

Criterion 7: Institutional Values and Best practices

7.1.1 Gender Equity programs

Year	Male	Female
2019-20	25	25
2018-19	26	21
2017-18	20	19
2016-17	19	27
2015-16	22	10

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

- Collected and analyzed drinking water quality for four districts (Sagar, Vidisha, Guna and Ashok Nagar).
- Development of magnetic nanomaterials for waste water treatment.
- Developing techniques and energy materials to increase the efficiency of solar cells by using green synthesis.
- Analyzed impact of pesticides on soil fertility.
- Theoretical prediction of novel Ni(I) catalysis for carbon dioxide conversion and dihydrogen generation.
- Nano porous materials development for electrochemical sensor, super capacitors and removal of toxic metals and dyes.
- Construction of diatoms solar panels for bio-fuel production
- Process of Waste Management: Minimum possible amount of chemicals are used during laboratory training practices using Green chemicals. The waste chemicals are collected in drums and distilled to maximum extent. The minimum possible amounts of generated wastes are disposed in earth pit.

7.1.3 Differently abled (Divyangjan) friendliness: Ramps are available at the entrance of the department, a rest room is available and a volunteer is allowed to provide to differently abled person for writing/ reading process during examination.

7.1.4 Inclusion and Situatedness:

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff	Year	Number of initiatives to address locational advantages and disadvantages
207-2021	01	01	November 30, 2017 to August 31, 2021	Checking of drinking water quality parameters	Hardness, TDS, nitrate and sulphate of some places of Sagar districts are found above acceptable limit.	02	2017-2021	02

7.1.5 Human Values and Professional Ethics: Department believes in human and society development, is impartial in its approach and work scientifically on any problem. Most of the research projects of the department have good impact on societal development. Also department strictly follow material safety data to avoid any possibilities of accidents in the laboratories.

7.1.6 Activities conducted for promotion of universal Values and Ethics: No additional activities for promotional of universal values, instead its part of the training of the students. For example, research ethics are the part of curriculum of PhD program.

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five):

- a. During PhD each student plant and adopt a tree.
- b. Department religiously employ a staff to irrigate the plants that are adopted/ not adopted by faculty/ staff/ scholars.
- c. In any award function, department use to provide a plant to responsible persons as a token of respect.
- d. Strictly avoid the chemicals to through into sink/ water medium.
- e. Green processes are preferred in laboratory experiments.

7.2 Best practices:

- a. We use to regularly mentor (psychologically, emotionally, professionally and academically) students at different level and for that each student is assigned a faculty staff.
- b. The faculties of the department have a good degree of participation in remedial classes and community colleges.

7.3 Institutional Distinctiveness:

Recognizing its privileged position as a premier institute of higher learning, makes consistent efforts in fulfilling its social responsibility toward the downtrodden sections of society.