ASPIRE TO EXCEL

# ONE TO EVERYONE

**DATE: FOREVER**          **COST: YOUR PRECIOUS TIME**

## INFORMATION SECTION

### QISKIT: AN OPEN-SOURCE FRAMEWORK FOR QUANTUM COMPUTING

**Qiskit** is an open-source quantum computing software development framework developed by IBM Research for leveraging today's quantum processors in research, education and business. It provides tools for creating and manipulating quantum programs and running them on prototype quantum devices and simulators. It follows the circuit model for universal quantum computation, and can be used for any quantum hardware that follows this model.

Programming languages used: Python, Swift, JavaScript

Qiskit provides the ability to develop quantum software both at the machine code level of OpenQASM, and at abstract levels suitable for end-users without quantum computing expertise.

**Qiskit Terra** provides tools to create quantum circuits at or close to the level of quantum machine code. It allows the processes that run on quantum hardware to be explicitly constructed in terms of quantum gates. It also provides tools to allow quantum circuits to be optimized for a particular device, as well as managing batches of jobs and running them on remote-access quantum devices and simulators.

**Qiskit Aqua** provides tools that can be used without any explicit quantum programming required by the user. It currently supports applications in chemistry, AI, optimization and finance. Users can provide problems and receive results defined using standard tools in these domains, such as PySCF for chemistry. Qiskit Aqua then implements a corresponding quantum algorithm.

**Qiskit Aer** component provides simulators hosted locally on the user's device, as well as HPC resources available through the cloud. The simulators can also simulate the effects of noise for simple and sophisticated noise models. This allows development

**Learn Quantum Computation using Qiskit**

of quantum software by enabling simulation of small quantum devices.

**Qiskit Ignis** is a component that contains tools for characterizing noise in near-term devices, as well as allowing computations to be performed in the presence of noise. This is includes tools for benchmarking near-term devices, error mitigation and error correction.

For more details visit **https://qiskit.org/**

### SOME LESSER-KNOWN TREASURES OF KNOWLEDGE

**Shodhganga- a reservoir of Indian Theses:** Theses and dissertations are known to be the rich and unique source of information. Shodhganga is set-up using an open source digital repository software called DSpace developed by MIT in partnership with Hewlett-Packard.

**Shodhganga** facilitates universities to deposit their theses. The system also permits online or offline submission of theses by students on voluntary basis. *Shodhganga* interface supports basic search, advanced search and subject-wise browsing. URL *https://shodhganga.inflibnet.ac.in/*

**Library Genesis:** It is a search engine for articles and books on various topics, which allows free access to content that is otherwise pay walled or not digitized elsewhere. As of 28 July 2019 its database contains more than 2.3 million non-fiction books, 76 million science magazine articles, 2 million comics files, 2.2 million fiction books, 0.4 million repository magazine issues. URL: *https://libgen.is/*

**Internet Archive:** Started in 1996, non-profit, internet platform. It provide free access to everyone. Its mission is to provide Universal Access to All Knowledge. This includes 330 billion web pages, 20 million books and texts, 4.5 million audio recordings (including 180,000 live concerts), 4 million videos (including 1.6 million Television news programs), 3 million images and 200,000 software programs. URL: *https://archive.org/*

### WHATS NEW?

* **One to Everyone Editorial team is committed to improve newsletter each upcoming edition.**

* **Herby we added new section- Fun and Trivia section and also included informative yet interactive sub-sections.**

* **You will find enhanced graphics, covering major aspects and in-house activates of BIT Durg.**

* **Interviews of alumni is dedicated full page for larger benefit of readers.**

# EVENTS SECTION

## INTERNATIONAL RADIO PLAYWRITING 2020

The 27th International Radio Playwriting Competition hosted by **BBC World Service** and **The British Council** is calling upon young and aspiring playwrights from outside of the UK to write and submit a radio play script.

Entry is **open to any non-UK resident** over the age of **18 years**. There are two categories of entry :

- For those who speak English as their first language.

- For those who have it as their second language.

### The radio play must:

- Be approximately **53 minutes** long.

