUNT OF WBC”

DEPARTMENT OF MICROBIOLOGY

TITLE	Differential count of WBC
ACTIVITY TYPE	Hands-on training
YEAR/SEMESTER	2026/IV and VI Semester
DATE OF EVENT	03.03.2026
VENUE	Microbiology Laboratory
ORGANISED BY	Department of Microbiology
RESOURCE PERSON (with designation and affiliation)	Ms. Manasa Y. Research Scholar Dayanand Sagar University
FACULTY INCHARGE/EVENT COORDINATOR	Dr. Rinku Debnath Assistant Professor The Oxford College of Science
TARGET AUDIENCE	IV and VI Sem B.Sc. Microbiology Students
NUMBER OF BENEFICIARIES	57

The Objectives of the programme: The program aimed to strengthen the practical knowledge and laboratory skills of students in hematological techniques. Differential leukocyte count is an important diagnostic procedure used to identify and quantify different types of white blood cells present in blood, which helps in understanding various physiological and pathological conditions. The training session provided students with an opportunity to gain practical exposure to the preparation and microscopic examination of blood smears for WBC identification.

Highlights of the programme: Practical training is an essential component of microbiology education. The session began with a brief introduction to the concept and clinical importance of differential leukocyte count. Students were guided on the preparation of peripheral blood smears using standard laboratory procedures. Demonstration of staining techniques was provided to ensure proper visualization of white blood cells. Participants observed stained blood smears under the microscope and identified different types of WBCs. Resource person supervised the practical session and assisted students in identifying the cells and recording their observations. Students actively participated in the practical exercise and gained hands-on experience in haematological techniques.

The outcome of the programme: The hands-on training was successfully conducted with enthusiastic participation from the students. The initiative under the DBT Star College Scheme significantly contributed to experiential learning and skill enhancement. Students gained practical exposure to differential leukocyte count techniques. Participants learned to identify and differentiate various types of white blood cells under a microscope. The training enhanced their laboratory skills and accuracy in microscopic observation. Students developed a better understanding of the clinical significance of WBC variations in disease diagnosis. The program helped in improving the practical competency and confidence of the students in performing hematological experiments.



Inauguration of event



Technical talk delivered



Lab demonstration

Head of the Department

DBT-STAR Coordinator

Vice Principal

Principal