

DELHI TECHNOLOGICAL UNIVERSITY

MINUTES of 2nd Meeting

PLANNING BOARD

Date : 31.01.2020

Time : 11:30 a.m.

Venue: Room No. 307, 2nd Floor,

Administrative Block, DTU

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Delhi Technological University

(Established by Govt. of NCT of Delhi vide Act 6 of 2009) (Formerly Delhi College of Engineering)

Minutes of 2nd meeting of the Planning Board held on 31st January, 2020 at 11:30 a.m. in Room No. 307, 2nd Floor, Administrative Block, Delhi Technological University, Delhi - 110042 is as follows:

The following members were present:

- 1. Prof. Yogesh Singh, Vice Chancellor, Delhi Technological University.
- 2. Padma Shri Prof. Pritam Singh, Former Director, IIM Lucknow.
- 3. Prof. J.P. Saini, Vice Chancellor, Netaji Subhash University of Technology, Delhi.
- 4. Prof. Anu Singh Lather, Vice Chancellor, Ambedkar University, Delhi.
- 5. Prof. Prem Vrat, Pro Chancellor, NorthCap University, Gurugram.
- 6. Prof. S.K. Garg, Professor, Delhi Technological University
- Prof. Samsher, Professor, Deptt. of Mechanical Engg. and Registrar,
 Delhi Technological University

Prof. I.K. Bhat, Vice Chancellor, Manav Rachna University, Faridabad could not attend the meeting due to his pre-occupation.

Sh. D.P. Dwivedi, I.A.S.(Retd.)) attended the meeting as special invitees.

Agenda 2.1: Opening remarks by the Chairperson.

The Hon'ble Vice Chancellor welcomed the members of the Planning Board in its 2nd meeting held on 31.01.2020. He apprised the members about the University ranking and progress made during the last five years (2015 to 2019). The report highlights the achievements of the University in various areas such as Student Growth, Placement Record, Faculty Recruitment, Research Publications and continuous increase in Foreign Students Enrolment, Details are as under:

1. Students Growth

| Year | Total No. of Students | No. of Students Admitted | No. of Students Graduated | No. of Ph. D Degrees Awarded |
|---------|-----------------------------|-------------------------------------|---------------------------------|------------------------------------|
| 2015-16 | 8612 | UG - 1726 PG - 474 Ph.D - 36 | UG - 1605 PG - 510 | 28 |
| 2016-17 | 8850 | UG - 1934 PG - 439 Ph.D - 184 | UG - 1664 PG - 382 | 52 |
| 2017-18 | 9780 | UG - 2471 PG - 514 Ph.D - 211 | UG - 1648 PG - 390 | 69 |
| 2018-19 | 11019 | UG - 2566 PG - 543 Ph.D - 227 | UG - 1636 PG - 447 | 62 |
| 2019-20 | 12011 | UG - 2693 PG - 673 Ph.D - 302 | | |

2. Placement Data of B.Tech Program

| Year | No. of Companies Visited | No. of Offers |
|---------|--------------------------|------------------------|
| 2015-16 | 261 | 1025 |
| 2016-17 | 268 | 1122 |
| 2017-18 | 292 | 1053 |
| 2018-19 | 323 | 1306 |
| 2019-20 | 157 | 973 Till 10.12.2019 |

3. Faculty

| Year | Faculty | No. of Faculty | Faculty Promoted Under CAS | No. of Faculty Recruited |
|------|---------------------|----------------|----------------------------------|--------------------------------|
| | Professor | 69 | 0 | 0 |
| 0045 | Associate Professor | 69 | 0 | 0 |
| 2015 | Assistant Professor | 56 | 0 | 0 |
| | Total | 194 | 0 | 0 |
| | Professor | 84 | 0 | 0 |
| | Associate Professor | 55 | 25 | 0 |
| 2016 | Assistant Professor | 73 | 78 | 17 |
| | Total | 212 | 103 | 17 |
| , | Professor | 90 | 23 | 0 |
| | Associate Professor | 50 | 8 | 0 |
| 2017 | Assistant Professor | 104 | 2 | 28 |
| | Total | 244 | 33 | 28 |
| | Professor | 92 | 13 | 3 |
| | Associate Professor | 52 | 6 | 25 |
| 2018 | Assistant Professor | 127 | 4 | 23 |
| | Total | 271 | 23 | 51 |
| | Professor | 93 | 0 | 0 |
| | Associate Professor | 55 | 0 | 0 |
| 2019 | Assistant Professor | 127 | 0 | 0 |
| | Total | 275 | 0 | 0 |

4. Research and Innovation

| Year | No. of Publications (Scopus Indexed) | No. of Citations |
|------|--------------------------------------|------------------|
| 2015 | 345 | 2922 |
| 2016 | 540 | 4024 |
| 2017 | 575 | 4981 |
| 2018 | 687 | 6613 |
| 2019 | 689 | 8346 |

Research Papers in Leading International Journals such as IEEE Transactions, Springer, Elsevier, Wiley and so on.

5. Research Data

| | Sponsored Research Projects | 80 |
|------|--------------------------------|-----------|
| 2015 | Consultancy Projects | 62 |
| 2015 | No. of Faculty Completed Post- | 4 |
| То | Doctoral Research | |
| 10 | No. of Papers Presented in | 1050 |
| 2019 | National & International | (Approx.) |
| 2013 | Conferences | |
| | No. of Patents | 17 |
| | Awarded/Published | |

6. Awards for Excellence in Research

| Year | 2017 | 2018 |
|-------------------------------|------|-------|
| Researchers Awarded | 103 | 152 |
| SCI/SCIE Publications Awarded | 82 | 107 |
| Award Amount (in Lakhs) | 37 | 43.41 |

7. Financial Resources

Budget Allocation:

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|--------------|---------|---------|---------|---------|-------------|
| Grant-in-Aid | 41.00 | 25.50 | 28.25 | 29.00 | 7.75+21.25 |
| University | 61.52 | 71.75 | 77.38 | 110.50 | 120.00 |
| Gen.Fund | | | | | 3 |
| Total | 102.52 | 97.25 | 105.63 | 139.50 | 127.5+21.25 |
| Expenditure | 75.92 | 100.77 | 117.14 | 147.19 | 119.00 * |
| Non-Govt. | 6.05 | 9.69 | 21.55 | 28.00 | 19.0 * |
| Fund (Exp.) | | | | | |

*(Upto 12.12.2019)

8. Cultural Festival

| Year | No. of Participants | Budget (Rs. in Lakhs) |
|---------|---------------------|-----------------------|
| 2014-15 | 700 | 20 |
| 2015-16 | 1800 | 47 |
| 2016-17 | 2300 | 61 |
| 2017-18 | 2700 | 68 |
| 2018-19 | 3500 | 85 |

9. No. of Foreign National Students Admitted

| Year | UG | PG | Ph.D | Total |
|---------|-----|----|------|-------|
| 2017-18 | 14 | 8 | 8 | 30 |
| 2018-19 | 141 | 25 | 10 | 176 |
| 2019-20 | 168 | 29 | 3 | 200 |

10. Ranking

NIRF India Ranking Engineering

| Year | Total Score | Rank |
|------|-------------|------|
| 2017 | 46.19 | 39 |
| 2018 | 46.00 | 41 |
| 2019 | 49.97 | 34 |

| | Rank |
|--------------------------------|--------|
| World University Ranking | 1001 + |
| THE : Computer Science | 601 + |
| THE : Engineering & Technology | 801 + |
| THE : Physical Sciences | 801 + |

Times of India Magazine and India Today Magazine have been rated DTU at 2^{nd} and 5^{th} position respectively.

Agenda 2.2 : Confirmation of the minutes of 1st meeting of the Planning Board held on 26.04.2019.

It was submitted to the Planning Board that the minutes of the 1st meeting of the Planning Board, DTU held on 26.04.2019, were circulated among all the members vide forwarding number F.DTU/Council/ Plg.Board/ 33/ 2019/ 482-90 dated 30.04.2019. No comments have been received.

Decision : The Planning Board confirmed the minutes of its 1st meeting held on 26.04.2019.

Agenda 2.3 : Action taken report on the decisions taken in the 1st meeting of the Planning Board held on 26,04,2019.

The Planning Board was informed that 4 agenda items were discussed in the last meeting held on 26.04.2019. The details of the agenda, decisions taken thereon and the action taken by the University were given in the agenda note for information of the Hon'ble members.

Regarding point 1.3, the Chairperson emphasised to conduct meeting of the committee constituted for the purpose at the earliest.

Decision: The Planning took the Action Taken Report on record.

Agenda 2.4 : Progress report for two years Strategic Plan (2019-2021) of Training and Placement Department.

The Planning Board was informed that review meeting of the T & P department was held on 20th January 2020. Head of the department presented the details of placement both for the year 2018-2019 and 2019-2020 (up to January 2020). During the presentation Prof. Rajesh Rohilla, Head, Training and Placement (T&P) department mentioned the placement statistics of University and the future steps proposed to be taken for improving over-all ranking of the University. Accordingly, the strategic plan for T&P department was placed before the Planning Board as under:

Placement Scenario 2018-2019

| No. of Offers B.Tech (Session 2018-19) | | | | | |
|--|--------------------|--------|------------|------------------------|-------------|
| BRANCH | STUDENTS PLACED | OFFERS | REGISTERED | % STUDENT PLACED | % OFFERS |
| COE | 128 | 166 | 140 | 91.43 | 118.57 |
| IT | 90 | 110 | 93 | 96.77 | 118.28 |
| SE | 77 | 96 | 80 | 96.25 | 120.00 |
| MCE | 72 | 96 | 90 | 80.00 | 106.67 |
| ECE | 133 | 165 | 176 | 75.57 | 93.75 |
| EE | 93 | 114 | 136 | 68.38 | 83.82 |
| EEE | 65 | 80 | 88 | 73.86 | 90.91 |
| ME | 129 | 163 | 181 | 71.27 | 90.06 |
| AE | 52 | 60 | 88 | 59.09 | 68.18 |
| PIE | 27 | 31 | 44 | 61.36 | 70.45 |
| CE | 55 | 61 | 118 | 46.61 | 51.69 |

| ENE | 31 | 44 | 59 | 52.54 | 74.58 |
|-------|------|------|------|-------|-------|
| PS | 33 | 39 | 53 | 62.26 | 73.58 |
| ВТ | 16 | 20 | 31 | 51.61 | 64.52 |
| EP | 32 | 40 | 61 | 52.46 | 65.57 |
| Total | 1033 | 1285 | 1438 | 71.84 | 89.36 |

| | STUDENTS PLACED | OFFERS | REGISTERED | Company Visited |
|--------|-----------------|--------|------------|--------------------|
| B.TECH | 1033 | 1285 | 1438 | 323 |
| MBA | 123 | 129 | 155 | |
| M.TECH | 160 | 195 | 249 | |
| Total | 1316 | 1609 | 1842 | |

| Total Companies | Median CTC (Lacs) | Average CTC (Lacs) | Max CTC (Lacs) | |
|--------------------|-------------------|--------------------|-------------------|--|
| 323 | 8 | 10.63 | 102 | |

Placement Session 2019-2020

| | | NO. OT OTTE | rs (Session 201 | 3-20) | |
|--------|--------------------|-------------|------------------|---------------------|----------|
| | | | B.Tech | | |
| BRANCH | Students Placed | OFFERS | REGISTERED | % Student Placed | % Offers |
| COE | 286 | 306 | 361 | 79.22 | 84.76 |
| IT | 100 | 107 | 124 | 80.65 | 86.29 |
| SE | 66 | 68 | 91 | 72.53 | 74.73 |
| MCE | 60 | 64 | 86 | 69.77 | 74.42 |
| ECE | 123 | 130 | 181 | 67.96 | 71.82 |
| EE | 65 | 69 | 131 | 49.62 | 52.67 |
| EEE | 36 | 42 | 83 | 43.37 | 50.60 |
| ME | 102 | 111 | 191 | 53.40 | 58.12 |
| AE | 40 | 42 | 92 | 43.48 | 45.65 |
| PE | 23 | 25 | 45 | 51.11 | 55.56 |
| CE | 39 | 42 | 118 | 33.05 | 35.59 |
| ENE | 16 | 18 | 56 | 28.57 | 32.14 |
| PS | 21 | 22 | 57 | 36.84 | 38.60 |
| BT | 5 | 5 | 25 | 20.00 | 20.00 |
| EP | 31 | 33 | 78 | 39.74 | 42.31 |
| Total | 1013 | 1084 | 1719 | 58.93 | 63.06 |

| | STUDENTS PLACED | OFFERS | REGISTERED | |
|--------|--------------------|--------|------------|--|
| B.TECH | 1013 | 1084 | 1719 | |
| MBA | 61 | 66 | 179 | |
| M.TECH | 73 | 78 | 242 | |
| Total | 1147 | 1228 | 2140 | |

| Total Companies | Median CTC | Average | Max CTC |
|-----------------|------------|------------|---------|
| | (Lacs) | CTC (Lacs) | (Lacs) |
| 195 | 10 | 12.63 | 107 |

| Intern Offers | Offers >=50000 | Average Stipend | Max Stipend |
|---------------|----------------|--------------------|-------------|
| 238 | 102 | 50717 | 200000 |

Challenges Ahead

- · Increase in intake for existing programs.
- Increased requirement for practical skills to be addressed through Internship and industrial training.
- Higher expectation of industry in terms of skills in diverse areas.
- Requirement of better infrastructure.
- · Placement in Core sector companies.
- · Preparing the students for entrepreneurship.
- Requirement of six months Internship.

Action Plan

- To enhance the infrastructure in terms of GD/PI rooms and number of computers for better process management in view of enhanced intake.
- To organise at least 10 training programs for students to enhance their technical, analytical and soft skill in collaboration with industry in following area:
 - a) Machine Learning
- b) IOT
- c) Data Analytics
- d) Algorithms

- e) Data Structures
- f) Soft Skills
- To develop facilities for industry recognised certification courses to enhance employability of students.
- Enhanced collaboration with industry to indulge in student projects (at least 10) and sponsored research.

- Connect the industry with academic departments for establishment of Centre of Excellence and sponsored Research Labs.
- Feedback of industry to be used for improving our academic processes and curriculum as per requirement.
- Initiatives to help students in getting international internships and placement (Mainly Japan for COE/ME/EE/EC/COE).
- Create the learning resources and share on T&P portal to prepare the students to meet industry expectation.
- Organise orientation program and career counselling sessions for students at early stage to give them enough time to prepare. (At least 8 sessions to cover all years and branches)
- Organise at least two training programs to encourage entrepreneurship.
- Development of Departmental Library to provide common learning resources required for placement.

INFRASTRUCTURE REQUIRED

| STAFF | Existing | Additional Requirement |
|----------------------|----------|------------------------|
| HOD | 1 | - |
| TPO | 0 | +1 |
| Asstt TPO | 1 | - |
| Sr Office Assistant | 1 | +1 |
| Jr Office Assistant | 1 | +1 |
| Attendant | 3 | +1 |
| Infrastructure | | |
| Computers | 290 | +110 |
| GD rooms | 05 | +3 |
| PI rooms | 26 | +20 |
| Presentation Hall | 01 | +1 |
| Departmental Library | - | +1 |

Decision: The Planning Board approved the progress report for two years Strategic Plan (2019-2021) of Training and Placement Department subject to the following condition:

The 'challenges' and 'action plan' mentioned in the proposal should be quantitative and the timeline be indicated.

Agenda 2.5 : Progress report for two years Strategic Plan (2019-2021) for Internal Quality Assurance Cell (IQAC).

The Planning Board was informed that Director, IQAC presented on the subject matter indicating the achievements and future plan along with activities proposed to be undertaken for the betterment of the University in the review meeting held on 20th January 2020. Accordingly, two-years strategic plan (2019-2021) for IQAC was placed before the Planning Board in its 2nd meeting 31.01.2020 as under:

Strategic Plan (2019-21)

A. Scope:

- S1: NBA accreditation of selected courses
- S2: Content development for ICT enabled learning
- S3: IT audit of the university and ERP audit
- S4: Organizing of training/workshop/conferences related to quality
- S5: Implementation of recommendation of Green Audit
- S6: Accreditation of Labs from NABL/DPCC
- S7: Workshop on E-Waste Management
- S8: Safety audit of DTU
- S9: Monthly report collection from various Department/Division
- \$10:Annual report on pattern of NAAC
- S11: IQAC website and interfacing with centralized Database of the University
- S12: Archival register of IQAC
- S13: Academic internal and external Audit
- S14: ISO internal and external audit
- S15: Stakeholder's feedback collection and analysis
- S16: Hiring of the IPR firm/ Attorney to handle the IPR generated from DTU
- \$17: Training/ Awareness programmes about the IPR
- S18: Conduct of student's contest to invite ideas leading to IP generation
- S19: Documentation of standard Non-Disclosure Agreement (NDA) and other standard documents
- S20: Archival of IPR related documents
- S21: To achieve at least 50 patent filing/ year in two years
- S22: IPR Cell web page development

B. Procedure:

S1: On regular basis Courses meeting the STR criteria of NBA will be processed for NBA accreditation. Assessment will be done on following nine broad criteria.

Criterion 1- Vision, Mission and Programme Educational Objectives (PEOs)

Criterion 2- Programme Outcomes

- Criterion 3- Programme Curriculum
- Criterion 4 Students' Performance
- Criterion 5 Faculty Contributions
- Criterion 6 Facilities and Technical Support
- Criterion 7- Academic Support Units and Teaching Learning Process
- Criterion 8 Governance, Institutional Support and Financial Resources
- Criterion 9 Continuous Improvement
- **S2:** Faculty will be encouraged for developing ICT enabled content based on online platforms such as SWAYAM, NPTEL etc. Also in-house MOODLE based content development will be encouraged. The faculty will also be asked to upload assignments online on ERP.
- S3: IT audit will be planned for collecting and evaluating evidence to determine whether a computing/ IT infrastructure meets the standards of safety, privacy, integrity of data so that organizational goals are achieved effectively resources are used efficiently. The ERP system will be reviewed for performance, implementation and ease of operation.
- **S4:** Workshop/symposium/conferences will be organised on themes related to quality issues in Higher Education. A National Conference on Quality in higher education will be organized jointly with ESCI, Hyderabad.
- **S5:** All the 10 recommendations of the Green audit report will be implemented. Concerned departments/branches related to the observations to be facilitated/helped for compliance.
- **S6:** A workshop on NABL accreditation of labs will be conducted for Lab in charges followed by creation of necessary documentation, submission of application and accreditation of few labs.
- **\$7:** E-waste management workshops will be organized.
- **S8:** Potential auditors will be identified and internal and external safety audit will be carried out.
- **S9:** Online data collection system will be created in NAAC Format for monthly report collection from various department/ division.
- **\$10:** Annual Report of the University will be published on NAAC pattern based upon monthly reports of various department/division.
- **\$11:** New features will be added to IQAC website. It will be interfaced with centralized database of the University Data Storage and access.
- **\$12:** A data archival system with required storage and software/ hardware will be created in IQAC to keep all the data and information of University in a structured format.
- \$13: Performa for Academic internal and external Audit will be prepared, experts will be identified and audit will be conducted.
- \$14: ISO internal and external audit will be performed as per schedule.
- **S15:** The Performa for feedback from all Stakeholder's will be prepared for 360-degree feedback collection and analysis. The feedback from students will be collected two times in a year online.
- **\$16:** The hiring of the IPR firm/ attorney will be done through e-tendering process.