- Have a maximum of **6 central characters**.

- Be accompanied by a short synopsis of not more than 400 words which outlines the story of the play.

- Not have children in central roles.

### The radio play can be submitted by methods listed below:

- Online - https://bbcplaywrite.monterosa.co.uk/

- Email -- radioplay@bbc.co.uk

The entry must be accompanied by a complete copy of an entry form*.

*The two winners (one from each category) will have their **plays broadcasted on BBC World Service** and will receive £2500 Sterling (Approx. 2.28 Lakh INR) along with a trip to London for an award ceremony.*

The last date to apply is **31st January 2020.**

For more information and to download the above -mentioned entry form, visit :

https://theatreanddance.britishcouncil.org/blog/2019/internationalradioplaywriting2020/

## TINY LIBRARY 2019 ARCHITECTURE COMPETITION

Want the world to know about the creativity worm inside you? It's your time then!!

The International Architecture and Design Magazine "Volume Zero" is back with its new initiative called "**Tiny Library 2019 Architecture Competition**". Volume Zero is a unique platform for architects and designers to showcase their innovative ideas and concepts as their passion. T

his year, the participants are supposed to design a tiny library for 50 readers of all ages. The library should have a perfect blend of traditional and modern reading material such as e-books, audio-books, audiovisual books, etc.

### ELIGIBILITY

Students and professionals from all walks are welcome to participate and showcase their ideas.

### IMPORTANT DATES

- Early Bird Registrations: 18th October 2019 to 20th December 2019.

- Standard Registrations: 21st December 2019 to 24th January 2020.

- Last day for queries: 18th January 2020.

- Closing date for Submissions: 31st January 2020.

- Announcement of winners: 3rd April 2020

### Register yourself at:

https://vzcompetitions.volzero.com

### For further information visit:

http://scholasticworld.blogspot.com/2019/11/tiny-library-2019-architecture.html

## 2019 UNICEF FUNDING OPPORTUNITY FOR TECH START-UPS

Planning your own start-up?? Read the article below and fund your venture!

The UNICEF Innovation Fund is looking forward to make equity-free investments of 50-90,000 USD to provide early-stage finance to for-profit technology start-ups having the potential to benefit humanity. This is a newly established, non-thematic, pooled fund that has been designed to finance early stage, open-source technology to benefit children.

**ELIGIBILITY**
1) Applicants must be registered as a private company in a UNICEF program country.
2) Be working on open source technology solutions or willing to be under open source licenses or equivalent : BSD (software), CERN (hardware), or CC-BY (content).
3) Must have an existing prototype of the solution with promising results from initial pilots.
4) Applicants' solutions should have the potential to positively impact the lives of children.

If you've got a start-up registered in one of UNICEF's program countries and have a working, open-source prototype (or you are willing to make it open-source) showing promising results, the UNICEF Innovation Fund is looking for you!

Visit the link below for registrations and further details.
https://www.youthop.com/competitions/grants/2019-unicef-funding-opportunity-for-tech-startups?ref=browse_page
*(Fill the application form whenever ready as the reviewing process is ongoing and only short-listed companies will be asked to give detailed information)*

# STUDENTS SECTION

## VIKRAM SARABHAI CENTENARY PROGRAM AT BIT DURG

ISRO is commemorating birth centenary of its founder father Dr. Vikram Sarabhai by organizing space exhibitions, water rocket launching, showcasing satellite and launch vehicle models, selfie corner,competitions for students (Quiz, Painting and Rangoli) and speeches by eminent personalities under flagship of *Vikram Sarabhai Centenary Program* across 100 selected cities all over India.
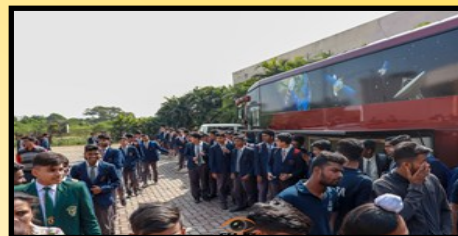


BIT Durg is privileged to be one among them, Vikram Sarabhai Memorial Lecture was commenced for two days 19th and 20thDecember 2019. On this occasion Padma Shree Dr. Prem Shankar Goel (Former Secretary MoES GoI), Dr. Rajashree V. Bothale (Scientist 'G' and GM, NRSC Hyderabad) and Dr. Alok Shukla (IAS, 1986 Batch) had presented their thoughts.



