

## Criteria 7

### **7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year.**

University has a policy on Gender Equity and accordingly provides equal opportunities for girls and boys in all curricular, co-curricular and extracurricular activities. The university provides gender neutral career progression services such as UGC / CSIR / NET coaching classes and remedial coaching classes for students who need academic assistance. In every academic year university also selects gender champions in order to promote and sensitize gender equity. Department of Information Technology also encourages girl students to participate in Gender Championship.

To promote confidence in female students and provide a calm and soothing environment, the department provides girls' common rooms in all departments, with sanitary vending machines in most of the places. The campus, including classrooms, corridors and campus main roads is under CCTV surveillance, providing a sense of safety and security among all stakeholders' especially female students and staff.

Academic Year	Girls Admitted
2023 - 24	16

### **Supporting Documents:**



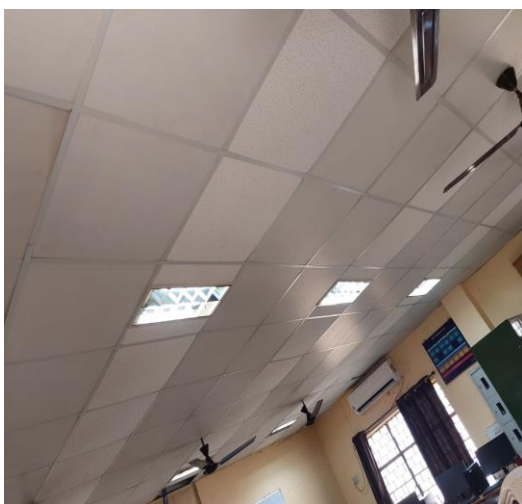
**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation**  
**Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment.**

**Solar Energy:** Utilizing solar panels to capture sunlight and convert it into electricity. This is a clean and renewable source of energy that can significantly reduce reliance on fossil fuels.

**Wheeling to the Grid:** This refers to the process of transferring excess energy produced from renewable sources (like solar or biogas) back to the power grid. Institutions can sell or share surplus energy with the grid.

**Sensor-based Energy Conservation:** Sensors can detect occupancy or environmental changes (like lighting needs) and automatically adjust energy use. For example, lights or air conditioning may turn off when no one is present, saving power.

**Use of LED Bulbs/Power-efficient Equipment:** LED bulbs use significantly less energy compared to traditional incandescent bulbs. Similarly, energy-efficient appliances and devices consume less power while performing the same tasks, further enhancing conservation efforts.





**7.1.3** *Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)*

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

**Solid Waste Management:**

The university is very sensitive towards waste disposal and has developed a well-established mechanism for the disposal of waste generated on the campus. The solid waste disposal mechanism has three phases:

- (i) Waste collection
- (ii) Waste segregation
- (iii) Final disposal/transformation into manure (manure /biogas)

The university has placed blue and green colour dustbins in several common areas across the campus. The waste collected from academic, administrative and residential area of the campus is collected and segregated into degradable and non-degradable waste. The solid non-degradable waste is accumulated in the trench from where it is transported for proper disposal outside the campus (in a place identified by the municipal corporation).

Three Bio-gas plants have been setup in the university to produce bio-gas from solid degradable (the leftover food, decomposable organic materials and kitchen waste) wastes. The gas produced is used in the kitchen of the University Cafeteria, Boys Hostel and Girls hostel. The slurry from the bio-gas unit is used in organic manure production for the garden.

The bio-degradable waste such as plant leaves collected from the campus is used to prepare organic manure, which is utilised in the university nursery for seedlings production etc. and also sold.

**Liquid Waste Management:** The liquid waste manating from the university buildings (offices, hostels, residential area and teaching departments) is disposed off either through septic tank or soak pits or STP associated with the buildings.

The recycled water flowing out of the STPs are used in garden and wash areas. Further, all the upcoming buildings in the campus have provision of Sewerage Treatment Plant (STP) in their architectural design plan.

**E-Waste management:** University has a well-defined IT policy and IT cell that implements the e-waste disposal as per the e-waste disposal policy. When possible, high-end systems and electronic gadgets are repaired and used for low-end usage. All outdated Electrical/Electronic gadgets, instruments etc. are collected, accumulated at a central store for its disposal through E-waste auction. University also procures new instruments, batteries, and other items as a buyback policy to replace the ones that are already there.