- S17: A pool of faculty members has been trained as master trainers who will be conducting regular training/ awareness programmes in their respective departments for faculty and students regarding the IPR. The IPR cell will coordinate these types of awareness programmes. External experts will be invited for lectures from time to time.
 - S18: The students will be encouraged to participate in idea generation contest conducted by IPR cell jointly with E-cell twice a year. The received idea will be screened by a committee. The student whose idea will get shortlisted/selected, allowed to choose a mentor from any department as per idea merit to convert his/her idea to product or process leading to IPR protection.
 - **S19:** The documents like Non-Disclosure Agreement (NDA), Non-Disclosure Form, and other standard documents will be drafted for signing by students, faculty, start-ups and visitors etc. The drafted documents will be submitted to IPR standing committee for approval. The approved documents will be used for IPR related activities.
 - **S20:** The existing IPs of DTU either in the name of University or individual faculty will be documented and kept in IPR cell as record in a structured manner so that it can be retrieved easily when required.
 - **S21:** The procedure for filing of the IPs/ patents are highly simplified so that inventor can focus on invention and not on administrative processes. The Law firm will be hired and inventor has to submit only one document to the IPR cell i.e. disclosure form. Rest of the work of taking approvals, filing to commercialization will be done by IPR cell. This may lead to increase in patents/ IP filing.
 - **S22:** A separate page for IPR cell will be created on DTU website for better interface with stakeholders.

C. Time Lines:

| S. No. | Task | Timeline | Present Status |
|-----------|---|--------------------|--|
| S1 | NBA accreditation of selected courses | Continuous process | SAR of 2 courses submitted. SFR of all programs calculated. Five more programs identified for NBA accreditation. |
| S2 | Content development for ICT enabled learning | Continuous process | Scheme is being designed. |
| S3 | IT audit of the university and ERP audit | January 2020 | ERP audit is in progress, IT audit request is submitted to STQC. Scope of work is under discussion. |
| S4 | Organizing of training/ workshop/conferences related to quality | Continuous process | Workshop on NABL accreditation organized, ISQIHE 2020 is scheduled on 19 March 2020. |

| S5 | Implementation of recommendation of Green Audit | January 2020 | Three recommendation got implemented. Review is scheduled on 22 Jan 2020. |
|-----|--|-------------------------------------|---|
| S6 | Accreditation of Labs from NABL/DPCC | Till July 2021 (in phases) | Work order is placed for accreditation of 4 labs. Work will be completed by October 2020. |
| S7 | Workshop on E-Waste Management | Continuous process | |
| S8 | Safety audit of DTU | January 2020 | Not initiated |
| S9 | Monthly report collection from various Department/Division | At the end of each month | Online system is created and data entry started. |
| S10 | Annual report on pattern of NAAC | Every year in September/ October | Implemented, |
| S11 | IQAC website and interfacing with centralized Database of the university | December 2019 | Website is in place, Database will be shifted/ integrated with centralized database in phases. |
| S12 | Archival register of IQAC | June 2020 | Discussion is going on specification finalization. |
| S13 | Academic internal and external Audit | Continuous process | Scheduled between 23-30 January 2020. |
| S14 | ISO internal and external audit | Continuous process | Completed. |
| S15 | Stakeholder's feedback collection and analysis | Continuous process | System is in place. |
| S16 | Hiring of the IPR firm | March 2020 | Technical evaluation of bids completed, Financial bid is opened, Likely to be completed before March 2020 |
| S17 | Awareness programmes about the IPR | Continuous Process | Going on |
| S18 | Conduct of student's contest to invite ideas leading to IP generation | September 2019 onwards | About 200 ideas have been received, Scrutiny is going on for selecting workable ideas and mentors will be allotted. |
| S19 | Documentation of standard Non-Disclosure Agreement (NDA) and other documents | July 2020 | NDA Approved by BOM and notified |
| S20 | Archival of IPR related documents | July 2020 | Will be implemented along with IQAC system. |
| S21 | To achieve at least 50 patent filing/ year in two years | December 2020 | Work is going on. |
| S22 | IPR Cell web page development | December 2019 | Completed |

D. Man power requirements (in addition to existing):

| S. No. | Task | Manpower |
|------------|--|---------------|
| S1 | NBA accreditation of selected courses | |
| S2 | Content development for ICT enabled learning | 2 USIP Intern |
| S 3 | IT audit of the university and ERP audit | |

| S4 | Organizing of training/workshop/conferences related to quality | |
|-----|--|---------------|
| S5 | Implementation of recommendation of Green Audit | 1 USIP Intern |
| S6 | | 1 USIP Intern |
| | Accreditation of Labs from NABL/DPCC | |
| S7 | Workshop on E-Waste Management | |
| S8 | Safety audit of DTU | |
| S9 | Monthly report collection from various Department/ | |
| | Division | 2 USIP Intern |
| S10 | Annual report on pattern of NAAC | 2 CON MILEM |
| S11 | IQAC website and interfacing with centralized Database | |
| | of the university | |
| S12 | Archival register of IQAC | |
| S13 | Academic internal and external Audit | |
| S14 | ISO internal and external audit | |
| S15 | Stakeholder's feedback collection and analysis | |
| S16 | Hiring of the IPR firm | |
| S17 | Awareness programmes about the IPR | |
| S18 | Conduct of student's contest to invite ideas leading to IP generation | 2 USIP Intern |
| S19 | Documentation of standard Non-Disclosure Agreement (NDA) and other documents | |
| S20 | Archival of IPR related documents | |
| S21 | To achieve at least 50 patent filing/ year in two years | |
| S22 | IPR Cell web page development | |
| | . 0 | |

Decision: The Planning Board approved progress report for two years Strategic Plan (2019-2021) for Internal Quality Assurance Cell (IQAC) subject to the following condition:

The redundant process mentioned in the strategic plan should be done away and emphasis should be laid down on the Plan-Do-Check-Adjust (PDCA) cycling.

Delhi Technological University may also go for accreditation of MBA courses from International Agencies like Association to Advance Collegiate Schools of Business (AACSB).

Agenda 2.6 : Progress report for two years Strategic Plan (2019-2021) of office of Deans of the University.

The Planning Board was informed that review meeting of short term strategic plan (2019-2021) with all the Deans of the University was held under the chairmanship of Hon'ble Vice Chancellor, DTU on 20th January 2020. Each Dean gave presentation on the subject matter mentioning his actions and aims proposed to be achieved along with time period of his activity. Few suggestions were recommended by the members to further streamline their activities in the interest of the University. The Deans have submitted their Strategic Plans for two years (2019-2021) which were placed before the Planning Board in the meeting. Dean - Industrial Research and Development, Dean - International Affairs and Dean - Academic (UG) presented their two-year strategic plan (2019-2021) before the members of the Planning Board.

1. DEAN - INDUSTRIAL RESEARCH & DEVELOPMENT

IRD division is committed to University's Strategic Plan 2019-2030

Two Years Strategic Term Plan For Two Years From August 2019 To July 2021

Name of Department: Industrial Research & Development (IRD)

Key Achievements of Department

- Design and development of Research policy in 2019
- Constituted Research Excellence Award in 2017
- Development of Research Track and Product Track in 2019
- Revision of Major Project Grading in 2019
- Participation in Times World Rankings in 2019
- Conducting workshops to promote research at undergraduate and postgraduate level.
- Development of policy to promote industry and academia relationship in 2019
- Revision of Consultancy guidelines in 2019

Research Goals

- Rankings: To promote research w.r.t. various parameters in national and international ranking
- 2. **Visibility:** To improve national and international visibility for research and development
- Collaborations: To promote and encourage research collaborations with industry
- 4. Research Projects: To motivate faculty to enhance the number of research applications for project grants

Research Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1. | h-index of the university | 71 | 95 | 2021 |
| 2. | Citations of the university | 38779 | 50000 | 2021 |
| 3, | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 4777 | 5300 | 2021 |
| 4. | DTU Research Projects | 16 | 32 | 2021 |
| 5, | Number of Research Projects (more than 5 Lacs each) | 21 | 31 | 2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | 22 | 24 | 2021 |
| 7 | Number of Consultancy Projects (between 1 Lac to 5 Lac) | 5 | 5 | 2021 |
| 8 | Number of Patents:- (a) Filed | | | |
| | (b) Published | 05 | 10 | 2021 |
| | (c) Granted | 03 | 05 | 2021 |

Strategic Plan 2019-21

• Education

| Action | Target | Goal |
|--|---|---------|
| To add research and product tracks in curriculum | Track already added in the curriculum. To increase number of students in Research Track from 22 to 60 in 2021. | Ranking |
| To promote research publications at undergraduate and postgraduate level in curriculum | Added publication outcome in research track Added publication outcome in Major Project in B.Tech and M.Tech curriculum Add publication outcome in management courses by 2021. | Ranking |
| To increase research interns in university | To increase research interns from 6 to 18 till 2021 as part of research projects being granted to faculty. | Ranking |

• Research

| Action | Target | Goal |
|--|---|----------------------------------|
| To provide support to faculty or carrying out research with an expected outcome in terms of high impact publications and/or patents. | Already in progress by providing funds for research projects, awards for research publications. Increasing from 16 DTU research projects to 32 | Research Projects, Ranking |
| | research projects till 2021. | |
| To promote research at undergraduate level by motivating and encouraging students to pursue research track. | Already conducted one awareness workshop and to conduct atleast 3 awareness workshops till 2021 | Ranking |
| To provide advice for writing research papers and plagiarism to undergraduate students | To conduct alteast 4 awareness workshops till 2021 | Ranking |
| Increase number of Ph.D and post doctorate students. | To add atleast 100 Ph.Ds till 2021 | Ranking |
| Institute a research grant for transdisciplinary research. | To achieve the mission till 2021 | Collaboration |
| Promote research awards for high quality publications. | Increase h-index from 69 to 85 till 2021. | Ranking |
| | Research awards being awarded to researchers yearly. | |
| To provide advice for applying for projects and awards. | 1) To add 10 new research projects by 2021. | Research Projects, Ranking |
| | 2) Devise booklet till 2020 and conduct atleast 4 workshops from various agencies till 2021. | |



| Action | Target | Goal |
|---|---|---------------|
| Identify sources of new funding and conduct awareness workshops for motivating faculty to apply for research projects in these funding agencies. | To add 10 new research projects by 2021. Devise booklet till 2020 and conduct atleast 4 workshops from various agencies till 2021. | Ranking |
| To increase research laboratories with collaboration with industry | To add atleast 4 research laboratories till 2021. | Collaboration |
| To create an archive consisting of pre-print of publications of DTU faculty after verifying the copyright conditions/access policy of the respective publication from SHERPA/RoMEO. | maintained by individual faculty on the digital space | Visibility |
| To increase faculty and student travel grants for presenting and publishing their work in Scopus indexed publications. | Policy already in place | Visibility |
| Design and draft policy for enabling research collaborations of faculty with industry. | Already achieved | Collaboration |

Innovation & Entrepreneurship and Finance

| Action | Target | Goal |
|--------|--|---------|
| | To increase the consultancy income from ₹10.5 crores to ₹12 crores by 2021 | Ranking |

Faculty and Staff

| Action | Target | Goal |
|--------------------------|---|------|
| To increase Ph.D faculty | High quality publications already given weightage in Exemption of Faculty recruitment examination | |

2. DEAN - INTERNATIONAL AFFAIRS

Name of Department

Office of International Affairs (OIA)

Year of Establishment

October, 2016

Vision: To act as a key node in the national and International knowledge network providing information and access to global opportunities

Mission:

> Engages DTU's students & faculty in educational and research experiences internationally.

> Facilitates the integration of international students and scholars into DTU's world of knowledge

Building international bridges to foster excellence in Science, Technology & Management

Information Exchange on collaborations and projection of academic expertise of the DTU for the benefit of human race

Key Achievements of OIA:-

| AY | 2016 - 17 | 2017 - 18 | 2018 - 19 |
|-------------------|-----------|-----------|-----------|
| Particulars | | | |
| Students admitted | | 108 | 176 |
| MoU signed | - | 3 | 18 |
| Student Mobility | 14 | 12 | 14 |

Education:

i. Academic details:- Foreign Students

| Sr. No. | Action | Existing | Target(s) admission 2020-21 | Date of Achievement(s) |
|------------|---|--------------|-----------------------------------|------------------------|
| 1. | Number of UG | Male - 314 | 181 | |
| | Students | Female - 87 | | |
| 2. | Number of PG | Male - 46 | 51 | |
| | Students | Female – 16 | | |
| 3. | Number of Ph.D. | Male - 19 | 15 | |
| 54 | Students | Female - 2 | | |
| 4. | Annual Intake:- | B.Tech - 285 | | |
| | | BBA - 18 | | |
| | (a) UG | BA - 18 | | |
| | | B.Des - 9 | | |
| | (b) PG | M.Tech -60 | | |
| | | MBA - 18 | 1 | |
| | | MBA(BA) - 9 | | |
| 5. | Percentage of Female Students in the Department | 22% | 29% | |

ii. Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|--------------------|--------------------------------|--|
| 1,. | UG Programs | | 181 |
| | a) ECE | 27 | 16 |
| | b) COE | 54 | 50 |
| | c) ME | 36 | 15 |
| | d) EE | 36 | 16 |
| | e) PIE | 9 | 4 |
| | f) CE | 18 | 13 |
| | g) ENE | 9 | 3 |
| | h) PCT | 9 | - |
| | i) IT | 18 | 15 |
| | i) BT | 9 | 1 |
| | k) SE | 18 | 16 |
| | I) MAM | 9 | 8 |
| | m) EP | 15 | 3 |
| | n) MC | 18 | 8 |
| | B.DÉS | 9 | • |
| | BA (ECO) | 18 | - |
| | BBA | 18 | - |
| 2. | PG Programs | | - |
| | (a) PTE | 3 | 1 |
| | (b) NST | 3 | - |
| | (c) BÍO | 3 | - |
| | (d) BME | 3 | - |
| | (e) IBT | 3 | - |
| | (f) GTE | 3 | 2 |
| | (g) HRE | 3 | 2 |
| | (h) STE | 3 | - |
| | (i) CSE | 3 | 3 |
| | (j) SWE | 3 | 2 |
| | (k) ISY | 3 | 2 |
| | (I) MOCE | 3 | - |
| | (m)SPD | 3 | 3 |
| | (n) VLS | 3 | 1 |
| | (o) C & I | 3 | 1 |
| | (p) PSY | 3 | 1 |
| | (q) ENE | 3 3 | 3 |
| | (r) CDN | 3 | - |
| | (s) PIE | 3 | - |
| | (t) THE | 3 | _ |
| | MBA | 18 | 8 |
| | MBA (B.A) | 9 | - |
| | Total | | 197 |

Details of MOUs with National & International Institutions/Organisations:-

| | Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the las five years (only functional MoUs with ongoing activities to be considered) | | | | uring the last | |
|---|--|--|---------------------------|--|--|--|
| | Organization with which MoU is signed | Name of the institution/ industry/ corporate house | Year of signing MoU | Duration | List the actual activities under each MoU year wise | Number of students/ teachers participated under MoUs |
| 1 | University of Houston, Texas | Cullen College of Engineering | 2017 | 5 years | Knowledge sharing | .1 |
| 2 | Illinois Institute of Technology, Chicago | | 2017 | 5 years | Knowledge sharing | |
| 3 | University of Alcala, Spain | | 2017 | 4 years | Knowledge sharing | GIAN Program (Students – 40 Attended the lectures.) |
| 4 | The University of South Florida | | 2015 | 5 years | Knowledge sharing | |
| 5 | "n+i" Network of Engineering Institutes called "n+i" | | 2013 | years (autom atically renew ed for an additio nal 4 years) | Knowledge sharing | |
| 6 | Chaoyang University of Technology, Taiwan | | 2015 | 2 years | Knowledge sharing | |
| 7 | University of Birmingham | | 2013 | 3 years | Knowledge sharing | |
| 8 | Tashkent University of Information Technologies named after Muhammad Al- Khwarizmi, Uzbekistan. | | 2018 | 5 years | Knowledge sharing | × |

| 9 | The Board of Regents of the University System of Georgia | The University of Georgia, Athens, Georgia, U.S.A | 2018 | 5 years | Knowledge sharing | |
|----|---|--|-------|-------------|-----------------------|--|
| 10 | Nanyang Technological University, Singapore | | 2018 | 5 years | Internship program | |
| 11 | EPF, ÈCOLE D INGÈNIEUR – È – S, France | (6) (6) | ,2019 | 5 years | 0 % | |
| 12 | Balitar Islamic University, East Java, Indonesia | | 2019 | 5 years | | |
| 13 | Dr. Soetomo University, Surabaya, Indonesia | | 2019 | 5 years | | |
| 14 | Mandala College of Economics, East Java, Indonesia | 1 | 2019 | -5 years | | |
| 15 | PGRI Adi Buana, East Java, Indonesia | | 2019 | 5 years | | |
| 16 | STIE Wilwatikta, East Java, Indonesia | | 2019 | 5 years | | |
| 17 | STIKI Malang, East Java, Indonesia | | 2019 | 5 years | | |
| 18 | STTM, East Java, Indonesia | | 2019 | 5 years | | |
| 19 | Universitas Wisnuwardhana Malang, East Java, Indonesia | | 2019 | 5 years | | |
| 20 | University of Kanjurahan, East Java, Indonesia | | 2019 | 5 years | | |
| 21 | University of Pesantren Tinggi Darul'Ulum, Jombang Indonesia | | 2019 | 5 years | | |
| 22 | Widya Kartika University, Surabaya, Indonesia | | 2019 | 5 years | | |

| 23 | PGRI, Madiun | 2019 | 5 years | = | = , |
|----|--|------|------------|---|-----|
| 24 | STT Atlas Nusantara, Malang | 2019 | 5 years | | |
| 25 | Nanjing University of Aeronautics & Astronautics, China | 2019 | 5 years | | |
| 26 | Royal University of Bhutan | 2019 | 5 years | Signed MoU has been posted in Dec 2019 | 1 |
| 27 | University of Transport Technology, Vietnam | 2019 | 5 years | Signed MoU has been posted in Nov 2019 | |
| 28 | Universitas Mercu Buana, Jakarta, Indonesia | 2019 | 5 Years | In process | |
| 29 | Universitas Muhammadiyah Surakarta, Central Java, Indonesia | 2019 | 5 Years | In process | |
| 30 | La Trobe University, Vitoria, Australia | 2019 | 5 Years | In process | |
| 31 | Riga Technical University, Latvia. | 2019 | 5 Years | Signed copies of MoU taken by Ms. Purlaura on the day of their visit to DTU on 02.12.2019 | |
| 32 | Mapua University, Philippines | 2019 | 5 Years | In process | |
| 33 | National Formosa University, Taiwan | 2020 | 5 Years | Signed copies of MoU taken the delegation on the day of their visit to DTU on 17.1.2020 | |

Any other details:-

Inward:

Faculty Mobility: Prof. John H.T. Loung, Adjunct Professor, Department of Biotechnology, University College, Cork, Ireland

Faculty Mobility : 2018-19 $\stackrel{\checkmark}{-}$ Nil, ; 2019-20 $\stackrel{}{-}$ 2% of eligible faculty strength, Target $\stackrel{}{-}$ 2020-21 $\stackrel{}{-}$ 3%

The count shall also include visiting professors under GIAN, SPARC, International conference and workshops besides visiting faculty under MoUs, USIEF, ERASMUS & other mobility grants.

