Scope of Microbiology: By definition Microbiology is the study of microbes such bacteria, viruses, fungi etc. So, the science of microbiology has an important role to play in health, agriculture, environment and industry. In the recent era several discoveries have significantly put Microbiology at a vital point of teaching, research and development globally.

The important qualification descriptors for a UG degree in Microbiology are as follows:

- ✓ A 360° comprehensive idea of the various fields where microbiology is involved.
- ✓ In-detail gain of knowledge of the diverse Microbiological processes.
- ✓ Students are imparted with skills such as microbial culture and their long term maintenance, detailed grip on industrial safety levels work, Good Microbiological practices etc.
- ✓ Moderately advanced skills in working with microbes such as pilot scale culturing, downstream processes, diagnostics etc.
- ✓ Being an inter-disciplinary field of work, it enables student with the quality of taking inputs from other subject areas. So reading and learning through vast areas gets naturally instilled.
- ✓ The course builds-in team-work in students through short-term microbiology projects.
- ✓ Through the course students gain to thorough skill to present and articulate their knowledge.
- ✓ Students gain computational skills, independent project-writing ability & data analysis abilities at the end of three year course.
- ✓ Analytical thinking and Critical analysis are also the abilities students gain through the course which lead them to innovate so as to generate new knowledge.
- ✓ Prepares students for higher academic pursuits and industrial prospects together by the end of the course.
- ✓ Microbiology in some areas also help students to pursue towards entrepreneurial development.
- ✓ Gives a strong moral and ethical awareness of working in the scientific discipline.

Career opportunities:

i. Working in science laboratories and pathology labs as research technicians
ii. Students get absorbed in industries like pharmacy, dairy, breweries, distilleries, enzyme, etc.

iii. Microbiologists can work in the area of food, pharmacy, agro-chemistry biotechnology, bio-refinery, environment, pollution control and bioremediation.

iv. Work as microbiologists in the field of medicine and health care.

v. Graduates/post-graduate students have a slot in the areas of management and banking as well.

vi. Universities and colleges employ microbiologists as researchers and teachers.