**Supporting documents:**



**7.1.4**      *Water conservation facilities available in the Institution:*

1. Rainwater harvesting
2. Borewell / Open well recharge
3. Construction of tanks and bunds
4. Wastewater recycling
5. Maintenance of water bodies and distribution system in the campus

**Options:**

- A. Any 4 or all of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above
- E. None of the above

**Response: A. Any 4 or all of the above**



Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles, Pedestrian Friendly pathways, Ban on use of Plastic, landscaping with trees and plants etc. in 500 words

The department took initiatives for (i) utilizing renewable energy resources, (ii) replacing the conventional electrical appliances with energy-efficient ones, such as LED, 5-star split ACs, sensor-based and solar panel street lights and thus reduced the conventional energy consumption from power grid significantly. The university has also taken steps to harness solar energy by installing of 2 MW roof top solar power plant with solar panels installed on the roofs of nearly all campus buildings that are connected to the grid via a common line.

Department has put a ban on the utilization of single-use plastic on campus. Students are discouraged to use plastic on campus and are sensitized to make the campus plastic free. Slogans and posters are put on the walls of common places like canteens, play areas, etc., to educate students about the dangers of using plastic.

In addition, the department is having beautiful landscapes that feature avenue plants, seasonal flowering plants, and various species of plants to grow, nurture, and enhance the appearance and space.

#### **Supporting documents:**





**7.1.6**      *Quality audits on environment and energy are regularly undertaken by the institution*      **5**

7.1.6.1. The institutional environment and energy initiatives are confirmed through the following

- 1.Green audit /Environment audit
2. Energy audit
- 3.Clean and green campus initiatives
4. Beyond the campus environmental promotion and sustainability activities

Response: **A. Any 4 or all of the above**

**Supporting documents:**



**7.1.7 The Institution has Differently-abled (Divyangjan) friendly, barrier free 5 environment**

*Write description covering the various components of barrier free environment in your institution within 500 words*

- Built environment with ramps/lifts for easy access to classrooms.
- Divyangjan friendly washrooms
- Signage including tactile path, lights, display boards and signposts
- Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading, font enlargement etc.,





The department is sensitive to the needs of people with disabilities (Divyangjans) on the campus and provides all essential amenities so as to provide barrier free environment. For the convenience of students with disabilities, ramps have been constructed in all academic buildings. The newly constructed academic buildings, hostels and other amenities are provided with lift facility for easy access to these areas by Divyangjan. Adequate provisions for the movement of Divyangjans have been made including wheelchairs, walkers, and other mobility aids.

Male and female individuals with disabilities have access to separate wash rooms in all campus buildings and common areas. Signage and display boards are placed at various places on the campus to convey department/office names on buildings, directions, important information, cautions etc. Divyangjans can walk safely within the campus through roadside pedestrian-friendly pathways.

The department provides reservations for the Divyangjan and all efforts are made to fill these vacancies on a priority basis. Similar provisions are affected in the admissions to various programs for persons with disability. University also celebrates world disability day to spread the message of equity and respect for Divyangjan.

**7.1.8** *Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and such other diversities (within 500 words).*



University is committed towards enhancing tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic diversities. The following initiatives in this regard are worth mentioning: -

1. The faculty members and students in the university represent almost all regions and states providing an environment of mini-India thus naturally enhancing the culture of diversity.
2. To inculcate the values of oneness among students, Independence Day, Republic Day, Constitution Day, Rashtriteya Ekta Divas, Guru Ghasidas Jayanti, International Women's Day etc. are celebrated.
3. Under the "Ek Bharat Shreshtha Bharat" program, university organizes various events and visit of the students and faculties to promote cultural and regional diversity.
4. During annual fests and cultural programs, aspects of Indian culture are exhibited through folk dance, folk song, dramas, art forms, etc., representing the great traditional cultural diversity of India. Similarly, in the hostels also students wear different attires representing different states, religions and cultures. The food festivals, organized by the students, offer variety of Indian foods.
5. Besides academic and cultural activities, the university has infrastructure for a variety of sports activities where students participate actively irrespective of any discrimination.
6. University organizes programs on various aspects of Indian Knowledge system including "Bhartiya Gyan Parampara Avam Advyat Vedant Darshan", "Charitra Nirman Evam Vyaktitva Vikas", etc., providing Pan Indian approach towards ethics, and spirituality.
7. NSS volunteers of the university are instrumental in creating sensitisation about community services.
8. **Supporting documents:**