Outward

Student Mobility: 2018-19 - 14, 2019-20 - 30, Target 2020-21 - 60

Faculty Mobility: 2018-19 - Nil, 2019-20 - 1% of eligible faculty strength,

Target - 2020-21 - 2%

3. DEAN- ACADEMIC (PG)

Two Years Strategic Term Plan For Two Years From August 2019 To July 2021

Name of Department

: Academic - PG

Year of Establishment

: 2015

Details of UG & PG Courses: -

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|---------|---|------------------|------------------|---|
| 1 | MBA | 120 | 2009 | 117 |
| 2 | MBA (Executive) | 60 | 2013 | 49 |
| 3 | MBA (USME) | 60 | 2017 | 26 |
| 4 | MBA (Business Analytics) | 30 | 2018 | 22 |
| 5 | MBA (Innovation, Entrepreneurship and venture Development) (IEV) | 34 | 2019 | 11 |
| 6 | MBA (Family Business & Entrepreneurship) (FBE) | 34 | 2019 | 16 |
| 7 | MSc. Mathematics | 33 | 2019 | 31 |
| 8 | MSc. Physics | 33 | 2019 | 33 |

| 9 | MSc. Biotechnology | 35 | 2019 | 35 |
|----|--|----|------|----------------------|
| 10 | Bioinformatics (Bio) | 22 | 2010 | 06 |
| | Bio-Medical | 20 | 2013 | 06 |
| 11 | Engineering (BME) | | | |
| 12 | Computational Design (CDN) | 20 | 2013 | 00 (Merged with PIE) |
| 13 | Control & | 22 | 2009 | 20 |
| 13 | Instrumentation (C&I) | | 2000 | |
| 14 | Computer Science & Engineering (CSE) | 22 | 2010 | 22 |
| 15 | Environmental Engineering (ENE) | 22 | 2010 | 17 |
| 16 | Geotechnical Engineering (GTE) | 22 | 2010 | 20 |
| 17 | Hydraulics & water Resources Engineering (HFE) | 21 | 2010 | 17 |
| 18 | Industrial Bio Technology (IBT) | 21 | 2013 | 05 |
| 19 | Information System (ISY) | 22 | 2009 | 18 |
| 20 | Microwave & Optical Communication Engineering. (MOC) | 21 | 2009 | 03 |
| 21 | Nano Science & Technology (NST) | 22 | 2009 | 01 |
| 22 | Production Engineering. (PIE) | 22 | 2010 | 14 |
| 23 | Power System (PSY) | 22 | 2009 | 22 |
| 24 | Polymer Technology (PTE) | 22 | 2010 | 03 |
| 25 | Signal Processing & Digital Design (SPD) | 22 | 2010 | 20 |
| 26 | Structural Engineering (STE) | 22 | 2010 | 19 |
| 27 | Software Engineering (SWE) | 22 | 2009 | 19 |
| 28 | Thermal Engineering (THE) | 22 | 2010 | 22 |
| 29 | VLSI Design and Embedded System (VLS) | 22 | 2009 | 21 |
| 30 | Geoinformatics (GINF) | 18 | 2019 | 03 |

Key Achievements of Department: - 1. DTU Fellowship
2. Enhancement of DTU Fellowship
3. Excellence in Teaching Award

Education

Academic details: -

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|---|--|------------------------|
| 1. | Number of UG Students | = | * | , , |
| 2. | Number of PG Students | 1214 | 1427 | July 2021 |
| 3. | Number of Ph.D. Students | 1105 | 1305 | July 2021 |
| 4. | Annual Intake: - (a) UG | - | - | |
| | (b) PG | 2018-964 2019-1192 | 1427 | July 2021 |
| 5. | Number of UG Programs | E | = == | |
| 6. | Number of PG Programs | 03 (i) MBA – 6 (ii) M.Tech – 21. (iii) M.Sc. – 3 | (i) MBA - 8 (ii) M.Tech - 25 (iii) M.Sc - 4 | July 2021 |
| 7. | DTU Ph.D. Teaching- cum-Research Fellowships | 03 | 06 | July 2021 |
| 8, | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 112 | 120 | July 2021 |
| 9. | Development of MOOCs Courses | • | =) | |
| 10. | Percentage of Female Students in the Department | 32.15% | 40% | July 2021 |
| 11. | Number of Foreign Students:- (a) UG | 9 | 9) | |
| | (b) PG | 52 (MBA-21 M.Tech31) | 72 | July 2021 |
| | (c) Ph.D. | 17 | 25 | July 2021 |

Details of admitted students: -

| Sr. No. | Prog | rams (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|------|----------------|-----------------------------|--|
| 1. | PG P | rograms | | |
| | (a) | M. Sc. | 101 | 99 |
| | (b) | MBA | 338 | 249 |
| | (c) | M. Tech | 753 | 315 |

Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|--------------------------------------|---------------|-----------------------------------|
| | MSc. Chemistry | 33 | July 2021 |
| | M.Tech. Power Electronics and System | 22 | July 2021 |

4. DEAN-OUTREACH AND EXTENSION ACTIVITIES

Strategic Plan of Centre for Extension and Field Outreach 2019-21

VISION: To use technological innovations for improving outreach access and effectiveness of educational promotion and strength for the society, to utilize human resource potential and march ahead for skill development while conducting outreach activities through the Centre

MISSION:

- 1. To make people aware of the benefits of general and technical education in particular. Also to encourage them enrol themselves and their family members in the desired field;
- To develop skill and entrepreneurship enthusiasm among learners for strengthening the human resource potential in engineering and social activities;
- 3. To use technological innovations for improving outreach access and effectiveness of educational promotion;
- 4. To provide quality, relevant and equitable training to skill workers and develop an inter-sectorial interface.



Targets and Goals:

- > To expand in meaningful, productive and more sustained manner having good rapport between the University and the community.
- > To increase knowledge and other institutional resources for the community at large.
- To gain insights and experience from a contact between knowledge resources and socio cultural realities with a view to refine the same in the entire academic system.
- > To conduct expert lectures for students, faculty and others.
- > To facilitate an intellectual interaction for residents of the villages regarding sanitation, road safety, health etc.

Broad Categories of Programme

- 1. Services to Schools and Colleges
- 2. Services to the Community
- 3. Services in the University Campus

Proposed programme in Capacity Building

- A. Laboratory testing in soil mechanics
- B. Laboratory material testing
- C. Laboratory testing of highway material
- D. Testing in Field laboratory
- E. Field testing
- F. Training to the site staff
- G. Training to the Masson
- H. Training to the Barbinder
- I. Training to the shuttering staff
- J. Training to the concreting staff
- K. Training of Electrical maintenance
- L. Training of Mechanical maintenance
- M. Training of I/C engines
- N. Training of Welding
- O. Training of CNC machine
- P. Training of Basic computer course
- Q. Training for Repair of Electronic Devices & Computers, etc

Proposed Programme in Service to Humanity

- A. Legal Literacy
- B. Social, Gender issues and inclusiveness
- C. Environmental Education
- D. Communal harmony and peace education
- E. Population Education

- F. Human rights and rights of Vulnerable groups
- G. Sanitation and Hygiene
- H. National Food Security Act and Public Distribution System
- I. Rain water Harvesting
- J. Panchayats and Development Issues
- K. Health Education for the Community and through the Health Care Center of the University.
- L. Awareness against tobacco, alcohol and drug abuse
- M. Open House for students of nearby school
- N. PAN India & International event to create awareness about research
- O. Adoption of some Govt. School to make it a role model school particularly science stream
- P. Community Education System
- Q. Digital literacy
- R. Legal Literacy
- S. Creche for the kids of construction and Industry workers
- T. Special help class/coaching for kids working as House help/un organised industries
- U. Health safety training to garbage pickers and segregator
- V. Traffic safety training
- W. Tips for Disaster management like Fire, Earthquake etc.
- X. Nature and Health
- Y. Yoga, meditation etc for combating stress

Five villages adopted by DTU

- 1. Barwala
- 2. Sahbad Dauatpur
- 3. Siraspur
- 4. Bhalaswa Jahangirpuri
- 5. Pehladpur Bangar

Strategic Plan 2019-30

- Increase the classes in Govt. Schools from 12 to 25
- Start Foundation Elective- Outreach Activities (for 2 credits)
- > To cover all the nearby school children in open house
- School on wheels to impart education to the under privileged children of nearby villages from 1 to 10
- > Capacity building for 1000 unskilled workers
- Health awareness camp for community residing in slum and nearby villages
- > Health awareness camp for DTU faculty member, staff, student and resident

Term Plan 2019-21

- Increase the classes in Govt. Schools from 12 to 25
- Start Foundation Elective- Outreach Activities (for 2 credits)
- > To cover all the nearby school children in open house
- School on wheels to impart education or other facilities to the under privileged children of nearby villages
- > Capacity building for 100 unskilled workers
- ➤ Health awareness camp for community residing in slum and nearby villages
- > Health awareness camp for DTU faculty member, staff, student and resident

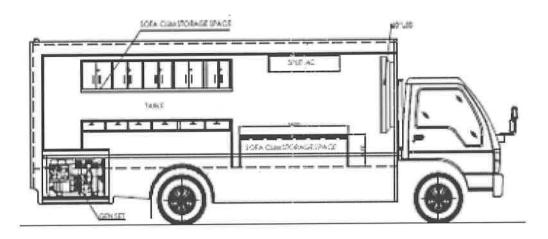
Term Plan 2019-21

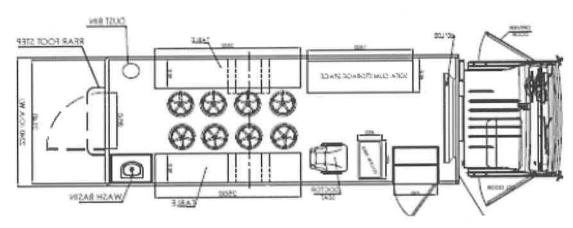
- Increased the classes in Govt. Schools from 10 to 17
- Started Foundation Elective- Outreach Activities (for 2 credits)
- Covering all the nearby school children in open house program
- > Lab on wheels is under progress (tendered) for the under privileged children of nearby villages
- Capacity building for 100 unskilled workers
- ➤ Health awareness camp for community residing in slum and nearby villages (Activities are performed under (FEC-52)
- ➤ Health awareness camp for DTU faculty member, staff, student and resident (to be done)

Strategic Plan 2019-21

- Under UBA the DTU has already adopted 5 villages
- ➤ In these villages and other Govt schools the Centre has increased the number of Govt. Schools from 10 to 17.
- > Started Foundation Elective- Outreach Activities (for 2 credits)
- > Under the FEC-52 the last odd semester 60 students were registered
- > In the current even semester 181 students have registered
- > All students under FEC-52 are working on different projects
- > The Centre for Extension and Field Outreach, the Centre has already started to cover all the nearby school children in open house program
- > The students of approximately 5 schools have visited the DTU under open house program.
- > Every visit of students has approx 60 students in each group.
- > The students basically consists of 11th and 12th standard students
- ➤ Health awareness camp for community residing in slum and nearby villages (Activities are performed under (FEC-52)
- A few groups of students registered under FEC-52 focussed on under privileged areas regarding health awareness amongst the masses
- Such projects cover whole Delhi city which was covered by one or two groups of FEC-52







| S.No. | Specification | |
|-------|---------------|------|
| 1 | Length | 6399 |
| 2 | Width | 2240 |
| 3 | Height | 2850 |
| 4 | Wheel Base | 2225 |

5. DEAN- STUDENT WELFARE

Strategic Plan 2019-21

Financial Support for organizing student Activity

| S.No. | Student Activity | 2018-19 | 2019-20 | 2020-21 |
|-------|---|-------------|-------------|-------------|
| 001 | Sports activity | 41,87,124/- | 45,00,000/- | 48,00,000/- |
| 002 | Cultural festival | 22,00,000/- | 24,00,000/- | 28,00,000/- |
| 003 | Literary festival | 9,00,000/- | 10,00,000/- | 15,00,000/- |
| 004 | Technical Festival | 13,00,000/- | 15,00,000/- | 16,50,000/- |
| 004 | Others (NSS, NCC, MUN, E-summit, TEDx etc.) | 13,25,175/- | 14,50,000/- | 15,50,000/- |

Financial Support for student Research

| S.No. | Student Activity | 2018-19 | 2019-20 | 2020-21 |
|-------|---|-------------|-------------|-------------|
| 001 | Research Paper presentation (both national and international conferences) | 3,00,000/- | 5,00,000/- | 15,00,000/- |
| 002 | Internship (both national and international) | 5,92,500/- | 15,00,000/- | 25,00,000/- |
| 003 | Participation in events (both national and international) | | | |
| 004 | Innovative research projects | 21,71,552/- | 43,00,000/- | 50,00,000/- |
| 005 | Industrial visits | 31,92,512/- | 32,00,000/- | 40,50,000/- |
| 006 | Hackathon | | | |

Financial Support for Infrastructure

- 1. Student activity centre
- 2. Concert ground
- 3. Renovation of Gymnasium

6. DEAN- Academic (UG)

Strategic Term Plan 2019-21

The Academic UG Section is the facilitating link among University academic
departments HODs/School heads, faculty members, students and the
University administration. All activities and roles of this section are
undertaken in light of furthering the best interests of the students of Delhi
Technological University. This office provides supports to Departments/
Schools in a manner that promotes excellence in teaching learning process,
scholarly and creativity among students.

The section ensures framing and implementation of academic policies/regulations in compliance with the University's Act and Statutes, ordinance and regulations and other Government policies/ schemes/ directions.

There are 8 staff members including 1 Dealing Assistant, 1 Junior Office Assistant, 4 Data Entry Operators and a Multi-Tasking Staff in the section. At supervisory level one section officer, Associate Dean and Dean Academic. The total strength of staff and officers in the section is 9.

The section handles following administrative activities pertaining to students' related matters- Framing /planning curriculum development, revising academic ordinances and regulations, Academic Calendar, matrix/admissions in different undergraduate programs, orientation of newly admitted students, printing and issue of Id-Cards, students' academic records, allocations of class rooms, central time table and grade moderation for first year; coordination of Foundation Electives, and elective courses on Research work, Product development, Entrepreneurship and Venture Development related tracks; issuance of various certificates such as Provisional, Bonafide, Character, Migration, Fee Structure, Transcripts; processing Course/ Semester/ Year/ admission withdrawal requests/ cancellation of admissions, refund of Security Money; Attendance Monitoring, examining the cases of mid and end term makeup examination; Fee Monitoring, handling DTU Fee Concession and DTU Merit Scholarship; Govt. Scholarships, processing requests of students for financial assistance for Conferences/ Competitions/ Academic activities/ Internship etc. Additionally, the section handles all the students' related activities for Convocation which is the most ceremonial function of the University.

DTU offers following Undergraduate Programs -B.Tech, B.Tech (Continuing Education), B.Des, BA(H) ECO and BBA and currently the details of present the UG students is as under:

| Program | YEAR | Sanctioned intake (Including DASA & FN) | Total Number of Students | Students Admitted | TOTAL |
|--|------|--|--------------------------------|-------------------------|-------|
| | 2k16 | 1883 | | 1836 | |
| B.Tech | 2k17 | 2210 | 8703 | 2049 | 8294 |
| (including LE) | 2k18 | 2210 | 6703 | 2104 | 0234 |
| , | 2k19 | 2400 | | 2305 | |
| | 2K17 | 120 | | 117 | |
| BBA | 2K18 | 120 | 372 | 116 133 96 118 | 366 |
| | 2K19 | 132 | | 133 | |
| | 2K17 | 120 | | | 342 |
| BAE | 2K18 | 120 | 372 | | |
| | 2K19 | 132 | | | |
| D DEO | 2K18 | 60 | 106 58 | 124 | |
| B.DES | 2K19 | 66 | 126 | 66 | 124 |
| | 2k16 | 182 | | 98 | |
| B.Tech (Cont. | 2k17 | 240 | 000 | 209 | 578 |
| Edu) | 2k18 | 240 | 862 | 223 | 5/0 |
| • | 2k19 | 200 | | 48 | |
| Total UG Students | | | 10435 | | 9704 |
| UG Student Intake/Admissions in 2k19 | | | 2930 | | 2680 |

Strategic Term Plan 2019-21

In line with Strategic Term Plan 2019-21 of DTU the the Strategic Term Plan 2019-21 of UG section is prepared with a focus on increased intake, extending financial support to students of low income group, travel grant to attend conference/workshops and increasing number of student registrations in three tracks of electives namely research, product development and entrepreneurship which will lead to enhanced research outcome and patents filed/publications.

