Timely submission of AQAR for the academic year 2018-19 was done.
IQAC members appreciated the support provided by the various departments and units for their timely support and help.

1 Examination Reforms
The Examination Board established a procedure for holding online examinations. Various resources, like google meet, zoom, webex, etc were proposed to be used for viva-voce examinations. To conduct the quiz examinations, take home examinations and assignment submission, university LMS and Google Classroom were recommended. Some of the faculty members also used other free online resources. These resources helped teachers and students to keep their teaching and learning uninterrupted during the lockdown.

Like last year's students were supposed to adhere to the minimum pass marks policy (detailed below).

Minimum Pass Marks
It is important to realise that the marks in individual papers are essentially useful symbols for grading and ranking students in a course in a consistent and equitable manner. The present grading system of awarding grades based on total marks obtained by the students would be applicable as documented in the Academic Regulations approved by the Senate. However, for each individual course a minimum of 33 marks would be required to be obtained by the student
to pass the course with the lowest pass grade. In all project based courses (those courses where no formal written examination is conducted (e.g. Project Semester, Engineering Design II or III) a minimum of 50 marks will be required to pass the course.

For the purpose of awarding grades, all students with marks less than 33 were awarded “E” (fail) grade. The normal distribution curve was used to award grades as per the existing regulations at TU. The minimum marks considered for assessing the normal distribution will be 33. This would mean all students at 33 will be automatically awarded “C” grade and other grades will be awarded based on normal distribution. The Examination Board is the highest body deciding on matters related to the examination results in a department/school. The AVGP and other matters related to final grading is also its sole discretion.

2 INFRASTRUCTURE

Mccullough-Mulvin Architects completed the development of the following infrastructure for Thapar

- Computer Science Block
- Lecture hall complex
- Library
- Three Student residences for 2500 students
- Other academic buildings
- Face lifting and modernization of existing buildings

In addition to above 2 residential complexes, consisting of 64 apartments of 3BHK were constructed.

Under the expansion plan of the university more such faculty residences and student housing complexes are going to be built.

The Center of Excellence for Emerging Materials and Center of Excellence for Food Security procured many research equipment. These equipment are helping researchers to do the cutting edge research.

3 STIMULATING RESEARCH, DEVELOPMENT AND CONSULTATION
The research output has improved considerably during the last few years. The data in the Tables and figures below show the research output of the University during the last few years. The data will be explained during the meeting.

<table>
<thead>
<tr>
<th>Publications</th>
<th>2019-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journals listed in Thomson Reuter SCI List</td>
<td>1273</td>
</tr>
<tr>
<td>In other Journals</td>
<td>120</td>
</tr>
<tr>
<td>In seminars, conferences and workshops</td>
<td>192</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sponsored Projects</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received</td>
<td>29</td>
</tr>
<tr>
<td>Funds Sanctioned (Rs. in lakh)</td>
<td>1240.41 lakh INR</td>
</tr>
<tr>
<td>Amount received during this year</td>
<td>596.97 lakh INR</td>
</tr>
</tbody>
</table>

### 4 INTERNSHIP PROCEDURE

In the last years various departments faced a challenge to keep track of Reflective diaries (one of the major components in the internship, the complete procedure is explained below). IQAC recommended developing a digital solution for the problem. A team of students under the mentorship of faculty members are developing a digital diary. We hope that the solution will be available by the end of the current year.
**Internship procedure**

The project semester is aimed at developing the undergraduate education programme in engineering to include practical training in a professional engineering setting (a company, top educational institution, research institute etc.). The project semester gives the student the opportunity to translate engineering theory into practice in a professional engineering environment. A central requirement of the project semester is that it must be based around significant engineering work and is principally assessed on that basis. The technical activity should be related to both the student’s engineering studies and to the host organization’s activities, and it should constitute a significant body of engineering work at the appropriate level.

During the visits to Trinity in 2015, a comprehensive procedure was developed for evaluation of Project Semester which was identified as weak during the Academic Review. The assessment procedure includes the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Submission timeline</th>
<th>Marks awarded by</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective Diary</td>
<td>End of Project Semester</td>
<td>Faculty Supervisor</td>
<td>10%</td>
</tr>
<tr>
<td>Goals Report</td>
<td>End of week 4 of project semester</td>
<td>Faculty Supervisor</td>
<td>5%</td>
</tr>
<tr>
<td>Midway report</td>
<td>End of week 10 of project semester</td>
<td>Faculty Supervisor</td>
<td>15%</td>
</tr>
<tr>
<td>Final Assessment</td>
<td>End of project semester</td>
<td>Host Mentor</td>
<td>20%</td>
</tr>
<tr>
<td>Final Report</td>
<td>End of project semester</td>
<td>Committee assessment</td>
<td>20%</td>
</tr>
<tr>
<td>Oral and poster presentation and viva</td>
<td>End of project semester</td>
<td>Committee assessment</td>
<td>30%</td>
</tr>
</tbody>
</table>

The learning outcomes for the project semester are focussed on the implementation of technical knowledge to address engineering problems, communications, group work, professional and
social ethics, sustainability, risk assessment and engineering design practice. On completion, students will have achieved several learning outcomes from the following list:

- Able to identify and use appropriate mathematical methods, numerical techniques and software tools for application to new and ill-defined engineering problems;
- Be able to integrate knowledge, handle complexity and formulate judgements with incomplete or limited information;
- Have the ability to redesign products, processes or systems in order to improve productivity, quality, safety and other desired needs;
- Have the ability to apply design methods, processes and techniques to unfamiliar, ill-defined problems, involving other disciplines;
- Be able to design according to codes of practice and industry standards; to identify limitations of codes of practice and the need for their application;
- Have the ability to investigate and define a need and identify constraints including health, safety and legal issues and the impact of engineering solutions in a societal and environmental context;
- Be able to make engineering judgements that take cognisance of the social, environmental, ethical, economic, financial, institutional and commercial considerations affecting the exercise of their engineering discipline;
- Have the ability to consult and work with experts in various fields in the realisation of a product or system;
- Have knowledge and understanding of concepts from a range of areas outside engineering;
- Be able, via knowledge and understanding of group dynamics, to exercise leadership;
- Be able to select and apply appropriate communication tools and write technical papers and reports;
- Be able to describe the relevant advantages and disadvantages of various technologies to an audience, and to communicate effectively in public.

5 Website

Website is a place for the outside world including prospective students, their parents/guardians to interact with the university and also it provides a user interface to the students and teachers. Keeping this in mind IQAC recommended an overhaul of the website.
The Website Committee is working to redesign and revamp the website. Various departments forwarded their requests and requirements for the new website. An agency is helping us to make the website contemporary.