**गुरु घासीदास विश्वविद्यालय**  
(केन्द्रीय विश्वविद्यालय अधिनियम 2009 क्र. 25 के अंतर्गत स्थापित केन्द्रीय विश्वविद्यालय)  
**कोनी, बिलासपुर - 495009 (छ.ग.)**



**Guru Ghasidas Vishwavidyalaya**  
(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)  
**Koni, Bilaspur - 495009 (C.G.)**





### **7.1.9     *Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens***

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

On Constitution Day, students, faculty and staff take oath to follow the constitutional obligations. Speech, debate, drama, dialogue, quizzes, essay writing, mock parliament, youth parliament etc., are organized to inculcate the constitutional values among the students.

A generic course “Constitutional Law” is offered to the students of departments. Similar courses on “Indian Constitution” are available to help students understand their constitutional responsibilities.

Vigilance Awareness Week is celebrated every year to encourage all stakeholders to collectively participate in the prevention of, and the fight against corruption and to raise public awareness regarding the existence, causes and gravity of and the threat posed by corruption.

Social inclusion is stimulated through various extra-curricular activities and extension programs organised by NCC, NSS, Ek Bharat Shrestha Bharat, Unnat Bharat Abhiyaan.

Environmental studies are offered to graduate students. Vishwavidyalaya conducts awareness programs and mobilises the students in the drive on ban of plastics, cleanliness, Swatch Bharat, etc.

Every year, the Vishwavidyalaya observes all national, international days, birth and death anniversary of legendary persons. Independence Day, Republic Day, Teacher's Day, Constitution Day, International Human Rights Day, Anti-Terrorism Day, Vigilance Day, World Environment Day, Birth Anniversary of Mahatma Gandhi, Sardar Vallabhbhai Patel, Subhash Chandra Bose, and others are among them.

It is a matter of pride that the Vishwavidyalaya has twenty-one NSS units on campus, and one NCC platoon on campus are attracting the students for their engagement in Nation Building and National Security.

Every year on the occasion of Armed Force Flag Day, a contribution is collected by deduction from salary of the employees, and the amount collected is deposited at the District Army Welfare Office, Bilaspur, Chhattisgarh.

Various departments of the Vishwavidyalaya and NSS units are actively involved in a variety of activities aimed at instilling principles for responsible citizens. Among them are the Blood Donation Camp; Swatch Bharat Abhiyan; Cleanliness drives and the Plantation drives.

### **Some Photographs**





**7.1.10** *The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.*

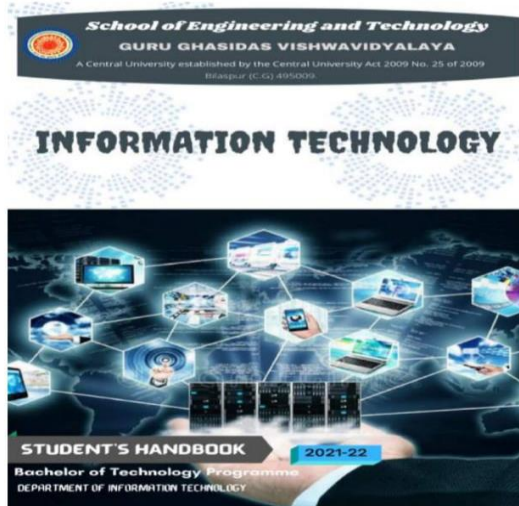
1. The institutional Code of Conduct principles are displayed on the website
2. There is a committee to monitor adherence to the institutional Code of Conduct principles
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

**Options:**

- A. All of the above
- B. Any3 of the above
- C. Any2 of the above
- D. Any1of the above
- E. None of the above

**(Opt any one)**

Response: A. All of the above



Department of Information Technology	
CONTENTS	
	PAGES
1. ABOUT THE DEPARTMENT	4
2. FACULTY OF THE DEPARTMENT	6
3. B.TECH. ORDINANCE	8
4. CODE OF CONDUCT FOR STUDENTS	20
5. DISCIPLINE AMONG STUDENTS IN UNIVERSITY EXAMINATION	22
6. REGULATION FOR THE DISPOSAL OF CASES OF "USE OR ATTEMPT TO USE UNFAIR MEANS" AND DISORDERLY CONDUCT AT AN EXAMINATION BY A CANDIDATE	27
7. ABOUT RAGGING	33
8. TELEPHONE DIRECTORY	44
9. COURSE STRUCTURE AND SYLLABUS	47