1. Increase in Student Intake at UG level programs (Implementation of EWS quota)

| Intake | Existin | ng 2019-20 | Target 2020-21 | | |
|----------------|------------|---|--|------------------------|--|
| Seats | Sanctioned | Supernumerary (DASA/FN/SII) (15%) | Sanctioned (Increase In- take due to EWS) | Supernumerary (15%) | |
| B.Tech | 2115 | 285 | 2399 | 318 | |
| B.Des | 66 | 09 | 70 | 10 | |
| BBA | 132 | 18 | 152 | 20 | |
| B.A (H) Eco | 132 | 18 | 152 | 20 | |

2. Financial Assistance to Students

- (i) Fee Concession to the students whose family income < Rs. 4.5 Lakh per annum are given for 50/100% tuition fee waiver. In exceptional cases the full fee concession is also granted based on the family income of the students.
- (ii) Travel grant to students for attending conferences/workshops (Once in 4/3 yrs of study at DTU).
- (iii) Merit scholarship to the toppers of each branch of B.Tech programs.

| Head | Expenditure (Till date) | Target Expenditure |
|-------------------|-------------------------|--------------------|
| | 2019-20 | 2020-21 |
| Fee Concession | 5,13,73125/- | 6,25,00,000/- |
| Travel Grant | 3,72,031/- | 10,00,000/- |
| Merit Scholarship | 7,30,000/- | 8,20,000/- |

3. Provisions for Research Project/Mini Project/Entrepreneurship and Venture Development track in B.Tech Curriculum

To promote research, innovation and entrepreneurship among the UG students three track in elective courses are offered namely (a) Research project (b) Mini Project and (c) Entrepreneurship and Venture Development. A student may register for research project/mini project/Entrepreneurship course of 04 credits in V semester against his/her DEC/GEC course. The outcome of the research/project work would be considered for the award of the credits based upon published work/Product developed/Venture development.

| Courses | Registered students 2019-20 | Expected Registration 2020-21 |
|---|-----------------------------|-------------------------------|
| Research Project | 21 | 45 |
| Mini Projects | 39 | 60 |
| Entrepreneurship and Venture development | 13 | 20 |

7. DEAN- ALUMNI AFFAIRS

Two years Strategic plan for Alumni Office (2020-2022).

Under the esteemed leadership of Prof. Yogesh Singh, Hon'ble Vice chancellor of DTU; the main aim of alumni office is to closely in touch with alumni to understand how to engage the alumni network and job market in the benefit of our current students and at large the University and nation. Furthermore, alumni affairs office, DTU is a connecting link between alumni activities and DTU. DTU office of alumni affairs is also taking active participation in the alumni associations meet, arranging annual meet of golden and silver jubilee events, sponsorship programme for B.Tech, M.Tech. and PhD students. Another work of this office is to enable alumni to understand the need of their alma mater in terms of sponsorship and infrastructure development. Furthermore, Alumni affairs office is also updating the activities of alumni portal at DTU web page. In order to strengthen the alumni and to better connect with such a diverged flag bearers of the University, we are establishing many outreach efforts, for instance, over the years we have developed many databases, alumni affairs website, Facebook, LinkedIn and WhatsApp groups. Currently, we have American, European, Singapore, Middle East groups apart from national/local chapters of Bangalore, Delhi and Hyderabad. The outcome of our alumni accomplishments routinely published in the university news bulletin "DTU times". Our DCE DTU alumni association is very strong and active in arranging yearly Silver and Golden Jubilee alumni meet. After, that overseas chapter meets, several alumni visited their alma mater and many new initiatives have been started. Further, it also encouraged many alumni to

donate/contribute funds for the development of their alma mater. Our prestigious alumni "Shri Vinod Dham, Dr. Durga Das Agarwal, Ashok Nangia and many more have contributed thousands of Dollars to DTU. This was culminating with a biggest ever donation by our illustrious Indian American philanthropist Dr. Rajesh Kumar Soin Alias Raj Soin (1959 batch of DCE) to DTU. He has signed a MoU and provided Rs. 5 crores for the construction of Multipurpose hall now renamed "Raj soin Hall." The first instalment of around 2.6 crores has been sent by Dr. Rai Soin to DTU. Recently with the initiative of our alum 2002 batch Dr. Hitesh Handa and Prof. Pravir Kumar, MoU agreement has been signed between University of Georgia, Athens and DTU. In addition to that, DTU alumni office has started providing alumni card to pass out DTU students, Souvenir shop, lecture series, close interaction with DCE DTU association headed by IPS officer and renounded educationist Dr. Muktesh Chander, DGP of Goa. For the first-time, DTU has organized: homecoming meets for Diamond (1959 batch) and Golden Jubilee (1969) batches on February 8-9th February, 2019 to recognize our alumni. Under the dynamic leadership of our Hon'ble Vice chancellor Prof. Yogesh Singh, alumni office is bound to provide a nostalgic interaction with all alumni, creation of opportunity for internship, fund-raising for infrastructure development, seminar series and workshop.

With reference to the notification F. DTU/Registrar/Gen. Corres./2017-18/1337 dated 14.06.2019, I am hereby enclosing the 2 years strategic plan of alumni office for your kind attention and advise.

- (1) Generation of funds up to TWENTY CRORES from Alumni in the form of infrastructure development, endowment, fellowship, centre establishment or installation of statues in the university.
- (2) Strengthen of alumni networking through **UPDATION** in the web portal so that interaction between university and alumni will be re- established.
- (3) Goal is to connect at the least another 10,000 ALUMNI with university.
- (4) Identification of alumni who are **ENTREPRENEURS** and can provide jobs to our recent passed out B.Tech of M.Tech. Students or young DTU Alumni.
- (5) Establishment of a **JOB PORTAL BY ALUMNI** in our training and placement division.
- (6) **REINFORCEMENT OF DTU-IIF** through by direct involvement of Alumni who are interested in new start-up at DTU along with monetary aids.
- (7) Establishment of RESEARCH CENTERS with the help of notable Alumni.
- (8) Plan to establish an AVIONICS AND SEMICONDUCTOR SUPER SPECIALITY LABORATORY by Sh. Vinod Dham in this year with the help of Government of India.
- (9) Establishment of CENTRE FOR CLEAN AND GREEN ENERGY by Prof. Yogi Goswami together with Ministry of New and renewable Energy (MNRE), Government of India.



WORK DONE SO FAR:

- i. Alumni meet of 1974 batches of DCE on 26th July on DTU main campus and Kashmiri gate campus. Participation of more than 40 alumni.
- ii. Alumni meet on 10.01.2020 and 11.01.2020 with the participation of more than 110, Alumni of 1970 batches both days followed by visit of DCE Old campus, Kashmiri Gate.
- iii. Raj Soin hall is under progress and so far more than 60% work is achieved. DTU has received 3.75, Crores from Mr. Raj Soin and remaining amount of 1.25 Crores will be received upon completion.
- iv. Establishment of center for green and clean energy by Professor Yogi Goswami (1969, Mechanical Engineering Graduate of DCE). So far 50,000\$ has been received from Professor Goswami.
- v. Institution of new scholarship by Goswami brothers for students whose parents are school teachers.

8. DEAN-CONTINUING EDUCATION

| S.N | Action | Existing | Target | Date of Achievement |
|-----|--------------------------|----------|---|------------------------|
| 1 | Staff | | | |
| 2 | Activities Time Limit | Nil | To start certificate programs of six or twelve months duration for developing vocational skills and professional competencies among technical, marginal, professional, industrial and unemployed youth through in-service programs. | August, 2020 |

Decision: The Planning Board took the progress report for two years Strategic Plan (2019-2021) of office of Deans of the University and approved the plans of Dean-IRD, Dean-International Affairs and Dean-Academic (UG). The Board also recommended the following:

- i. The Dean, IRD should set the goals for five years.
- ii. Every faculty should publish at least one paper in each year.
- iii. Efforts should be made to enhance the consultancy value from Rs. 10.5 crores to 12 crores in two years.
- iv. The Dean Academic (UG) was informed that the maximum duration for completion of the undergraduate programme should be taken as (n+2) where 'n' is the duration of each undergraduate programme, as per the revised UGC norms.

Progress reports of the offices of remaining Deans have been taken on record.

Agenda 2.7: Progress report for two years Strategic Plan (2019-21) in respect of Academic Departments of the University.

The Planning Board was informed that review meeting of short term strategic plan (2019-2021) with all Heads of the academic departments was held under the chairmanship of Hon'ble Vice Chancellor, DTU on 16th of January 2020. During the course of deliberations, a common format was designed in respect of main parameters i.e. education, research and faculty/staff with a view to obtain uniform information from all the concerned department/branches. Few suggestions were also recommended so that clear picture may be placed before the members of the Planning Board. All academic departments have submitted their Strategic Plan for two years (2019-2021) which were placed before the Planning Board as under:

Head of Applied Physics and Head of the Computer Science & Engineering departments presented their two-year strategic plan (2019-2021) before the members of the Planning Board.

1. Mechanical Engineering Department

- 1. Year of Establishment : 1941
- 2. Introduction: The Department Of Mechanical Engineering has seen considerable growth since its inception in 1941. The department of Mechanical engineering offers Under Graduate, Post Graduate and PhD Programs in various fields of specialization in Mechanical Engineering.
- Vision: To become a global hub of academic excellence, research and innovation in the field of Mechanical, Production & Industrial and Automobile Engineering.
- 4. Mission: To produce world class skilled Mechanical, Production & Industrial and Automobile Engineers by imparting quality education through cutting edge technologies and research & development enabling them to work towards sustainable professional development.

Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|--------------------------------------|------------------|---------------------|--|
| 1 | B. Tech Mechanical Engg. | 266 | 1941 | 275 |
| 2 | B. Tech Prod. & Ind. Engg. | 68 | 1989 | 79 |
| 3 | B. Tech Mechanical Engg (Automobile) | 68 | 2009 | 71 |
| 4 | M. Tech Thermal Engg. | 22 | | 22 |
| 5 | M. Tech Production Engg. | 22 | | 14 |

6. Key Achievements of Department :-

7. Education

7.1 Academic details :-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|--|------------|------------------------|
| 1 | Number of UG Students | 1544 | | |
| 2. | Number of PG Students | 83 | | |
| 3. | Number of Ph.D. Students | 195 | | ā |
| 4 | Annual Intake:- | 14 | I. | |
| | (a) UG | 425 | | |
| | (b) PG | 44 | | |
| 5 | Number of UG Programs | 3 | | 5 <u>4</u> 5 |
| 6. | Number of PG Programs | 2 | 4 | 2021 |
| 7 | DTU Ph.D. Teaching- cum- Research Fellowships | 37 | | |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 2 | <u>√</u> 5 | <u>j≆</u> l |
| 9. | Development of MOOCs Courses | - | | |
| 10. | Percentage of Female Students in the Department | 6.1% | | |
| 11. | Number of Foreign Students: | • | | |
| | (a) UG | 52 | | |
| | (b) PG | (=) | | |
| | (c) Ph.D. | - | | |
| 12. | Minor Specialisation:- | (a) THERMAL (b) PRODUCTION | | |
| | (a) UG | (c) INDUSTRIAL (d) DESIGN (e) AUTOMOBILE | | |
| | (b) PG | (a) THERMAL (b) PRODUCTION | | |

7.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|---------------------|-----------------------------|--|
| 1,: | UG Programs | | l, |
| | (a) Mechanical Engg | 264 | |
| | (b) Prod & Ind Engg | 66 | |
| | (c) Mechanical Engg | 66 | |
| | (Automobile) | *i | |
| 2. | PG Programs | | |
| | (a) Thermal Engg | 22 | 22 |
| | (b) Production Engg | 22 | 14 |
| | | | |

7.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|----------------------------|---------------|-----------------------------------|
| 1 | M Tech (Industrial Engg) | 22 | 2021 |
| 2 | M Tech (Mechanical Design) | 22 | 2021 |

8. Research

8.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|------------|-----------|------------------------|
| 1. | h-index of the department | 35 | 50 | 2021 |
| 2. | Citations of the department | 3432 | 4000 | 2021 |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 50 | 100 | 2021 |
| 4, | Number of Ph.D. students in the department | 195 | 225 | 2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 1 | 5 | 2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | = | 2 | 2021 |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | - : | 2 | 2021 |
| 8 | Number of Patents:- (a) Filed | (₹) | | |
| | (b) Published | - | | |
| | (c) Granted | | | |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | • | | |
| 10. | Commercially sustainable Products | W . | | |
| 11, | Number of research laboratories | 15 | 20 | 2021 |
| 12. | MOUs with National & International Institutions/Organisations | ₹ 3 | | |

9. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) | | |
|------------|---|----------|-----------|------------------------|--|--|
| 1, | Number of sanctioned teaching | | | | | |
| | (a) Professor | 12 | | | | |
| | (b) Associate Professor | 26 | | 왕 | | |
| | (c) Assistant Professor | 82 | | | | |
| 2. | Number of faculty in position :- | | | | | |
| | (a) Professor | 5 | | | | |
| | (b) Associate Professor | 14 | | | | |
| | (c) Assistant Professor | 21 | | | | |
| 3. | Number of sanctioned technical | posts:- | | | | |
| | (a) Technical Officer/Foreman | 8 | | | | |
| | (b) Senior Technical Assistant | 46 | | | | |
| | (c) Technical Assistant | | | | | |
| | (d) Junior Technical Assistant | 10 | | | | |
| | (e) Others | | | | | |
| 4. | Number of technical staff in position:- | | | | | |
| | (a) Technical Officer/Foreman | 6 | | | | |
| | (b) Senior Technical Assistant | 9 | | | | |
| | (c) Technical Assistant | - | | | | |
| | (d) Junior Technical Assistant | 5 | | | | |
| | (e) Others | | | | | |
| 5. | Number of Ministerial Staff | 0 | • | 2021 | | |
| 6. | Number of Multi-Tasking Staff | 1 | - | 2021 | | |

10. Details of ongoing research projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---|-------------------|--------|-----------------------------|----------------|
| 1 | Development of a Stand- Alone Spray Assisted Solar Thermal Desalination System | DST | 517880 | 06-12-2019 | Dr. Anil Kumar |

11. Details of proposed Research Projects:-

a) Design and development of reliable, energy efficient and cost effective spray assisted solar desalination system

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- b) Design and development of energy efficient and cost effective greenhouse
- c) Study of heavy metals accumulation and risk assessment in agricultural crops in selected areas of Indo-ASEAN region
- d) ICT based smart energy management system for built infrastructure with renewable resources
- e) A project proposal for harnessing the solar energy in Ladakh worth is underway
- 12. Details of ongoing Consultancy Projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Amount | Date of start of Project | Name of PI |
|------------|-------|-------------------|--------|-----------------------------|------------|
| | Nil | | | | |

- 13. Details of existing research laboratories:- Advanced Machining Lab, Design Centre, Biodiesel Lab Metal Forming Lab, Theory of Machine Lab
- 14. Details of proposed research laboratories:- CFD Lab, CAD Lab, Robotics Lab, Industrial Engg Lab
- 2. Civil Engineering Department
- 1. Year of Establishment

: 1941

2. Introduction: Civil engineering is one of the oldest Department of DTU. Department was established in 1941 and started its PG programme in structural engineering in 1966. This Department offers UG/PG and Ph.D. programmes. Currently the Department has an annual intake of 122 students in B.Tech programme in Civil Engineering. Project and industrial training is an integral part of the curriculum and are carried out in formal areas of Civil Engineering and Technology. New equipment and experimentation work leading to perfect understanding of curriculum in Civil Engineering lays greater emphasis on deep understanding of fundamental principles and state of art knowledge. The PG programs include M. Tech. in Structural Engineering, Geo-technical Engineering and Hydraulics & Water Resource Engineering. The Department has focused attention on quality research. Scholarships are available for Ph. D. Programs in the area of Civil Engineering.

3 Vision:

- To produce technologically relevant civil engineering graduates/ post graduates/ researchers through a globally acceptable curriculum in a teaching – learning environment.
- The creation of new knowledge and innovations with the support of qualified and inspired faculty and having a strong interface in the industry and R&D organizations.

4. Mission:

- To produce Civil Engineers to meet the current and future requirements of the industry in India and abroad.
- To provide cutting-edge technology and solutions to the industry.
- To engage into technologically relevant activities including extension programs for capacity development in areas of high national priority.

5. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|---|------------------|---------------|--|
| 1. | B.Tech. (Civil Engineering) | 122 | 1955 | 145 |
| 2. | M.Tech. (Structural Engineeirng) | 25 | 1966 | 21 |
| 3. | M.Tech. (Geotechnical Enginering) | 25 | 2010 | 22 |
| 4. | M.Tech. (Hydraulics and Water Resource Engineering) | 24 | 1966 | 21 |
| 5. | M.Tech. (Geo-Informatics) | 18 | 2019 | 03 |

6. Key Achievements of Department:-

- NBA Accreditation: B.Tech. programme
- ISO 9001-2015 certified
- Department has well defined Standard Operating Procedures
- Multi Disciplinary Centre for Geo-Informatics(MCG) Inaugurated on 5th
 March, 2019 by the Hon'ble Vice Chancellor, Prof. Yogesh Singh, with
 the vision to be a world class multidisciplinary centre in the field of
 geospatial and Geoinformatics education, research and consultancy.
- M. Tech. program in Geo-Informatics started from Academic Year 2019-20 in MCG and it has AICTE approval.
- Prof K.C. Tiwari has been awarded National Geospatial Chair in the Year 2018.
- Two Patents submitted by Prof. Naresh Kumar in the year 2013 & 2018.
- Prof. A. Trivedi and Prof. Amit K. Srivasatava received award for best research paper in the year 2017 and 2018.
- Deptt. has opened a student chapter of Indian Association of Structural Engineers.