Dr. Prem Shankar Goel talked about the relevance of Dr. Vikram Sarabhai in today's context. How his vision and ideas shaped ISRO the way it's now. He also talked on how technology can transform life, scientific thinking and raised a question among young minds to find ways which we can be self-reliance and measures to promote indigenization of goods and services in fields like defense, space, energy, research and develment etc.



Students came to know about contribution of ISRO for India's development and world enlarge via satellite and launch vehicle models, informative posters and *Space on Wheels*bus.



## SILVER JUBILEE REUNION 1994 BATCH

Alumni Association of Bhilai Institute of Technology, Durg celebrated Silver Jubilee Reunion of 1994 Batch on 24th December 2019 at BIT Campus.



Welcome address was given by Dr. Arun Arora, Principal BIT-D followed by unveiling of handbook and e-Souvenir. Beautiful glimpses of '94 batch were shown followed by felicitation of dignitaries and addressing the fellow alumni by Dr. M. K. Verma (Hon. Vice Chancellor CSVTU), Shri I. P. Mishra (Member Secretary BIT Trust) and Shri Vijay Gupta (Chairman governing body) respectively. Laasya and Alankar, the dance and singing group of BIT-D set the stage on fire with their splendid performances.



The alumni also shared their experiences and memories of college days. Alumni payed their humble gratitude by felicitating the invited faculty members under program titled "Naman". A vote of thanks followed by group photo session and lunch, marked the conclusion of the event. Overall it was such a memorable moment and one the best memory for everyone.



## KNOW YOUR CLUB



The Astro Club is a special venture for the popularization of astronomy and basic sciences. It is a joint initiative by **Chhattisgarh Vigyan Sabha** and **Bhilai Institute of Technology, Durg** towards the eradication of superstitions from amongst the society and inculcates scientific temperament amongst the youth.
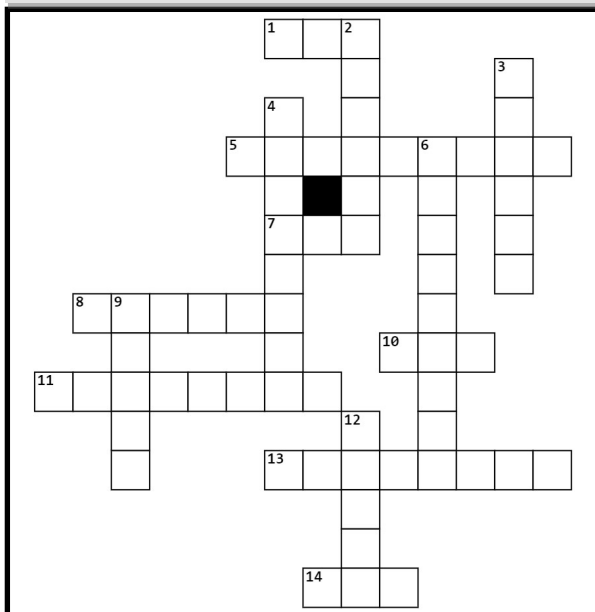
Started in 2014, Astro Club is 1st formal astronomy club of Chhattisgarh state and is a family of 600+ members currently. The Student Incharge of the Astro club is C. S. Robinson sir and current president Harsh Vardhan (Mech. 5th Semester)..