## Key Indicator - 7.2 Best Practices (30)

**7.2.1** Describe two best practices successfully implemented by the Institution as per the NAAC format provided in the Manual. **30**

- Best practices as hosted on the Institutional website
- Any other relevant information

**BEST PRACTICE**

**Title of the Practices: - PRAYAS “Practice of Reasoning and Aptitude for Young Aspiring Students.”**

### Practices

PRAYAS, it's a test series for all engineering students. The full form of PRAYAS is “Practice of Reasoning and Aptitude for Young Aspiring Students”. It's a Twelve Mock Test Series for all Engineering Students as a guideline to achieve success in the Higher Studies Exam (GATE/NET/SET) and Placement (Placement Entrance Exam).



---

It grooms students to achieve good Higher Education Institutes and Multinational Organizations.

### Objective of Practice

- **Skill Development:** The primary objective may be to facilitate the development of reasoning and aptitude skills among young students. This can include critical thinking, problem-solving, and logical reasoning.
- **Preparation for Exams:** If targeted at students preparing for competitive exams, the objective could be to offer a structured platform for practicing and improving reasoning and aptitude sections commonly found in various entrance exams.
- **Educational Support:** The initiative may aim to provide additional educational support beyond the regular curriculum, focusing specifically on areas related to reasoning and aptitude.
- **Empowering Aspiring Students:** The goal might be to empower aspiring students by equipping them with the skills and knowledge needed to excel in academic and competitive pursuits.
- **Access to Resources:** The initiative could provide access to resources such as practice materials, mock exams, and guidance to help students strengthen their reasoning and aptitude capabilities.

### The context

"PRAYAS" stands for "Practice of Reasoning and Aptitude for Young Aspiring Students" in a specific context or organization, the objective would likely be to provide a platform or program aimed at helping young students enhance their reasoning and aptitude skills.

### Evidence of Success

Number of students qualified GATE, CAT and many prestigious competitive exams.

### Supporting Document

---



## BEST PRACTICE

1. Title of the Practice: "Geeks of Geeks" Student Chapter
2. Objectives of the Practice (100 Words)

## II

Basic Objective of Geeks of Geeks (GFG) for students is to provide a comprehensive and effective platform for learning and enhancing their skills in the field of computer science and information technology. Geeks of Geeks strives to be a comprehensive learning ecosystem that empowers students by offering valuable resources, fostering skill development, and connecting them with opportunities in the ever-changing world of information technology.

### 3. The context (150 Words)

The concept of Geeks of Geeks (GFG) in the context of providing educational and skill development resources for students in the field of computer science and information technology. GeeksforGeeks is an online platform that has gained popularity for its extensive collection of tutorials, articles, coding challenges, and other resources aimed at helping students and professionals enhance their knowledge and skills.

### 4. The Practice (400 words)

Here are several ways in which Geeks of Geeks contributes to student development:

**Learning Resources:** Geeks of Geeks provides a vast repository of articles, tutorials, and coding examples covering a wide range of topics in IT. Students can access high-quality content on programming languages, data structures, algorithms, databases, and more. These resources help students understand concepts and enhance their



---

coding skills.

**Interview Preparation:** Geeks of Geeks is widely used by students to prepare for technical interviews. The platform offers a dedicated section for interview preparation, including commonly asked questions, practice problems, and solutions. This helps students build confidence and excel in technical interviews.

**Coding Practice:** The platform offers a variety of coding challenges, from easy to advanced levels, allowing students to practice and improve their coding skills. Regular coding practice is essential for honing problem-solving abilities, which are crucial in the IT industry.

**Algorithms and Data Structures:** Geeks of Geeks provides in-depth coverage of algorithms and data structures, which are fundamental to computer science and IT. Students can learn about different algorithms, their implementations, and when to apply them in real-world scenarios.

**Community and Forums:** Geeks of Geeks has a vibrant community and forums where students can interact with peers and experts. They can seek help for doubts, share their knowledge, and engage in discussions related to IT. This sense of community fosters collaborative learning and networking.

**Regular Updates:** The field of IT is dynamic, with new technologies and trends emerging regularly. GeeksforGeeks keeps its content updated to reflect the latest developments, ensuring that students have access to relevant and current information.