7. Education

7.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|------------------|------------------------|
| 1 | Number of UG Students | 524 | 670 | August 2020 |
| 2. | Number of PG Students | 123 | 284 | August 2021 |
| 3. | Number of Ph.D. Students | 88 | 110 | August 2021 |
| 4. | Annual Intake:- | | | |
| | (a) UG | 122 | 180 | August 2021 |
| | (b) PG | 92 | 77 + 40 = 117 | August 2020 |
| | | 92 | 77 + 60 = 137 | August 2021 |
| 5. | Number of UG Programs | 01 | (= : | |
| 6. | Number of PG | | 06 | August 2020 |
| | Programs | 04 | 07 | August 2021 |
| 7. | DTU Ph.D. Teaching- cum-Research Fellowships | Nil | 04 | August 2021 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 06 | 10 | August 2021 |
| 9. | Development of | | 02 | August 2020 |
| | MOOCs Courses | Nil | 04 | August 2021 |
| 10. | Percentage of Female Students in the Department | 127 | 150 | August 2021 |
| 11, | Number of Foreign Students:- (a) UG | 26 | 40 | August 2021 |
| | (b) PG | 05 | 10 | August 2021 |
| | (c) Ph.D. | 04 | 10 | August 2021 |
| 12. | Minor Specialisation:- (a) UG | Nil | Nil | Nil |
| | (b) PG | Nil | Nil | NilNil |

7.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|---|--------------------------------|--|
| 1. | UG Programs | | |
| | (a)B.Tech. | 122 | 145 |
| 2. | PG Programs | | · a |
| | (a) M.Tech. (Structural Engineeirng) | 25 | 21 |
| | (b) M.Tech. (Geotechnical Enginering) | 25 | 22 |
| | (c) M.Tech. (Hydraulics and Water Resource Engineering) | 24 | 21 |
| | (d) M.Tech. (Geo- Informatics) | 18 | 03 |

7.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|--|---------------|-----------------------------------|
| 1. | M.Tech. (Earthquake Engineering) | 20 | August 2020 |
| 2. | M.Tech. (Construction Planning and Management) | 20 | August 2020 |
| 3. | M.Tech. (Transportation Engineering) | 20 | August 2021 |

7.4 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|---------------------|-----------------------|--------------------------------|
| 1. | Soil Mechanics | Prof. A.K.Gupta | August 2020 |
| 2. | Structural Analysis | Prof. Nirendra Dev | August 2020 |

8. Research

8.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|-----------------------------|----------|-----------|------------------------|
| 1. | h-index of the department | 16 | - | - |
| 2. | Citations of the department | 1302 | 1500 | August 2021 |

| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 119 | 150 | August 2021 |
|-----|---|------|-------------|-------------|
| 4. | Number of Ph.D. students in the department | 88 | 110 | August 2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 07 | 03 | August 2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | 16 | 20 | August 2021 |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | 25 | 35 | August 2021 |
| 8 | Number of Patents:- | | | |
| | (a) Filed | 02 | 34 5 | ¥6 |
| | (b) Published | Nil | Nil | Nil |
| | (c) Granted | Nil | Nil | Nil |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | 01 | 01 | August 2021 |
| 10. | Commercially sustainable Products | Nil | Nil | Nil |
| 11. | Number of research laboratories | . 06 | 08 | August 2021 |
| 12. | MOUs with National & International Institutions/Organizations | 04 | 10 | August 2021 |

9. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1, | Number of sanctioned teaching posts :- | | | |
| | (a) Professor | 05 | - | - |
| | (b) Associate Professor | 10 | - | |
| | (c) Assistant Professor | 33 | 16 | 2 |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | 13 | N#. | = |
| | (b) Associate Professor | 10 | - | - |
| | (c) Assistant Professor | 01 | 19 | August 2021 |
| 3. | Number of sanctioned technical posts:- | | | |

| | (a) Technical Officer/Foreman/Draftsmen | 01 | 15 | 8 |
|-----|---|-----|-----|-------------|
| | (b) Senior Technical Assistant | 11 | 14 | August 2021 |
| | (c) Technical Assistant | NIL | 07 | August 2021 |
| | (d) Junior Technical Assistant | 01 | 07 | August 2021 |
| | (e) Others | Nil | NIL | - |
| 4. | Number of technical staff in position:- | | | |
| | (a) Technical Officer/Foreman/Draftsmen | Nil | 01 | August 2021 |
| | (b) Senior Technical Assistant | 03 | 11 | August 2021 |
| | (c) Technical Assistant | Nil | 07 | August 2021 |
| | (d) Junior Technical Assistant | 01 | 07 | August 2021 |
| | (e) Others | Nil | - | - |
| 5. | Number of Ministerial Staff | 01 | 02 | August 2021 |
| 6. | Number of Multi-Tasking Staff | 11 | 15 | August 2021 |
| 7, | Number of International faculty engaged | Nil | 01 | August 2021 |
| 8. | Number of faculty deputed for higher studies/PDFs | Nil | | æ |
| 9,. | Number of faculty members sent to industry | Nil | | (m): |
| 10 | Number of Adjunct/Honorary Faculty | Nil | - | |

10. Infrastructure:-

- 10.1 Details of new Laboratories proposed for UG Programs:- Up gradation of Mechanics of Solids Lab and Structural Analysis Lab
- 10.2 Details of new Laboratories proposed for PG Programs:- Two new laboratories namely
 - WIND TUNNEL LAB
 - SERVO-HYDRAULIC ACTUATORS in Earthquake Technology Lab
- 11. Details of ongoing research projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---|-------------------|-------------|-----------------------------|------------------|
| 1.: | An assessment and impact of urbanization in South Delhi on environmental quality and disaster management using remote sensing and GIS | DST | 10,93,000/- | 2015 | Prof. K.C.Tiwari |

| 2. | Detection and Identification of engineered surfaces and Objects using Hyperspectral data | DST | 35,02,400/- | 2016 | Prof. K.C.Tiwari |
|----|---|---|--------------|--------------|------------------|
| 3. | Mapping Impervious Surfaces from Temporal Multisensor-Multiresolution Data and its Area Estimation Using Super resolution | ISRO | 20,00,000/- | 2017 | Prof. K.C.Tiwari |
| 4. | National Mission on Himalayan Studies (NMHS), GB Pant National Institute of Himalayan Environment and Sustainable Development (GBPNIHESD) | NHMS | 35,43,408/- | 2018 | Prof. K.C.Tiwari |
| 5 | National Geospatial Chair project | DST | 35,00,000/- | 2018 | Prof. K.C.Tiwari |
| 6 | Impact of Climate Change, Land Use Land Cover, and Socio-Economic Dynamics on Landslides in South and East Asia | Internation al Science Council (ISC) | USD 15,000 | July 2019 | Dr. Raju Sarkar |
| 7 | Study on Residual Effects on Soil and Groundwater Quality at Different Soil Strata (0.5m and 1.0m) in and around 3 km radius of Dumping Site at Boragaon- Deepar Beel | Pollution Control Board, Assam (PCBA), Ministry of Environme nt and Forests | INR 7,62,000 | October 2019 | Dr. Raju Sarkar |

12. Details of proposed Research Projects:-

| S.N | Project Title | Funder | Project Amount | Investigator | Status |
|-----|---|---|-------------------|--|-----------|
| 1 | History and use of interdisciplinary seismic hazard knowledge in the Eastern Himalayas | Knowledge Frontiers 2020, British Academy | UKP 12,000 | Dr. Raju Sarkar (Co-PI) Prof. Frances Harris - University of Hertfordshire, UK (PI) | Submitted |
| 2 | Earthquake Induced Landslide: Modelling and Validation for Kalimpong, Darjeeling Himalayas, India | Ministry of Earth Sciences | Rs. 32,00,000 | Dr. Raju Sarkar(P.I.) Dr. Shilpa Pal(Co-Pl) | Submitted |

| Development of Earthquake Disaster Risk Index for 60 Indian Cities National Disaster Hakh National D | Submitted |
|--|-----------|
|--|-----------|

13. Details of ongoing Consultancy Projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Amount (Rs.) | Date of start of Project | Name of PI |
|------------|---|-------------------|----------------|--------------------------------|--------------------|
| 1 | TPQA towards Construction of 325 Two BHK, 170 Three BHK & 194 EWS Houses (Design & Built model) earmarked in Pkt-7 at sector-A-1 to A-4, Narela vide letter no. 54(28)/RPD- 5/DDA/186 | DDA DELHI | 93,05,000.00 | 29/08/2019 | Prof. Nirendra Dev |
| 2 | C/O 625 Two BHK, 350 three BHK and 376 EWS houses (design and build Model), earmarked in pocket-3, sector A1 to A4, Narela, New Delhi | DDA DELHI | 1,65,08,984.00 | 12/06/2019 | Prof. Nirendra Dev |
| 3 | Third Party inspection/quality assurance for "Comprehensive development of corridor (outer ring road) between Mukarka Chowk to Wazirabad Chowk. SH: C/o Flyovers, Loops, Bridges, across suplementry drain FOBs, Footpath, Cycle track, Widening of road on embankment. Rain Water harvesting scheme, electrical works and other allied works." | PWD, Delhi | 80,94,800/- | 12/03/2018 | Prof.K.C.Tiwari |

| 4 | Various projects undertaken by hscc under aiims, new delhi- empanelment of third party quality inspection agency reg. | AIIMS Delhi | 28,00,000/- | 17/01/2017 | BRG Robert |
|---|--|-------------------|---------------|------------|------------------|
| 5 | TPQA For "C/o Skywalk and FOB at Junction of Sinkandra Road, Mathura Road, Tilak Marg and Bahadur Shah Zafar Marg at 'W' Point and near HanshBhavan New Delhi (on EPC Mode)." | PWD Delhi | 13,80,600/- | 15/03/2018 | BRG Robert |
| 6 | Detailed Third Party Inspection/ Quality Assurance for " Construction of Bus Depots at East Vinod Nagar, Sector 37 Rohini, Mundela&Ghumanhera, Delhi." | P.W.D | 47,20,000/- | 02/11/2018 | BRG Robert |
| 7 | Detailed Third Party Quality Assurance for C/o World Class Skill Centre, Phase-1 at Village Jonapur, South Delhi. (SH (a): C/o Academic Block, Hospitality Block, Workshop, Hostel Block, Electric Sub- Station, and all external and internal services including External development and landscaping, and allied civil and E&M Works. SH (b): Furniture, Furnishings and Lab Equipments) | P.W.D. Delhi | 1,69,08,020/- | 14/09/2018 | BRG Robert |
| 8 | TPQA for "Construction of Connectivity between Northern Mahipalpur by pass road, NH-8 and northern access road from Airport near Hanuman Mandir, New Delhi" | C.P.W.D. Delhi | 80,94,800/- | 12/03/2018 | Prof. Alok Verma |

| 9 | Construction of 821 multi storied housed (600 two BHK and 221 EWS housed) in pocket-E at lok Nayak Puram (Bakkarwala) | DDA DELHI | 84,48,800.00 | 29/06/2019 | Prof. Amit.K.Shrivastava |
|----|---|---------------|----------------|------------|-----------------------------|
| 10 | Transport Study of Bridge: Grade Separator At Rani Jhansi Road. | NDMC | 9,73,500/- | • | Sh. Susheel Kumar |
| 11 | Conducting Road Study and Benkelman Beam Test for Roads under South West Road-1. | P.W.D | 5,90,000/- | - | Sh. Susheel Kumar |
| 12 | TPQA Construction of 520 Two BHK, 250 Three BHK & 294 EWS (DESIGN & Built model) earmarked in Pkt-14, Sector-A-1 to A- 4, Narela | DDA, DELHI | 99,75,638.00 | 29/08/2019 | Dr. T.Vijaya Kumar |
| 13 | C/O 750 Two BHK, 325 three BHK and 412 EWS houses (design and build Model), earmarked in pocket- 13, sector A1 to A4, Narela, New Delhi | DDA, DELHI | 2,38,74,918.00 | 20/07/2019 | Dr. S. Anbu Kumar |
| 14 | C/O 420 Two BHK, 225 three BHK and 250 EWS houses (design and build Model), earmarked in pocket-6, sector A1 to A4, Narela, New Delhi | DDA, DELHI | 2,29,26,928.00 | 11/10/2018 | Dr. S. Anbu Kumar |
| 15 | Proof Checking/vetting of Structural Drawings for the work of C/o SPS type additional class room in various schools under Education MAint(North Division), PWD Delhi | PWD Delhi | 20,00,000 | 16/02/2019 | Dr. Ritu Raj |
| 16 | TPQA of Expansion and Remodelling work at Acharya Shri Bhikshu Govt. Hospital at Moti Nagar, Delhi | PWD Delhi | 17,72,837/- | 02/01/2020 | Dr. Shilpa Pal |



- 14. Details of Patents:- Two have been filed by Prof. Naresh Kumar
- 15. Details of existing centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:-

A Multidisciplinary Centre for Geoinformatics (MCG), under the Department of Civil Engineering of Delhi Technological University was inaugurated on 5th March, 2019 by the Hon'ble Vice Chancellor, Prof. Yogesh Singh. The MCG has been established with the vision to be a world class multidisciplinary centre in the field of geospatial and Geoinformatics education, research and consultancy. The Centre is currently progressing five projects/ awards /fellowships awarded by Department of Science and technology, New Delhi, Space Applications Centre, ISRO, Ahmedabad and national Mission on Himalayan Studies, Almora. Besides, there are 7 students currently enrolled for their PhD at the Centre. In future, the Centre aims to work in close coordination with central/state Govt agencies and industries in fulfilment of Govt objectives, capacity building and for research and consultancy.

16. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:-

Centre for <u>Geo-Hazards Studies</u> in collaboration with leading research institutions of Himalyan Region. Studies will be carried out in Geo-Hazards such as Landslides, earthquakes, Glacier, Lake Outburst Flood etc.

17. Details of existing research laboratories:-

- Concrete Lab
- Rock Mechanics Lab
- Earthquake Technology Lab
- Hydraulics Lab
- Soil Mechanics Lab
- CAD Lab

18. Details of proposed research laboratories:-

- WIND TUNNEL LAB
- SERVO-HYDRAULIC ACTUATORS in Earthquake Technology Lab

19. Details of MOUs with National & International Institutions/Organizations:-

| S.No. | Name of the University | Country | Date of Signing of MOU | Faculty Associated |
|-------|--|----------|------------------------------|-----------------------|
| 1 | Asian Institute of Technology, Bangkok | Thailand | October 2019 | Dr. Raju Sarkar |
| 2 | University of Transport Technology, Hanoi | Vietnam | November 2019 | Dr. Raju Sarkar |

| 3 | Universitas Muhammadiyah Surakarta, Central Java | Indonesia | December 2019 | Dr. Raju Sarkar |
|---|--|-----------|------------------|-----------------|
| 4 | Royal University of Bhutan, Thimphu | Bhutan | October 2019 | Dr. Raju Sarkar |

3. Applied Mathematics Department

1. Year of Establishment : July 2009 (DCE upgraded to DTU)

2. Introduction

3. Vision: To emerge as a centre of excellence and eminence by imparting futuristic technical education with solid mathematical background in keeping with global standards, making our students technologically and mathematically competent and ethically strong so that they can readily contribute to the rapid advancement of society and mankind.

4: Mission:

- 1. To achieve academic excellence through innovative teaching and learning practices.
- 2. To improve the research competence to address social needs.
- 3. To inculcate a culture that supports and reinforces ethical, professional behaviours for a harmonious and prosperous society.
- 4. Strive to make students to understand, appreciate and gain mathematical skills and develop logic, so that they are able to contribute intelligently in decision making which characterizes our scientific and technological age.

5. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|---------|--|------------------|--|
| 1 | B.Tech | 122 (JAC) + 6(DASA) + 13(IA) = 141 | 2011-12 | 138 |
| 2 | M.Sc. | 33 | 2019-20 | 31 |
| 3 | Ph.D. | | | 11 |

6. Key Achievements of Department: -

The department started M.Sc. Mathematics program from the academic session 2019-20.

7. Education

7.1 Academic details: -

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|--|-----------|------------------------|
| 1. | Number of UG Students | 489 | | |
| 2. | Number of PG Students | 31 | | |
| 3. | Number of Ph.D. Students | 52 | | |
| 4. | Annual Intake:- (a) UG | 122 (JAC) + 6(DASA) + 13(IA) = 141 | | |
| | (b) PG | 33 | | |
| 5. | Number of UG Programs | 1 | | |
| 6. | Number of PG Programs | 1 | | |
| 7. | DTU Ph.D. Teaching-cum- Research Fellowships | 11 (DTU Fellowship) | | |
| 8. | Junior Research Fellowship of UGC, CSIR, DST, DBT etc. funding agencies | 16 | | |
| 9. | Development of MOOCs Courses | 1 | | |
| 10. | Percentage of Female students in the department | 18.88% | | |
| 11. | Number of Foreign Students:- a) UG | 22 | | |
| | b) PG | NIL | | |
| | c) Ph.D. | NIL | | |
| 12, | Minor Specialisation:- (a) UG | Mathematics and Computing | | |
| | (b) PG | Mathematics | | |

7.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|---------|-----------------------|---------------------------------------|--|
| 1 | UG Programs | | |
| | (a) B.Tech. | 122 (JAC) + 6(DASA) + 13(IA) = 141 | 138 |
| | (b) | | |
| | (c) | | |
| 2. | PG Programs | | |
| | (a) M.Sc. | 33 | 31 |
| | (b) | | |
| - 11 | (c) | | |

8. Research

8.1 Research Parameters/Metrics

| S. N. | Action | Existing | Target(s) | Date of Achieve- ment(s) |
|----------|---|--|-----------|--------------------------------------|
| 1,5 | h-index of the department | 6 (data taken from http://dtu.irins.org/faculty/ index/Department+of+Applied +Mathematics) | | menico |
| 2. | Citations of the department | 81 (As data taken from http://dtu.irins.org/faculty/ind ex/Department+of+Applied+ Mathematics) | | |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Journals | 289 | | |
| 4, | Number of Ph.D. students in the department | 52 | | |
| 5. | Number of Research Projects (more than 5 Lacs each) | | | |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | | | |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | | | , |
| 8. | Number of Patents:- (a) Filed (b) Published (c) Granted | | | |
| 9. | Centre of excellence in emerging areas of Technology/Science/ | | | |
| 1 0. | Commercially sustainable Products | | | |
| 1 1: | Number of research laboratories | n 8 | 01 | By academic session 2021-22 |
| 1 2. | MOUs with National & International Institutions/Organisations | 2 3 4 | # # | |

9. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|--------------------------|-----------|------------------------|
| 1 | Number of sanctioned | | | |
| | teaching posts:- | | | |
| | a) professor | 1 (Applied | | |
| | | mathematics) + | | |
| | | 3 (Mathematics | | |
| | | and | | |
| | b) Associate professor | 3+5 = 8 | | |
| | c) Assistant Professor | 9+12 = 21 | | |
| | C) Assistant Floresson | 9+12-21 | | |
| 2. | Number of faculty in position:- | | | |
| | (a) Professor | 07 (direct + CAS) | | |
| | | + 1 (Special | | |
| | | Mode of | | ľ |
| | | Recruitment) = 8 | | |
| | (b) Associate Professor | 02 (direct +CAS) | | |
| | (c) Assistant Professor | 11 + 1 (UGC FRP) = 12 | | |
| 3. | Number of sanctioned | | | |
| | technical posts:- | | | |
| | (a) Technical | | | |
| | Officer/Foreman | | | |
| | (b) Senior Technical Assistant | | | |
| | (c) Technical Assistant | | | |
| | (d) Junior Technical | | | |
| | Assistant | | | |
| | (e) Others | | | |
| 4, | Number of technical staff in position:- | | | |
| | (a) Technical | | , | - |
| | Officer/Foreman | | | |
| | (b) Senior Technical | | | |
| | Assistant | | | |
| | (c) Technical Assistant | | | |
| | (d) Junior Technical Assistant | | | |
| | (e) Others | 1 – JOA | | 111-111 |
| | (5) 511.515 | 1 - Assistant | | |
| | | Programmer | | |
| | | (Both on | | |
| | | contractual | | |
| | | basis) | | |
| 5. | Number of Ministerial Staff | 症 | 19 | = |
| 6. | Number of Multi-Tasking Staff | 3 | E. | |

10. Details of proposed research laboratories:-

The department has proposed a research lab – Data Science Lab. The development of the lab is under process.