# FUN & TRIVIA SECTION

## CLUES:

1. It goes by the motto 'Ekta aur Anushasan'.

2. It was formed in 2010 and has around 400 members till date.

3. Their prime focus is filmmaking.

4. Its application in Indian classical music is essential to enhance the beauty of the genre.

5. They aim to develop professional skills related to speaking.

6. Official club of TPO.

7. Their motto is simple 'Not me, but you'.

## IDENTIFY YOUR COLLEGE CLUBS

8. This term describes the dance performed by Goddess Parvati.

9. Aims at developing general awareness of science and removal of superstitions.

10. The only dramatics club of BIT.

11. Publishers of One To Everyone newsletter.

12. Aims to inculcate team spirit, sportsmanship and to provide a platform to bring out the talents of the students.

13. The only online quiz club of BIT.

14. Aims at empowering aspiring minds of a new generation of technologists with innovative

## GENERAL AWARENESS

1. Who was awarded by prestigious Sahitya Akademi Award 2019 in Hindi literature?

2. Who was awarded by prestigious Sahitya Akademi Award 2019 in English literature?

3. Name of Indian American economist awarded by "Nobel Memorial Prize in Economic Science, 2019", along with two others is?

4. Recent cyber-attack in one of the power plant of Nuclear Power Corporation of India Limited was located in?

5. Who won the Sri Lankan presidential election held in November 2019?

6. Who was named as the Time's Person of the year 2019?

### ANSWERS

1. DR. NAND KISHORE ACHARYA, CHIL- LATE HUE APNE KO (POETRY)

2. SHASHI THAROOR, AN ERA OF DARK- NESS (NON FIC- TION)

3. ABHIJIT BANERJEE

4. KUNDANKULAM NUCLEAR POWER PLANT, TAMILNADU

5. MR. GOTABAYA RAJAPAKSHA

6. GRETA THUNBERG

## KNOW YOUR ALUMNI

### Umesh Nandkumar Patel
**(Indian Politician)**

1. He is a member of the Indian National Congress.

2. He is minister of Higher Education of Chhattisgarh and Skill development, Science and Techonogy, Sports and Youth Development.

## TV TRIVIA

### F·R·I·E·N·D·S

1. What was Phoebe's twin sister's name?

2. What was Barry's profession?

3. What was the spinoff show of Friends?

1. Ursula
2. Dentist
3. Joey

### GAME OF THRONES

1. What are the house words of house Margarine?

2. The Night King was created using a dagger made of?

3. What was the name of Arya's direwolf?

1. Fire and Blood
2. Dragonglass
3. Nymeria

### Harry Potter

1. How many staircases does Hogwarts have?

2. What was the name of Harry Potter's oldest son?

3. What is Neville Long-bottom's greatest fear?

1. 142
2. James Sirius Potter
3. Severus Snape

## INDIAN HERITAGE

- India invented the Number System. Zero was invented by Aryabhatta.

- The ancient Indians were accomplished engineers. The Kallanai Dam, built in the second century AD, is the fourth-oldest water diversion structure in the world—and it's still in use today!

# INTERVIEW SECTION

## "SWARIL SINGHAL" ALL INDIA RANK 86 (CSE), GATE 2019

The main motto of this section is to bridge the gap between faculty and students. Here we interview personalities alumni, faculties, current students of BIT Durg regarding benefit of student's community enlarge.

1. **Describe yourself in three words?**
*"Desire to learn "*

2. **What inspired you to prepare for GATE?**
*Like every engineering aspirant, I too dreamt to study in IITs and GATE gives me the last opportunity to reach there. And the more we watch motivational videos, read motivational articles, go through toppers' success stories, we get motivated. So seeing our alumni cracking GATE also inspired me a lot.*

3. **May you share your preparation strategy with our readers?**
*I kept my preparation strategy as simple as possible. It was -*
i. *Plan*
ii. *Reading Notes*
iii. *Solve previous year papers*
iv. *Give the Mock Test*
v. *Revise*
*I used to make short weekly goals and give my best to achieve it.*

> **Success is not final; failure is not fatal: It is the courage to continue that counts."**
>
> **-- Winston S. Churchill**

4. **State some common mistakes an aspirant may commit while preparing?**
- *I did not solve, many questions. I solved little but quality questions. So don't go for quantity, go for the quality.*
- *Every one targeting a decent rank must practice more and more but with a high standard question.*
- *While solving any question, correct reading of question is important.*
- *Start solving test-series as early as possible and after attempting a test you should analyze it.*
- *If you commit any silly mistake note it and if you get something new to add it to your short notes.*