## 5. Evidence of Success (200 Words)

**Here are some potential indicators of success: -**

**Membership Growth:** Increasing participation of students suggests that students find value in the activities and resources provided by the chapter.

**Event Participation:** Hosting and participating in coding competitions, hackathons, workshops, and seminars are common activities for Geeks of Geeks student chapters. Success can be seen measured by the level of engagement and turnout at these events.

**Learning Impact:** Evidence of success include testimonials or feedback from students who have benefited from the chapter's activities. This includes improved

---



coding skills, successful internship placements, or positive experiences in technical interviews.

**Collaborations and Partnerships:** Establishing collaborations with industry professionals, tech companies, or other student chapters is being done through this chapter. Such partnerships provide additional resources, networking opportunities, and industry exposure for chapter members.

**Community Engagement:** A successful student chapter often fosters a sense of community among its members. Active participation in forums, discussion groups, and collaborative projects indicates a thriving and engaged community.

**Recognition and Awards:** Recognition from Department of IT, SOSET, GGV, Bilaspur, C.G. as well as many awards received for outstanding achievements or events, can serve as evidence of success for a student chapter.

#### 6. Problem Encountered and Resources Required (150 Words)

Here are some common problems encountered and potential solutions:

**Membership Retention:** Student chapters sometimes face challenges in retaining members over time. Students may graduate, lose interest, or become involved in other activities.

**Solution:** Regularly organize engaging events, workshops, and activities. Foster a sense of community and involvement to keep members interested. Provide opportunities for leadership and skill development within the chapter.

**Funding and Resources:** Limited funding and resources can hinder the chapter's ability to organize quality events, bring in guest speakers, or provide educational materials.

**Solution:** Explore funding options within the college or university. Seek sponsorships from local businesses or tech companies. Allocate resources wisely and prioritize activities that align with the chapter's goals.

**Communication Issues:** Effective communication is crucial for the success of a student chapter. Miscommunication or lack of communication can lead to confusion and decreased participation.

**Solution:** Establish clear communication channels, such as a dedicated website, social media platforms, and regular newsletters. Use communication tools that are easily accessible and familiar to students.

**Leadership Transition:** As students graduate, there may be challenges in smoothly transitioning leadership roles, leading to a potential loss of institutional knowledge and continuity.

**Solution:** Implement a structured leadership transition plan. Document processes and responsibilities to facilitate a smooth handover. Encourage knowledge-sharing among existing and incoming leaders.

### Supporting Document



### Key Indicator - 7.3 Institutional Distinctiveness (20)

#### 7.3.1 *Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words* 20

**Provide web link to:**

- Appropriate webpage in the Institutional website
- Any other relevant information

**Report Commending the Department of Information Technology, School of Studies in Engineering and Technology, Guru Ghasidas Vishwa Vidyalaya**



**Introduction:** The Department of Information Technology at the School of Studies of Engineering and Technology, Guru Ghasidas Vishwa Vidyalaya, has demonstrated exceptional commitment and prowess in nurturing students' skills and fostering an environment conducive to innovation and professional development.

**Promotion of Entrepreneurship:**

The department has been instrumental in promoting entrepreneurship among its students. Various initiatives aimed at fostering an entrepreneurial spirit have been introduced, encouraging students to explore and develop their innovative ideas. The department's guidance and support towards shaping these ideas into viable business ventures have been commendable, nurturing a culture of innovation among the students.

**Internships and Industry Training:**

A hallmark of the department's commitment lies in its comprehensive internship programs. These programs have provided students with invaluable practical exposure and hands-on experience in their field. The structured internships serve as a bridge between theoretical knowledge and real-world application, equipping students with skills essential for their future careers. Additionally, the emphasis on industry-relevant training has ensured that students are well-prepared to face the challenges of the professional world upon graduation.

**Notable Achievement:**

An outstanding feat worth highlighting is the selection of 4 students from the 2020-2024 batch by the Delhi Police for their commendable work on the. This accomplishment not only showcases the students' dedication and ingenuity but also underscores the quality of education and guidance provided by the Department of Information Technology.

**Conclusion:**

In conclusion, the Department of Information Technology at the School of Studies of Engineering and Technology, Guru Ghasidas Vishwa Vidyalaya, stands as a beacon of academic excellence and a catalyst for grooming future innovators and leaders. The department's consistent efforts in promoting



entrepreneurship, facilitating internships, and providing industry-aligned training have been laudable and merit acknowledgment.

## Supporting Documents