4. Electrical Engineering

1. Name of Department : Department of Electrical Engineering

2. Year of Establishment : 1941

- 3. Introduction : Department of Electrical Engineering is one of the major departments of Delhi Technological University. The department has grown significantly since its inception in 1941. The year 2016 marks the 75th year of Excellence (Platinum Jubilee) for both the University and the department in academic, research and innovation. The goal of the department is to provide quality education at undergraduate, postgraduate levels and undertake cutting edge research in various areas of Electrical Engineering. The department also aims to develop active collaboration with various industries in power and other sectors. The department has earned itself a very good reputation in the national and global academic network.
- 4. **Vision :** To be a knowledge centre for Electrical Engineering fraternity committed to excellence in Research & Development and teaching at par with the best academic institutions in the country and abroad.
- Mission: Keeping abreast with progressing technologies and innovations necessary for conducive academic environment and professional excellence.

To impart quality Electrical Engineering education to foster enterprising spirit, skill development, broad vision and lifelong learning attitudes amongst students.

To create state-of-the-art facilities for R&D work.

To create synergetic Industry-Institute interface. Establishment of Incubation Centre for Entrepreneurship development.

5. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake (Present) | Year of Start | Number of students admitted in 2019-20 |
|------------|--------------|----------------------------|------------------|--|
| 1 | B.Tech(EE) | 240 | 1941 | 240+39*=279 |
| 2 | M.Tech (C&I) | 20 | 1971 | 19 |
| 3 | M.Tech (PSY) | 20 | 2010 | 22 |

^{*} Supernumerary



7. Key Achievements of Department: NBA Accredited, ISO Certified.

8. Education

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------------------------|-----------------|------------------------|
| 1,, | Number of UG Students | 726 | 875 | 2021 |
| 2. | Number of PG Students | 80 | 100 (80+20) | 2020 |
| 3. | Number of Ph.D. Students | 38(F/T)+72(P/T)=110 | 150 (110+40) | 2021 |
| 4. | Sanctioned Annual Intake:- (a) UG | 240 | 290 | 2021 |
| | (b) PG (C&I,PSY) | 44(F/T)+22(P/T)+10(SFT)=76 | 114 | 2020 |
| 5. | Number of UG Programs | 1 | | |
| 6. | Number of PG Programs | 2 | 3 (2+1) | 2020 |
| 7. | DTU Ph.D. Teaching- cum- Research Fellowships | 25 | 40 | 2021 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 04 | 05 | 2021 |
| 9. | Development of MOOCs Courses | NIL | 02 | 2021 |
| 10. | Percentage of Female Students in the Department | 14% | 15% | 2021 |
| 11 | Number of Foreign Students:- | | | |
| | (a) UG | 27 | 40 | 2021 |
| | (b) PG | 05 | 10 | 2022 |
| 12. | (c) Ph.D. Minor | 02 | 10 | 2022 |
| 14. | Specialization:- (a) UG | (2222) | **** | |
| | (b) PG | | | · |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|--------------------|---------------------------|---|
| 1 | UG Programs | | |
| | (a) Electrical | 240 | 279 |
| | Engineering | | |
| 2. | PG Programs | | |
| | (a) C&I(FT+PT+SFT) | 22(F/T)+11(P/T)+5(SFT)=38 | 19(FT) |
| | (b) PSY(FT+PT+SFT) | 22(F/T)+11(P/T)+5(SFT)=38 | 22(19FT+3PT) |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | | Annual Intake | Proposed date of start of program |
|------------|------------------------------|---|---------------------------|-----------------------------------|
| 1 | Power Electronics Systems | & | 22(F/T)+11(P/T)+5(SFT)=38 | July 2020 |

8.4 Details of minor specialization(s):- NA

8.5 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | | Name of | f Faculty | Proposed date of Completion |
|------------|----------------------|------------|--------------|-----------|-----------------------------|
| 1 | Basic Engineering | Electrical | Prof. N. | K. Jain | 2021 |
| 2 | Control Systems | | Mr. Singh | Himanshu | 2021 |

8.6 Any other details on the above matter:- The new P.G programme of Power Electronics & Systems is approved by BoS, Academic Council and BoM. The department will seek approval of AICTE shortly for AY 2020.

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) | | |
|------------|---|----------|-----------|------------------------|--|--|
| 1,, | h-index of the department | 42 | 50 | 2021 | | |
| 2. | Citations of the department | 6941 | 8000 | 2021 | | |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 706 | 806 | 2020 | | |

| 4, | Number of Ph.D. students in the department | 110 | 150 | 2021 |
|-----|--|------------------------------------|---|------|
| 5. | Number of Research Projects (more than 5 Lacs each) | 12 | 15 | 2020 |
| 6, | Number of Consultancy Projects (More than 5 Lacs each) | 5 | 7 | 2021 |
| 7, | Number of Consultancy Projects (between 1 Lac to 5 Lac) | NIL | NIL | NIL |
| 8 | Number of Patents:- (a) Filed | 02 | 03 | 2021 |
| | (b) Published | NIL | 01 | 2021 |
| | (c) Granted | NIL | 01 | 2021 |
| 9. | Centre of excellence in emerging areas of Technology/Science/ | NIL | 01 | 2021 |
| | Management & allied areas | | | |
| 10. | Commercially sustainable Products | NIL | NIL | NIL |
| 11, | Number of research laboratories | 04 PG Labs 12 Research Areas | 5 17 (i)High Voltage | 2021 |
| | | | Testing & Research Lab (ii)Advance Test Lab | 2021 |
| | | | (iii) Advanced Power Electronics | 2021 |
| | | | and Systems Lab | 2021 |
| | | | (iv) EV / iTS Lab | |
| | | | (v) Substation Automation Systems | 2021 |
| | | | Lab | 2020 |

| | T T | | | 0004 |
|-----|----------------------|---|---|------|
| 12. | MOUs with National & | 4 | 6 | 2021 |
| | International | | | |
| | Institutions/ | | | |
| | Organizations | | | 91 |

10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|----------|----------------|------------------------|
| 1 | Number of sanctioned | | | |
| -0.00 | teaching posts :- | | | |
| | (a) Professor | 9 | | •== |
| | (b) Associate Professor | 17 | ••• | |
| | (c) Assistant Professor | 51 | | |
| 2. | Number of faculty in | | | |
| | position :- (a) Professor | 1+3* | +8 | 2021 |
| | | 12 | +5 | 2021 |
| | (b) Associate Professor (c) Assistant Professor | 22 | 29- 15**=14 | 2021 |
| 3, | Number of sanctioned technical posts:- | | | |
| | (a) Technical Officer/Foreman | 03 | | *** |
| | (b) Senior Technical Assistant | 08 | *** | **** |
| | (c) Technical Assistant | | | |
| | (d) Junior Technical Assistant | 10 | +15 | 2021 |
| | (e) Others (Draftsman/Jr. Mech.) | 01/02=3 | *** | **** |
| 4. | Number of technical staff in position:- | | | |
| | (a) Technical Officer/Foreman | 02 | +01 | 2020 |
| | (b) Senior Technical Assistant | 03 | +05 | 2020 |
| | (c) Technical Assistant | *** | | |
| | (d) Junior Technical Assistant | 06 | +04 | 2020 |
| | (e) Others (Draftsman/Jr. Mech.) | 01 | +02 | 2020 |
| 5. | Number of Ministerial Staff | 01 | +01 | 2020 |
| 6. | Number of Multi-Tasking Staff | 12 | +04 | 2020 |

| 7 | Number of International | NIL | +02 | 2021 |
|----|---------------------------|-----|-----|------|
| | faculty engaged | | | |
| 8. | Number of faculty deputed | 01 | +02 | 2021 |
| | for higher studies/PDFs | | | |
| 9. | Number of faculty | NIL | +03 | 2021 |
| | members sent to industry | | | |
| 10 | Number of | NIL | +02 | 2021 |
| | Adjunct/Honorary | | | |
| | Faculty | | | |

^{*} Re-employed Professors ** Appointed and awaiting for Joining

11. Infrastructure:-

- 11.1 Details of new Laboratories proposed for UG Programs:-
 - 1. Switchgear and Protection Lab
- 11.2 Details of new Laboratories proposed for PG Programs:-
 - 1. High Voltage Testing and Research Lab
 - 2. Power Electronics and Systems Lab
 - 3. Advanced Switchgear and Protection Lab

12. Details of ongoing research projects (more than 05 Lacs):-

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|--|---------------------------------|-----------|--------------------------|---|
| 1 | Design, Development and Testing of Control and Synchronization of Power Electronics based Converters with Renewable Energy sources | SERB/DST | 68 Lacs | 2017 - 2020 | Dr. Alka Singh |
| 2 | Modeling and Development of Controller for Photovoltaic System Integration into Electricity Distribution Network | SERB/DST | 26.6 Lacs | 2018- 2019 | Dr. M. Rizwan |
| 3 | Research Study on effects of environment factors on soiling losses and optimal cleaning schedule for SPV panel in Delhi | Department of Power GNCTD | 5.6 Lac | 2019- 2020 | Prof. Priya Mahajan Prof. Rachana Garg |

| 4 | Demonstration of Grid supportive EV Charger and Charging | DST | 22.536 Lac | 2018- 2021 | Prof. Vishal Verma |
|----|--|------|-------------------|-------------------------------|-----------------------|
| 5 | Infrastructure at LT level (D-EVCI) Design and Development of | DST | 36.63 Lac | 2018- 2020 | Prof. Vishal Verma |
| | Biomass-solar electricity and Cooling Solutions for Rural India | | | 1 | |
| 6 | Design and demonstration of off-grid self- healing and sustainable DC community energy solutions | DST | 1.13 Cr. | 2018- 2020 | Prof. Vishal Verma |
| 7 | Design and Manufacturing of Artificial Intelligence based Electronic Metering and Monitoring System for Indian Power Distribution | GITA | 10Lac | 2017- 2020 | Prof. Vishal Verma |
| 8 | Feasible Coordinated Controlled Grid- connected Photovoltaic Sourced DC based Fast Charging Infrastructure for Electric Vehicle: Design, Development and Experimental Validation | SERB | 1.89Cr. | 2019- 2021 | Prof. Vishal Verma |
| 9 | Impact of Renewable Energy Source Integration on Power system Inertia: Challenges and Solutions | NPIU | 11.57 L ac | 2019- 2021 | Prof. Vishal Verma |
| 10 | Design and Development of Textile Antenna on Jeans Fabric Substrate for Telemedicine Applications | NPIU | 11.03Lacs | 18 th June 2019 | Prof. M.M.Tripathi |

| 11 | Smart Dynamic | SERB | 31.06Lac | 2018-19 | Dr. M. Rizwan |
|----|--|-------|----------|------------------------------------|------------------------|
| | Energy Management | | | | |
| | for the Built | | | | |
| | Environment with | | | | |
| | Integrated | | | | |
| | Renewable Energy | | | | |
| 12 | Design and deployment of motor controller for low to medium Electric Vehicle | MeitY | 39.84Lac | 13 th August 2019 | Prof. Mini Sreejeth |

13. Details of proposed Research Projects:- NIL

14. Details of ongoing Consultancy Projects (more than 05 Lacs):-

| Sr. No. | Title | Funding Agency | Amount | Date of start of Project | Name of PI |
|------------|---|---------------------------------|--|--------------------------------|---|
| 1 | Inspection and testing of Electrical work in construction of additional classrooms in existing schools of north west and west Delhi | PWD Govt. of NCT Delhi | Rs 200 Cr (Project cost)Consultancy charges @ 0.39% | 2015 – onwards | Prof. Madhusudan Singh AB Bhattacharya B R G Robert |
| 2 | Construction of 7000 additional classrooms in various existing school. Under education zone (M), new Delhi | PWD Govt. of NCT Delhi | Rs 800 Cr (Project cost) Consultancy charges @ 0.39% | 2016 – 2019 | Prof. Madhusudan Singh AB Bhattacharya BRGRobert |
| 3 | Third Party Quality Audit works installation of CCTV cameras in Delhi | PWD Govt. of NCT Delhi | 15.4 Lac | 2019- 2020 | Prof. Madhusudan Singh AB Bhattacharya B R G Robert |

| 4 | Dig and Restore work of underground cable work | BSES DELHI | Rs 15 Lakhs | 2018 - ongoing | Prof. Madhusudan Singh AB Bhattacharya B R G Robert |
|---|--|-----------------------|-------------|-------------------|---|
| 5 | Quality Audit of construction (Electrical) work in AIIMS JAJJHAR and various departments at AIIMS New Delhi Campus | AIIMS NEW DELHI | 12 Lakhs | 2017 – ongoing | Prof. Uma Nangia AB Bhattacharya |

15. Details of Patents:-

i. **Title of patent:** A device for Synchronizing sound Control light system and method

Inventors: M.M.Tripathi, Ayush Verma, Anand Akshansh, Ananya Aggarwal

Date of Filing: 11-07-2019

Patent Application No: 201911007954

ii. **Title of patent:** Hot spot mitigation circuit for photo voltaic module **Inventors:** Ravindra Birajdar, S.Ghosh, V.K.Yadav, V.Mukherjee

Date of Filing: 20-12-2018

Patent Application No: IN/PA-2058

16. Details of proposed centers of excellence in emerging areas of Technology/ Science/Management & Allied Areas:Centre of Excellence on Smart Technology Enabled Hybrid Vehicles

17. Details of existing research laboratories:-

- i. Research Area-1 located at Sr. Machine Lab
- ii. Research Area-2 located at Electrical Energy Utilization Lab
- iii. Research Area-3 located at Power Electronics lab
- iv. Research Area-4 located Smart Grid Research Lab
- v. Research Area-5 located at Simulation Lab
- vi. Research Area-6 located at Project and Research Lab
- vii. Research Area-7 Power Quality Research Lab located at PS Lab
- viii. Research Area-8 located at LIC Lab
- ix. Research Area-9 located at Center for Control of Dynamical Systems and Computation
- x. Research Area-10 located at Control system Lab
- xi. Research Area-11 located at Embedded Systems and IoT Lab
- xii. Research Area-12 located at EV and ITS Lab

18. Details of proposed research laboratories:-

- i. High Voltage Testing & Research Lab
- ii. Advance Test Lab
- iii. Power Electronics and Systems lab
- iv. EV/ITS Lab
- v. Substation Automation Systems Lab

19. Details of MOUs with National & International Institutions/ Organizations:-

- i. M/S HBSS India Pvt. Ltd.
- ii. M/S ONNYX ELECTRONISYS Pvt. Ltd.
- iii. University of South Florida USA
- iv. Technical University of Crete, Greece

20. Any other details:-

- (i) The Department organized a TEQIP-III sponsored One week FDP on "Recent Research Directions and Key Concepts in electrical Engineering" during 2-6 December 2019.
- (ii) The Department organized a Two day IEEE workshop and Exposition on "Grid Integrated Renewable & Electric transportation" during 17-18 December 2019
- (iii) Faculty members of the department have been regularly contributing towards International and National Journals of repute like IEEE, Elsevier, Springer etc. along with Proceedings of International and National Conferences.
- (iv) The department has uploaded 5 GIAN course proposals during November 2019.

5. Applied Physics Department

- 1. Name of Department : Applied Physics
- 2. Year of Establishment :1941
- 3. Introduction

Applied Physics Department is a major department of Delhi Technological University providing cutting edge research, innovation and education in the emerging areas of science and technology. The objective of the department is to create future generations of skilled Engineers and Scientists by providing quality education through cutting edge technologies and innovative teaching techniques so as to make them well equipped to face present and future challenges and their overall sustainable professional growth.

8-

4. Vision:

Consolidating teaching and learning process covering all aspects of pure and

| applied |
|---------|
| physics |
| that |

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|---------|--|------------------|---------------------|--|
| 1. | B.Tech. (EP) M.Tech.(NST) M.Sc. (Physics) M.Tech. (MOCE) | 95 | 2009 | 109 |
| 2. | | 20 | 2009 | 2 |
| 3. | | 30 | 2018 | 33 |
| 4. | | 20 | 2009 | 03 |

promotes research and development leading to the creation of new knowledge, inventions and discoveries fostering institute-industry linkages and entrepreneurial culture for the betterment of all its stakeholders and society at large..."

5. Mission:

- To establish global and industry standards of excellence by generating new knowledge in all the endeavours concerned about teaching, learning, research and consultancy.
- To develop close linkages with industry to undertake collaborative projects so as to enable young engineers to be a part of fast-changing technological scenario.
- To help our students in developing human potentials, intellectual interests, creative abilities and be lifelong learners to meet the challenges of the national and global environment and be true professional leaders.
- To stand up to the needs and expectations of our society by equipping and training our students to be good citizens, aware of their commitments and responsibilities, to make this world a better place to live.
- To be a world-class centre for education, research and innovation in the various upcoming fields of Applied Physics.
- To focus on the development of cutting-edge technologies and to foster an environment of seamlessness between academia and industry.

