



Manipal University Jaipur

Faculty of Science, Technology and Architecture

Department of Biosciences

M.Sc. Biotechnology

(2025-26)

Program Outcomes and Program Specific Outcomes

Program Outcomes (POs)

- [PO 1]. **Critical Thinking:** Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational and personal) from different perspectives.
- [PO 2]. **Effective Communication:** Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology....
- [PO 3]. **Social Interaction:** Elicit views of others, mediate disagreements and help reach conclusions in group settings.
- [PO 4]. **Effective Citizenship:** Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
- [PO 5]. **Ethics:** Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
- [PO 6]. **Environment and Sustainability:** Understand the issues of environmental contexts and sustainable development
- [PO 7]. **Self-directed and Life-long Learning:** Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes.

Program Specific Outcomes (PSOs)

- [PSO.1] To understand fundamental principles of molecular biology, molecular cell biology and bioinformatics.
- [PSO.2] Modern approaches in biotechnology: the 'omics technologies including proteomics, transcriptomic, metabolomics and bioprocessing.
- [PSO.3] Management and communication skills, including problem definition, project design, data collection and interpretation using statistical tools, decision processes, teamwork, written and oral reports, scientific publications.