

# JAI NARAIN VYAS UNIVERSITY JODHPUR



**2016 - 2021**

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This institute is located in the western part of the State, which is an Arid Zone by nature, and for that reason one of the thrust areas is the study of the desert ecosystem and various aspects related to it such as resource utilization pattern, medical geography, livestock conservation, wildlife conservation, desert plant biology, and biodiversity conservation, and water resource management. Several faculty members have been sanctioned individual projects for research on these aspects of Thar desert, from various funding agencies, like DST/UGC/DBT/CSIR/ICAR/ICMR/DOE, etc. In addition, various departments of the University are supported by UGC under special assistance programs (UGC-SAP) and under FIST (Funds for Improvement of S infrastructure) by the Department of Science and Technology, Government of India. Department of Botany has been recognized as one of the nine discipline-specific CENTERS FOR ADVANCED STUDIES (CAS) in India by UGC. It was also selected for implementation of COSIST program by the UGC for raising the standard of post-graduate education and research to the international level. The major thrust area of research is focussed on desert plant biology, from conventional botany, taxonomy, ecology, stress-physiology, microbiology, plant-microbe interaction, to advanced plant molecular biology and biotechnology, including recent “Omics” sciences. It has a state-of-the-art Plant Tissue Culture Facility and Modular Plant Functional Genomics Lab, with world-class research facilities and modern plant growth facilities. The department has mainly contributed to finding out novel bacterial strains for biological nitrogen fixation and their genome-sequencing, conservation of endangered plants by applying plant tissue culture techniques, the discovery of novel fungi for medicinal use, and finding the novel stress responsive genes by using modern proteomics and transcriptomics approaches, with the aim of deciphering molecular mechanism of abiotic stress-tolerance in Thar desert plants. These novel candidate genes could be used further to engineer stress tolerance in sensitive crop plants. Department of Geology is working through imageries on a desiccated cum palaeochannel of a river, to find out the possibilities on better use of these palaeochannels for wellbeing of local residents of the Thar Desert. The department is also working on Paleontology, and various fossils of

extinct plants and animals were also searched by the same departments in recent times. Department of Zoology is working on the physiology, ecophysiology, toxicology, ecology, animal behavior, environmental biology, cell biology, entomology and taxonomy, parasitology, primate behavior, and wildlife conservation of Thar desert animals. The chemistry department is involved in application-oriented research programs, coordination chemistry, polymers and their modifications for value-added products, nano-materials, solar energy conversion technology, environmental issues related to the Thar desert. Department of Geography is currently registered as Network institute of Indian Institute of Remote Sensing Dehradun(Uttarakhand) and running various courses of Remote Sensing and GIS. Various departments are associated with all local R and D laboratories and leading premier National and International research institutes for collaborative research activities. In addition, the university is producing a large number of professionals every year, including engineers, advocates, judges, chartered accountants, cost accountants, business leaders, entrepreneurs, academicians, scientists, writers, poets, musicians, etc.

**MAJOR CONSIDERATIONS:**

<https://www.jnvu.co.in/major-considerations/>

**WILDLIFE RESEARCH AND CONSERVATION CENTRE:**

[https://www.jnvu.co.in/cs\\_gallery/wildlife-research-and-conservation-awareness-center/](https://www.jnvu.co.in/cs_gallery/wildlife-research-and-conservation-awareness-center/)

**DEFENCE AND STRATEGIC STUDIES CENTRE:**

<https://www.jnvu.co.in/course/m-a-defence-and-strategic-studies/>

**DEPARTMENTS' THRUST AREAS OF RESEARCH:**

<https://www.jnvu.co.in/department/deptt-of-botany/>

<https://www.jnvu.co.in/department/deptt-of-zoology/>

<https://www.jnvu.co.in/department/deptt-of-chemistry/>

<https://www.jnvu.co.in/department/deptt-of-geography/>

**RESEARCH GRANTS/COLLABORATIONS/MOU:**

<https://www.jnvu.co.in/wp-content/uploads/2022/11/3.1.6-DEPARTEMENTAL-RESEARCH-GRANTS.pdf>

<https://www.jnvu.co.in/wp-content/uploads/2022/11/3.2.2-Sanction-letters-GOVT..pdf>

<https://www.jnvu.co.in/wp-content/uploads/2022/11/3.7.1-COLLABORATIVE-ACTIVITIES.pdf>

<https://www.jnvu.co.in/wp-content/uploads/2022/11/3.7.2-MOUs.pdf>