Details of UG & PG Courses: -

7. Key Achievements of Department: -

- ➤ Highest Number of Research Excellence Awards in DTU since 2 Consecutive Years
- Highest Number of Publications in SCI Journals in DTU
- Highest Number of Young Scientist Awards received from SERB-DST in DTU

- > Highest Number of Research Projects in DTU
- Centre of Excellence in Fibre Optics and Optical Communications (TIFAC-CORE)- 2.54 Crores
- DST-FIST sponsored Departmental Project 1.53 Crores
- State-of-the-art Research Labs
- > Advanced Instrumentation Centre
- Students going for higher studies in in esteemed universities with good QS
 Global World Rankings in abroad
- > International Fellowships
- > Visiting Professor, Chinese Academy of Science, DICP, China
- > Visiting Research Professor, Changwon National University, South Korea

8. Education

8.1 Academic details: -

| Sr. No | Action | Existing | Target(s) | Date of Achie- vement |
|-----------|---|---------------|---|--------------------------|
| 1. | Number of UG Students | 384 | *Two sections to be formed as the student intake is 109 *AICTE approval of B.Tech. (EP) | August 2020 |
| 2. | Number of PG Students (a) M.Sc (b) M.Tech | 33 8 | | |
| | (c) MOCE | 5 | | |
| 3. | Number of Ph.D. Students | 70 | 80 | 2021 |
| 4. | Annual Intake: - (a) UG (b) PG: - | 95 | | |
| | M.Tech (NST & MOCE) M.Sc. (Physics) | 20 & 20 30 | | |
| 5. | Number of UG Programs | 01 | | |
| 6. | Number of PG Programs | 03 | | |
| 7 | DTU Ph.D. Teaching- cum- Research Fellowships | 23 | | |
| 8. | Junior Research Fellowship of UGC, CSIR, DST, DBT etc. funding agencies | 21 | | |
| 9. | Development of MOOCs Courses | NIL | Proposals Invited/ faculty | |
| 10. | Percentage of Female Students in the Department | 9.6% | 15% | |
| 11. | Number of Foreign Students: (a) UG | 18 | | |
| | (b) PG | 0 | | |
| | (b) Ph.D. | 01 | | |

| 12. | Minor Specialisation: - (a) UG | Existing: Nanoscience & Technology Photonics Space & Atmosphere Sciences Robotics & Intelligent Systems Nuclear Engineering Plasma Science & Technology |
|-----|-----------------------------------|---|
| | (b) PG | NIL NIL |

8.2 Details of admitted students: -

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|-----------------------------|-----------------------------|--|
| 1 | UG Programs (a) B.Tech (EP) | 95 | 109 |
| 2. | PG Programs | | |
| | (a) M.Tech (NST) | 20 | 2 |
| | (b) M.Tech (MOCE) | 20 | 3 |
| | (c) M.Sc (Physics) | 30 | 33 |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|--------------------|---------------|-----------------------------------|
| 1, | M.Sc. (Physics) | 30 | August 2019 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|------------------|--|------------------------|
| 1 | h-index of the department | 40 | 60 | 2021 |
| 2. | Citations of the department | 4200 | | |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 110 (2018-19) | | |
| 4. | Number of Ph.D. students in the department | 70 | 80 | 2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 29 | Each faculty should have at least one project | |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | NIL | 02 | |

| 7., | Number of Consultancy Projects (between 1 Lac to 5 Lac) | NIL | 02 | |
|-----|--|-----|-----|--|
| 8. | Number of Patents: - | | | |
| | (a) Filed | 94 | 02 | |
| | (b) Published | 01 | - | |
| | (c) Granted | 01 | - | |
| 9. | Centre of excellence in emerging areas of Technology/Science/Management & allied areas | 01 | 01 | |
| 10, | Commercially sustainable Products | NIL | NIL | |
| 11. | Number of research laboratories | 10 | 07 | |
| 12. | MOUs with National & International Institutions/Organisations | 01 | 02 | |

10. Faculty & Staff: -

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|---|
| 1,, | Number of sanctioned teaching posts: - | | | |
| | (a) Professor | 04 | | |
| | (b) Associate Professor | 09 | | |
| | (c) Assistant Professor | 41 | | |
| 2. | Number of faculty in position: - | | | |
| | (a) Professor | 04 | - | |
| | (b) Associate Professor | 05 | 04 | |
| | (c) Assistant Professor | 14 | 27 | (2020) Posts have been advertised |
| 3. | Number of sanctioned technical posts: - | | | |
| | (a)Technical Officer/Foreman | V.S. | | |
| | (b)Senior Technical Assistant | 04 | | |
| | (c) Technical Assistant | - | - | |
| | (d) Junior Technical Assistant | 02 | | |
| | (e) Others | • | | |
| 4. | Number of technical staff in position: - | | | |
| | (a) Technical Officer/Foreman | 74 | | |

| | (b) Senior Technical Assistant | 03 | As per DTU norms | |
|----|---|----------------|------------------|--|
| | (c) Technical Assistant | * | | |
| | (d) Junior Technical | 01 + | As per DTU | |
| | Assistant | 4(Contractual) | norms | |
| | (e) Others | | | |
| 5. | Number of Ministerial | 01 | As per DTU | |
| | Staff | (Contractual) | norms | |
| 6. | Number of Multi- | 03 | As per DTU | |
| | Tasking Staff | (Contractual) | norms | |
| 7. | Number of International faculty engaged | NIL | 01 | |
| 8. | Number of faculty deputed for higher studies/PDFs | NIL | 02 | |
| 9. | Number of faculty members sent to industry | NIL | 02 | |
| 10 | Number of Adjunct/Honorary Faculty | NIL | 02 | |

11. Infrastructure: -

- 11.1 Details of new Laboratories proposed for UG Programs: NIL-
- 11.2 Details of new Laboratories proposed for PG Programs: Academic Labs for M.Sc. Program- 04

12. Details of ongoing research projects (more than 05 lacs): -

| Şr. No. | Title | Funding Agency | Grant (Rs.) | Date of start of Project | Name of PI |
|------------|--|--|----------------|--------------------------------|---|
| 1. | Analytical and Numerical Simulation of Growth and Field Emission Properties of CNT- Graphene Composites | SERB-DST, Govt of India | 23, 93,794 | 2018- 2021 | Prof. Suresh C. Sharma & Prof. Rinku Sharma |
| 2. | Development of Versatile Alkaline Earth Phosphate Micro and Nanophosphors for Energy Saving near UV-based White LEDs | SERB-DST, Govt. of India, New Delhi | 26,36,800 | 2015 2019 | Dr. M. Jayasimhadri |
| 3. | Photoinduced Charge Transfer Dynamics of Quantum Dots/Molecules under the Influence of External perturbation. | Science and Engineering Research Board (SERB), Department of Science | 62,17,000 | 2017- 2020 | Dr. Mohan Singh Mehata |

| r | | | | 1 | |
|-----|--|---|-------------------|-------------------|--|
| | | and Technology (DST) | | | |
| 4. | Electrical Energy Harvesting using Monolayer MoS ₂ and MoS ₂ -Graphene Heterostructures for Self- Powering Electronic and Bioelectronics Devices | DST- INSPIRE | 35 Lakhs | 2017- 2022 | Dr. Bharti Singh |
| 5. | Tapping solar, wind and human energy; a hybrid photovoltaic/piezoelectric device based on 2D materials and their van derWaalsheterostructure | UGC Startup Grant | 10 Lakhs | 2018- 2020 | Dr. Bharti Singh |
| 6. | Investigation of Heusler Alloys for Thermoelectric Applications | UGC | 10,00,000 | 2018 - 2020 | Dr Mukhtiyar Singh |
| 7. | Study of the chemical structure and bonding in CuO nanowire by using EXAFS Synchrotron radiation | IUAC-DAE, Indore | 7.5 Lakhs | 2017- 2020 | Dr. Pawan Kumar Tyagi |
| 8. | lon irradiation on filled- multiwalled carbon nanotubes to create N-V center | UGC-IUAC, Delhi | 7.5 Lakhs | 2017- 2020 | Dr. Pawan Kumar Tyagi |
| 9. | Ultrafast dynamics of excitons and charge carriers in the white-light-emitting quantum dots produced at low temperature. | Bilateral Project DST-RFBR (Indo- Russian Joint Research Project) | 19,75,000 | 2017- 2019 | Dr. Mohan Singh Mehata |
| 10. | Studies on Novel Visible Up-Conversion Luminescent Rare Earth doped Nanophosphors for Bio-Photonic Applications | DST-SERB | 38 Lakhs | 2017 to 2020 | Prof. A.S. Rao & Prof. G.Vijaya Prakash (IIT-Delhi) |
| 11. | Preparation and Characterization of Rare Earth ions doped Oxide, Fluoride and Oxy-Fluoride Glasses/Glassy Ceramics for Fiber Lasers and Optical Fiber Amplifiers | DST-ECRA | 52 Lakhs | 2016 to 2019 | Prof. A.S. Rao & Dr.Sk. Mahamuda (KLU) |
| 12. | Elastic Recoil Detection Analysis of Pt/Ti capped Na/Al and Li/Al thin films | Inter University Accelerator Centre | Non- Sponsored | 2017 to till date | Dr. Nitin K. Puri |

| | using 107Ag and 58Ni swift heavy ion beam. | (IUAC), UGC | | | |
|-----|---|--------------------------------|-----------|-------------------|---|
| 13. | Ultrathin 2D- Nanomaterials for Cancer Diagnostic Application | SERB-DST, Govt. of India | 49,68,480 | 2017 to till date | Dr. Nitin K. Puri, Dr. Saurabh Srivastava, Prof. B. D. Malhotra |

- 13. Details of Patents:-
- 14. Details of existing centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas: 01
- 15. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas: 01
- 16. Details of existing research laboratories: -
 - 1. Advanced Sensor Lab
 - 2. Nano Materials Research Lab
 - 3. Laser Spectroscopy Lab
 - 4. Nano Fabrication Lab
 - 5. Plasma and Nano Simulation Lab
 - 6. Lithium Ion Battery Technology Research Lab
 - 7. Atomic, Molecular & Terahertz Radiation Emission & Simulation Lab
 - 8. Materials & Atmospheric Science Research lab
 - 9. Luminescent Materials Research Lab (LMRL)
 - 10. Microelectronics Research lab
 - 11. Advanced simulation lab
 - 12. Advanced photonics simulation research lab
 - 13. Advanced Instrumentation Centre

17. Details of proposed research laboratories: -

Minutes of 2nd meeting of the Planning Board, 31.01.2020

*Cluster Computing Lab

| Name of the Inventor | Patent Number | Title of the Patent | Year of Award/ Publish |
|------------------------------|------------------|--|------------------------------|
| Dr. Vinod Singh | 301873 | A process for synthesis of metal core-carbon shell nanoparticles | 2015 |
| Dr. Mohan Singh Mehata | Granted | Light emitting metal and dual metal doped zinc selenide quantum dots and method thereof. | 2019 |

^{*7} new Research Labs

18. Details of MOUs with National & International Institutions/
Organisations: - 01 (INMAS)

6. Department of Design

1. Name of Department Department of Design

2. Year of Establishment : 2018

3. **Introduction** : Strategic role of design through innovation in enhancing national and industrial competitiveness is universally recognized and underpins the national policy of Govt. of India. The strategy to achieve this vision seeks spot light on strengthening quality design education and usages of design in different sectors.

In furtherance of this national design vision, Delhi Technological University had decided to provide facilities for excellent design education, research and training to suit the needs of the society. Department of Design is envisioned to pursue excellence in design thinking, design scholarship and design practice for the betterment of society in a holistic manner. Design is viewed as a driver of innovation and is recognized as key differentiator for providing competitive edge to products and services. It involves an integrated humanistic approach to design products, it involves an integrated humanistic approach to design products, services and systems. It seeks to delve deeper in understanding of technological, Commercial and societal context in conception, Developments and delivery of innovative products and services as well as tools, techniques and methods required in the practice of design suitable to environment.

- 4. **Vision**: To pursue excellence in design thinking, design scholarship and design practice for the betterment of humanity and planet earth.
- 5. Mission : The Mission of the department is as follows:

M1 :To develop centres of excellence in service design, interactive design, product design, visual communication and allied areas

M2:To attract and nurture quality faculty with empathy having a passion for growth of self and others.

M3: To attract energetic, innovative students and enable them to emerge as creative and caring design professionals

M4:To create facilities for incubation, product development, transfer of technology and entrepreneurship.

M5:To provide course and facilities for other than design department student and faculty for developing inter- disciplinary activities and projects.

6. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|---------|---------|------------------|------------------|--|
| 1. | B.Des | 64 | 2018 | 57 |

7. Key Achievements of Department: - Students' works published in Newsletter: Design for all Institute of India- October issue 2019.

8. Education

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|--------------------|---------------------|------------------------|
| 1. | Number of UG Students | 63+54=117 | | *** |
| 2. | Number of PG Students | (550) | 45 | 2021 |
| 3. | Number of Ph.D. Students | 5 | | |
| 4. | Annual Intake:- (a) UG (b) PG | 67 | 67 45 | 2021 |
| 5. | Number of UG Programs | 01 | 01 | |
| 6. | Number of PG Programs | 00 | 03 | 2021 |
| 7 | DTU Ph.D. Teaching- cum-Research Fellowships | 2 | ं चं जाः | |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 0 | | |
| 9. | Development of MOOCs Courses | | | |
| 10. | Percentage of Female Students in the Department | 31 | | |
| 11, | Minor Specialisation:- (a) UG | 3 | 3 | |
| | (b) PG | 1 | 3 | 2021 |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|--------------------|--------------------------------|--|
| 1. | UG Programs | | |
| | (a)BDes | 67 | 63 |
| | (b) | | |

| 2. | PG Programs | | |
|----|-------------|----|--|
| | (a)MDes | 15 | |
| | (b)PhD | | |
| | (c) | | |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|---------|---------------|-----------------------------------|
| | MDes | 15 | Aug 2020 |

8.4 Details of minor specialization(s):- Interaction Design, Visual Communication and Product Design

8.5 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|-----------------------------------|------------------------------|--------------------------------|
| | Ergonomics and its Application | Prof. Ranganath M Singari | August 2020 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1, | h-index of the department | 06 | | 1 |
| 2. | Citations of the department | | | |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 30 | | |
| 4. | Number of Ph.D. students in the department | 5 | | |
| 5. | Number of Research Projects (more than 5 Lacs each) | | | |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | NI NI | | |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | | | |
| 8 | Number of Patents:- (a) Filed | | | |
| | (b) Published (c) Granted | | | |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | | | |
| 10. | Commercially sustainable Products | | | |

| 11. | Number of research laboratories | |
|-----|---------------------------------|--|
| 12. | MOUs with National & | |
| | International | |
| | Institutions/Organisations | |

10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|----------|-----------|------------------------|
| 1. | Number of sanctioned | | | |
| | teaching posts :- (a) Professor | 1 | 3 | August 2021 |
| | | 1 | 6 | , again |
| | (b) Associate Professor | | | |
| | (c) Assistant Professor | 18 | 26 | |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | 0 | | |
| | (b) Associate Professor | 0 | | |
| | (c) Assistant Professor | 5 | | |
| 3. | Number of sanctioned technical posts:- | | | |
| | (a) Technical Officer/Foreman | 0 | 2 | August 2021 |
| | (b) Senior Technical Assistant | 0 | 4 | |
| | (c) Technical Assistant | 0 | 6 | |
| | (d) Junior Technical Assistant | 0 | 12 | |
| | (e) Others | 0 | 4 | |
| 4. | Number of technical staff in position:- | 0 | | |
| | (a) Technical Officer/Foreman | 0 | | |
| | (b) Senior Technical Assistant | 1 | | |
| | (c) Technical Assistant | 0 | | |
| | (d) Junior Technical Assistant | 0 | | |
| | (e) Others | 0 | | |
| 5. | Number of Ministerial Staff | 0 | 6 | August 2021 |
| 6. | Number of Multi-Tasking Staff | 2 | 12 | |
| 7. | Number of International faculty engaged | 0 | 4 | |
| 8. | Number of faculty deputed for higher studies/PDFs | 0 | 1 | |
| 9. | Number of faculty members sent to industry | 0 | 1 | |
| 10 | Number of Adjunct/Honorary Faculty | 1 | 5 | |

11. Infrastructure:-

11.1 Details of new Laboratories proposed for UG Programs:-

| Prototyping Facility | | | | | |
|----------------------|--------------------|---------|--------------------------|----------------------|--|
| Hard Material Lab | 3D Printing Lab | CAD Lab | Clay modelling Lab | Soft Material Lab | |

| Ergonomics Facility | | | |
|---------------------|-----------|--------|--|
| Physical | Cognitive | Visual | |

Universal & Human Centric Design Lab Virtual Reality and Augmented Reality Computer Lab Photography Studio and Video Sound Design Lab Studios

11.2 Details of new Laboratories proposed for PG Programs:-UI/UX Lab Workshop Design Studios

- 12. Details of proposed Research Projects:- One Project Submitted to DST in collaboration with MADS Delhi
- 13. Details of Patents:- 01
- 16. Details of existing centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:- CAPIER
- 17. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:- InDeCAM lab, Visual Communication Lab, UI/UX lab

7. Environmental Engineering

1. Name of Department

: Environmental Engineering

2. Year of Establishment

:1998 (separated from Civil Engg. In

2012)

- 3. Introduction
- 4. Vision: To produce technologically relevant environmental engineering graduates, post graduates and researchers through innovative application of science, engineering and technology with globally acceptable curriculum and teaching-learning environment; to create engineering leaders who can work in multi-disciplinary groups to anticipate and address evolving challenges sustainably for the betterment of human society.