5. **Share some memories of college days?**
*At a very personal level looking back following images appear:*
*Friends, Gossips at parking, Assignments, 3 hours lab :(, Last-minute exam preparations, Ojas, Placements.*

6. **One piece of advice you have received which you are very grateful for?**
*Someone once told me that "Happiness" is the only thing you must work extra hard to have because it precedes success and it hit me hard.*

> *If you really look closely, most overnight successes took a long time.*
>
> *-Steve Jobs*

7. **What is your hobby & favorite leisure time activity?**
*I love to play badminton. I prefer listening to music and watching web series in my leisure time.*

8. **Any advice for future aspirants?**
*Just Believe in yourself.*
*Don't let anyone tell you what you can't and what you can achieve. Aim to study every day because consistency is the key and finally let your hard work and determination speak.*

9. **Your all time favorite book and movie?**
*My favorite book is "The Secret". My all-time favorite movie is "Yeh Jawaani hai Deewaani".*

> **If you really want to do something, you'll find a way. If you don't, you'll find an excuse."**
>
> **-Jim Rohn**

10. **Any changes you noticed before and after clearing GATE?**
*GATE boosted my confidence which enhances my overall personality.*

11. **What is the best pathway/motivation while preparation? Pursuing Masters or joining PSUs?**
*Motivation comes from belief so just believe in yourself and your knowledge. Make small goals and cherish their accomplishments. And always keep in mind that maybe it's the last opportunity you are having, so go grab it!*

12. **Challenges/Opportunities in computer science as a career, especially in India's context?**
*High competition, updation, and development of new technologies are the biggest challenges one faces in this career but there are many opportunities too. You can be Software Engineer, Project Management personnel, Quality Assurance Engineer, System Analyst, Data Science Expert, Artificial Intelligence Expert, Machine Learning Expert (also AI), A Scientist/Researcher, Scholar in the Academic sector and many other things.*

> *Many of life's failures are people who did not realize how close they were to success when they gave up."*
>
> *-Thomas Edison*

## COMPETITION SECTION

### WINNERS OF ONE TO EVERYONE LITERARY COMPETITION 2019

Literary Club organized **One to Everyone Literary Competition** from 15 November 2019 to 10 December 2019. We have received about 45+ entries in Article, Short Story and Poetry. Here we are announcing most awaited results of this competition.

One to Everyone congratulates everyone who participated in this competition and helped make it a huge success!

**Top three entries of in each category is as follows:**

- **English Language**

#### English Poetry

| Position | Name | Branch/Year | Title |
|---|---|---|---|
| 1st | Nimrat Kaur Mudhar | IT, 1st Year | What was her fault? |
| 2nd | Nandini Pandey | IT, 1st Year | Be You |
| 3rd | Gauri Saraswat | CS, 3rd Year | Kashi |

#### English Article

| Position | Name | Branch/Year | Title |
|---|---|---|---|
| 1st | Yash Pamnani | CS, 3rd Year | The cost of FOMO |
| 2nd | Nidhi Karambelkar | CS, 2nd Year | Modern Lifestyle… |
| 3rd | Navya Singh | IT, 2nd Year | Mental Health… |

#### English Short Story

| Position | Name | Branch/Year | Title |
|---|---|---|---|
| 1st | Jayshree Parida | MCA, 2nd Year | The butterfly… |
| 2nd | Samarth Soni | CS, 4th Year | A beautiful lie |

- **Hindi Language**

| Position | Name | Branch/Year | Title |
|---|---|---|---|
| 1st | Tejasvini Singh Paikra | EE, 3rd Year | पापा |
| 2nd | Ameth Vikram | Mech., 2nd Year | इश्क़-ए-मिजाजी |
| 3rd | Nitish Kumar Singh | EE, 4th Year | अबला |

Note: Combined prize considering all categories is given for in Hindi language due to less number of entries.

*Keep Learning, Keep Writing!!!*

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