5. Mission:

- To mould students for profession practice career through basic fundamentals, environment advices and analysis and design.
- To accomplish high quality inter disciplinary research, leading to technology development and competency building in different areas related to environmental problems
- To maintain and intellectually challenging, yet supportive and welcoming environment, that encourages and enables our students, faculty and staff to achieve their best in a diverse community.
- To be recognized by our peers as a highly effective leader in knowledge creation and development of innovative approaches for solving environmental engineering problems

6. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|-------------------|------------------|------------------|--|
| 1 | B.Tech (Env Engg) | 60 | 1998 | 60 |
| 2 | M.Tech (Env Engg) | 23 | 1982 | 22 |

7. Key Achievements of Department:

8. Education

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|------------------|-----------|------------------------|
| 1 | Number of UG Students | 225(60+59+51+55) | 240 | |
| 2. | Number of PG Students | 38(16+22) | 46 | |
| 3. | Number of Ph.D. Students | 15 (8+7) | NA | |
| 4. | Annual Intake:- (a) UG | 60 | 60 | |
| | (b) PG | 18+5 | 23 | |
| 5. | Number of UG Programs | 01 | 01 | к |
| 6. | Number of PG Programs | 01 | 01 | |
| 7. | DTU Ph.D. Teaching- cum- Research Fellowships | 08 | 10 | 2021 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 04 | 08 | 2021 |

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| 9. | Development of MOOCs Courses | Nil | 05 | 2021 |
|-----|---|--------|----|------|
| 10. | Percentage of Female Students in the Department | 19% | | |
| 11, | Number of Foreign Students:- (a) UG | | | |
| | (b) PG | 4(3+1) | | |
| | (c) Ph.D. | 01 | | |
| 12, | Minor Specialisation:- (a) UG | | | |
| | (b) PG | | | |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|--------------------|--------------------------------|--|
| 1. | UG Programs | | |
| | (a)B.Tech (ENE) | 60 | 60 |
| | (b) | | |
| | (c) | | |
| 2. | PG Programs | | |
| | (a)M.Tech (ENE) | 23 | 22 |
| | (b) | | |
| | (c) | | |

8.3 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|------------------------|------------------|-----------------------------|
| 1 | Solid waste management | Dr A.K. Haritash | December 2020 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|----------|-----------|------------------------|
| 1 | h-index of the department | 24 | 30 | 2021 |
| 2. | Citations of the department | 5625 | | |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 52 | 75 | 2021 |

| 4. | Number of Ph.D. students in the department | 15 | | |
|-----|--|-----------------|-----|---------------|
| 5. | Number of Research Projects (more than 5 Lacs each) | 01 | | |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | s - | | - |
| 7 | Number of Consultancy Projects (between 1 Lac to 5 Lac) | - | - | 7 |
| 8 | Number of Patents:- (a) Filed (b) Published | | | |
| | (c) Granted | _ | _ | - |
| 9. | Centre of excellence in emerging areas of Technology/Science/Management & allied areas | Nil | 01 | December 2021 |
| 10. | Commercially sustainable Products | æ | === | _ |
| 11. | Number of research laboratories | 01 | 02 | 2021 |
| 12. | MOUs with National & International Institutions/Organisations | 01 | 03 | 2021 |

10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1. | Number of sanctioned teaching posts :- | | | 1 |
| | (a) Professor | | | |
| | (b) Associate Professor | | | |
| | (c) Assistant Professor | | | |
| 2. | Number of faculty in | | | |
| | position:- | | | |
| | (a) Professor | 01 | | |
| | (b) Associate Professor | 01 | | |
| | (c) Assistant Professor | 05 | | |
| 3. | Number of sanctioned | | | |
| | technical posts:- | | | |
| | (a) Technical | | | |
| | Officer/Foreman | | | |
| | (b) Senior Technical | | | |
| | Assistant | | | |
| | (c) Technical Assistant | | | |

| | (d) Junior Technical | | |
|----|---|---------------------|---|
| | Assistant | | |
| | (e) Others | L. | |
| 4. | Number of technical staff in position:- | | |
| | (a) Technical Officer/Foreman | | |
| | (b) Senior Technical Assistant | 01 | |
| | (c) Technical Assistant | | |
| | (d) Junior Technical Assistant | 02 (Contractual) | |
| | (e) Others | | |
| 5. | Number of Ministerial Staff | 02 (Contractual) | |
| 6. | Number of Multi-Tasking Staff | 05 | |
| 7 | Number of International faculty engaged | - | |
| 8. | Number of faculty deputed for higher studies/PDFs | 01 | |
| 9. | Number of faculty members sent to industry | - | |
| 10 | Number of Adjunct/Honorary Faculty | • | ₩ |

11. Infrastructure:-

- 11.1 Details of new Laboratories proposed for UG Programs:- Solid waste management lab
- 11.2 Details of new Laboratories proposed for PG Programs:- Solid waste management lab
- 12. Details of ongoing research projects (more than 05 lacs):-

| Şr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---|-------------------|---------------------|--------------------------|---------------------------|
| 1. | 'Proxy relationship of ultrafine particles number concentration, new particle formation and its growth rate in transport microenvironment in Delhi' | СРСВ | (Rs. 79,92,960/- | 2018 | Dr Rajeev Kumar Mishra |



- 13. **Details of existing research laboratories:-**Advance Air & Acoustic Research Lab
- 14. Details of proposed research laboratories:-
 - 1. Water technology centre
 - 2. Solid waste management lab
- 15. Details of MOUs with National & International Institutions/
 Organisations:- Labtrobe University Australia

8. Computer Science & Engineering

1. Summary

The Department of Computer Science & Engineering (CSE) of Delhi Technological University (DTU) is one of the leading department in India in education and research. Since its inception in 1989, the department is serving the nation by training the budding engineering in the emerging areas of computer science and software engineering and has produced world class alumni. The students are placed in the leading companies with impressive packages and have been selected by world class universities for higher education.

With this strategic plan, the Department of CSE plans to lay down a roadmap for next two years in education, teaching and research. The plan is the result of the vision and strategic plan of the university, by which the department aims to excel in all the phases of education. This will bring new challenges and create new opportunities for CSE education, teaching and research.

2. Department's Vision & Mission

Vision

Department of Computer Science & Engineering to be a leading world class technology department playing its role as a key node in national and global knowledge network, thus empowering the computer science industry with the wings of knowledge and power of innovation.

Mission

The Mission of the department is as follows:

- 1. To nurture talent of students for research, innovation and excellence in the field of computer engineering starting from Under graduate level.
- 2. To develop highly analytical and qualified computer engineers by imparting training on cutting edge technology.
- 3. To produce socially sensitive computer engineers with professional ethics.

- 4. To focus on R&D environment in close partnership with industry and foreign universities.
- 5. To produce well-rounded, up to date, scientifically tempered, design oriented engineer and scientists capable of lifelong learning.

3. Strategic Plan -- 2019-2021

3.1 Education

The department will contribute towards increasing the strength of students in the university in the undergraduate programs and will start a new postgraduate program. The following are the resolutions of the department for contributing towards education:

| Objectives | Actions |
|--|--|
| To increase student strength in B.Tech(Computer Engineering) from 350 to 400 and B.Tech (Software Engineering) from 120 to 150 | Achieved |
| To start new postgraduate program in Artificial Intelligence | To be started in academic year 2020 |
| To develop atleast 2 MOOC courses | Prof. Rajni Jindal, Dr. Ruchika Malhotra and Mr. Sanjay Kumar to develop MOOC courses till 2021 |
| To provide large number of choices to students in courses | To add 5 more electives in B.Tech program till 2021 |

3.2 Research

The department is committed to produce high quality research publications. The following are the resolutions of the department towards promoting research in the coming two years:

| Objectives | Actions |
|---|--|
| To develop Research Lab in collaboration with Samsung | Achieved |
| To increase number of Ph.Ds from 60 to 120 | To add atleast 50 Ph.D till 2021 |
| To collaborate with international institutions | |
| To publish papers in SCI/SCIE indexed publications | To add atleast 30 research SCI/SCIE indexed publications till 2021 |

3.3 Faculty

The following are the resolutions of the department towards increasing the number of highly qualified faculty:

| Objectives | Actions |
|--|--|
| To add atleast 20 new faculty and 10 new staff in the department | Recruitment process in progress |
| To motivate faculty to pursue higher education including Ph.D and post doctorate | 90% faculty to complete Ph.D till 2021 and increase post doctorate from 1 to 2 in next two years |

3.4 Infrastructure

The following are the resolutions of the department towards development of new laboratories and centres of excellence:

| Objectives | Actions |
|---|---|
| New 10 storeyed building to be constructed | In progress and to be completed till 2020 |
| To develop laboratory on Cyber Security | In progress to be completed till 2021 |
| To develop Centre of Excellence on Machine Learning | In progress to be completed till 2021 |

3.5 Innovation and Entrepreneurship

| Objectives | Actions |
|--------------------------------|---|
| To bring consultancy projects | In progress and to be completed till 2020 |
| To promote innovative projects | In progress to be completed till 2021 |

3.6 Finance

| Objectives | Actions |
|-----------------------|----------------------------------|
| To increase computers | Purchase 140 computers till 2021 |

9. Department of Humanities

1. Name of Department : Humanities

2. Year of Establishment :1965

3. Introduction

The Department of Humanities offers courses in Communication Skill, English, Economics and Accountancy for engineering and management students in an effort to train them for the global economic environment of the 21st Century. Moreover, it offers PhD programs in Economics and English. In addition, the department has enrolled post-doctoral fellows. The Department has 5 competent faculty members with a high degree of excellence who keeps pace with the current developments in their fields of specialization for the fulfillment of its teaching and research goals. It makes the environment of the department very vibrant. Faculty members, research scholars and students frequently participate and present their research papers in the national and international seminars / conferences. The Department organizes seminars and invited talks for the benefit of students.

4. Vision

➤ To achieve academic excellence through knowledge creation and its dissemination in the field of economics, ethics and communication skills with a view to prepare students for the 21st century global competitive market.

Mission

- > To develop strong communication and business skills among the students
- > To develop high standard of ethical and moral considerations
- > To sensitize students towards technological needs of the poor and deprived sections of society.

6. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|----------------|------------------|------------------|--|
| | Not Applicable | | | |

7. Key Achievements of Department:-

- > Establishment of language lab
- > Running PhD Program in Economics and English declines

8. Education

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------------|-----------|------------------------|
| 1 | Number of UG Students | Not Applicable | | |
| 2. | Number of PG Students | Not Applicable | | |
| 3. | Number of Ph.D. Students | 24 | 28 | December 2021 |
| 4. | Annual Intake:- (a) UG | Not Applicable | | |
| | (b) PG | Not Applicable | | |
| 5. | Number of UG Programs | Not Applicable | | |
| 6. | Number of PG Programs | Not Applicable | | |
| 7. | DTU Ph.D. Teaching- cum-Research Fellowships | 05 | | |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 01 | | |
| 9. | Development of MOOCs Courses | Nil | | |
| 10. | Percentage of Female Students in the Department | 75% (PhD) | | |
| 11, | Number of Foreign Students:- (a) UG | Not Applicable | | |
| | (b) PG | Not Applicable | | |
| | (c) Ph.D. | 02 | 04 | |
| 12. | Minor Specialisation:- (a) UG | Not Applicable | | |
| | (b) PG | Not Applicable | | |

8.2 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|----------------------|-----------------|-----------------------------|
| | Communication Skills | Dr. R R Dwivedi | December 2021 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|------------|-----------|------------------------|
| 1, | h-index of the department | 10 | 20 | December 2021 |
| 2. | Citations of the department | 280 | 400 | December 2021 |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 10 | 20 | December 2021 |
| 4. | Number of Ph.D. students in the department | 24 | 28 | December 2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 01 | 02 | December 2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | Nil | | |
| 7, | Number of Consultancy Projects (between 1 Lac to 5 Lac) | Nil | | |
| 8 | Number of Patents:- (a) Filed | Nil | | |
| | (b) Published | Nil | | |
| 9. | (c) Granted Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | Nil Nil | | |
| 10. | Commercially sustainable Products | Nil | | |
| 11. | Number of research laboratories | Nil | | |
| 12. | MOUs with National & International Institutions/Organisations | Nil | | |

10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|----------------|-----------|------------------------|
| 1. | Number of sanctioned | | | |
| | teaching posts :- (a) Professor | 1 | 1 | December 2021 |
| | (b) Associate Professor | 2 | 2 | December 2021 |
| | (c) Assistant Professor | 9 | 9 | December 2021 |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | 2 | | |
| | (b) Associate Professor | 2 | | |
| | (c) Assistant Professor | 1 | 2 | December 2021 |
| 3. | Number of sanctioned technical posts:- | - | | |
| | (a) Technical Officer/Foreman | Not Applicable | | |
| | (b) Senior Technical | Not Applicable | | |
| | Assistant | | | |
| | (c) Technical Assistant | Not Applicable | | |
| | (d) Junior Technical Assistant | Not Applicable | | |
| | (e) Others | | | |
| 4. | Number of technical staffin position:- | | | |
| | (a) Technical Officer/Foreman | Nil | | |
| | (b) Senior Technical | Nil | | |
| | Assistant | | | |
| | (c) Technical Assistant | Nil | | |
| | (d) Junior Technical Assistant | Nil | | |
| | (e) Others | Nil | | |
| 5. | Number of Ministerial Staff | Nil | | |
| 6. | Number of Multi-Tasking Staff | 1 | | |
| 7, | Number of International faculty engaged | Nil | | |
| 8. | Number of faculty deputed for higher studies/PDFs | 1 | | |
| 9. | Number of faculty members sent to industry | Nil | | |
| 10 | Number of Adjunct/Honorary Faculty | Nil | | |

10. Delhi School of Management

1. Name of Department

Delhi School of Management

2. Year of Establishment

2009

- 3. Introduction: Delhi School of Management (DSM) was established in 2009 with Delhi College of Engineering (DCE) acquiring a University status, being officially renamed as Delhi Technological University (DTU) through a legislature passed by the Delhi State Assembly. DSM envisages at developing distinctive future managers, keeping up with the tradition of DCE (and now DTU) by providing excellent world class education. DSM was established with a vision of inculcating a penchant for innovation, research, and experimentation in the aspiring managers.
- 4. Vision: To be among the leading world class management education and research institutions for meeting the contemporary and emerging challenges of business and society

5. Mission:

- 1. To develop socially responsible and ethically driven innovative managers and future leaders
- To evolve a system of quality education and research in management through sustained institutionalized efforts of students and faculty
- 3. To equip the students with contemporary and emerging developments in the field of management

6. Details of UG & PG Courses

| SI. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|-------------|---------------|------------------|--|
| 1 | PG - MBA | 120 + | 2009 | 116 + 7 |
| | | International | | (International) |
| 2 | PG - MBA | 60 | 2013 | 41 |
| | (Executive) | | | |

7. Key Achievements of Department

a) Live Projects

- Two students (MBA Full –Time) are currently working on a live project
- Efforts being made to integrate live projects with NUES (Non University Evaluation Scheme) courses for continuous evaluation
- III. MoU with NIC in pippeline

- b) Management Development Programs (MDPs)
 - Faculty has identified certain areas for MDPs based on industry relevance
 - II. MDP prospectus designing for promotion (in-process)
 - III. MDP calendar planned and proposed for 2019-21 (in-process)
- c) Department events,
 - Organized
 - i. Oct-2019 : Finance Conclave Changing dynamics in the financial world
 - II. Planned
 - Feb-2020 : HR Conclave Reinventing HRM for creating competitive edge
 - ii. Dec-2020 : 2nd International Conference on Business and Management
- d) Management Journal
 - Launch of management journal planned in Dec 2020
- e) Start-ups
 - Sportsapp App for sports professional network incubated at DTU center
 - II. Two proposals submitted to DTU Incubation center
- f) Higher Education (including Post Docs) attained by faculty
 - I. Two faculty members awarded PhD
 - II. Four faculty members enrolled for their PhDs
- g) International Conference /Training Program /Workshop attended by faculty
 - I. Case teaching and Writing Workshop at ISB Hyderabad
 - II. Paper presentation at MICA Conference (Theme : Managing Business in Digital Economy)
 - III. DSM organized 1st International Conference on Business and Management attended by all faculties
 - IV. Workshop on Machine Learning with Business Applications at IIM Bangalore
 - V. International workshop on Case Teaching and Writing for educators' by The Case Centre, Dubai
- h) Infrastructure
 - Vertical garden at the entrance completed.
 - II. Another proposed to be set-up

8. Education

8.1 Academic Details

| SI. No | Action | Existing | Target(s) | Date of Achievement(s |
|-----------|---|---|---|-----------------------------|
| 1 | Number of UG Students | N.A | N.A | Ń.A |
| 2 | Number of PG Students | MBA (1 st +2 nd) = 113 + 111 MBA (Executive) (1 st + 2 nd) = 41 + 40 | MBA – 150+ (per year) MBA (Executive)- 60 (per year) | Academic Year 2020-21 |
| 3 | Number of Ph.D Students | Total = 42 (Including part-time) | Total = 52 (Including part-time) | 2020-21 |
| 4 | Annual Intake (a) UG | N.A | N.A | N.A |
| | (b) PG | MBA – 120+ MBA - 60 (Executive) | MBA - 150+ MBA - 60 (Executive) | Academic Year 2020-21 |
| 5 | Number of UG Programs | N.A | N.A | N.A |
| 6 | Number of PG Programs | 2 | | Academic Year 2020-21 |
| 7 | DTU Ph.D Teaching- cum- Research Fellowships | 5 | 6 | Academic Year 2020-21 |
| 8 | Junior Research Fellowship of UGC, CSIR, DST, DBT etc. funding agencies | 5 (UGC JRF) | 6 | Academic Year 2020-21 |
| 9 | Development of MOOCs Courses | - | 1 | Academic Year 2020-21 |
| 10 | Percentage of Female Students in the Department | MBA(1 st) 45% MBA (2 nd) 36% MBA (Executive) (1 st) - 25% | As per DTU policy | _ |

| | | MBA (Executive) (2 nd) – 25% PhD – 40% | | |
|----|--|---|--|-----------------------------|
| 11 | Number of Foreign Students (a) UG | N.A | N.A | N.A |
| | (b) PG | MBA(1 st) – 5 MBA(2 nd) – 11 | MBA – 15 (every year) | Academic Year 2020-21 |
| | (c) Ph.D | 1 | 1 | Academic Year 2020-21 |
| 12 | Minor Specialisatio n (a) UG | N.A | N.A | N.A |
| | (b) PG | 6 Major Areas (Dual Specialization) | 6 Major Areas (Dual Specialization) | Academic Year 2020-21 |

8.2 Details of admitted students

| SI. | Programs (UG & PG) | Annual | Actual Admitted |
|-----|---------------------|------------------------|-----------------|
| No. | | Sanctioned | Students in |
| | | Intake | 2019-20 |
| 1 | UG Programs | N.A | N.A |
| | (a) | N.A | N.A |
| | (b) | N.A | N.A |
| | (c) | N.A | N.A |
| 2 | PG Programs | | |
| | (a) MBA | 120 + | 116 + 7 |
| | | International students | (International) |
| | (b) MBA (Executive) | 60 | 41 |

8.3 Details of new UG/PG Program(s)

| SI. No. | Program | Annual Intake | Proposed date of start of program |
|------------|---------|---------------|---|
| N.A | N.A | N.A | N.A |

8.4 Details of minor specialization(s)

- I. Dual specializations in following 6 major areas,
 - a. Finance
 - b. Human resource
 - c. Marketing
 - d. Knowledge management
 - e. Information technology
 - f. Operations and supply chain management

8.5 Details of proposed MOOCs Courses to be developed

| SI. | Title | Name of | Proposed date |
|-----|---|---------|--------------------------|
| No. | | Faculty | of completion |
| 1 | A course on essentials of any of the above areas in 8.4 or application of analytics in one of these areas | | Academic Year 2020-21 |

8.6 Any other details on the above matter

I. It is being explored with faculty to identify and undergo required training for development of one MOOC course

9. Research

9.1 Research Parameters/Metrics

| SI. No | Action | Existing | Target(s) | Date of Achievement(s |
|-----------|---|------------------------------------|--|--------------------------|
| 1 | h-index of the department | 5* | 7 | Academic Year 2020-21 |
| 2 | Citations of the department | 170* 700+ | 200 800+ | Academic Year 2020-21 |
| 3 | Number of SCI/SCIE/SSCI/Scopu s Indexed Publications | 55 | 75 | Academic Year 2020-21 |
| 4 | Number of Ph.D students in the department | Total = 42 (Includin g part- time) | Total = 52 (Includin g part- time) | Academic Year 2020-21 |
| 5 | Number of Research Projects (more than 5 lacs each) | 1 | 2 | Academic Year 2020-21 |
| 6 | Number of Consultancy Projects (more than 5 lacs each) | 2 | 1 | Academic Year 2020-21 |
| 7 | Number of Consultancy Projects (1 lac to 5 lac) | - | * | • |

| 8 | Number of Patents (a) Filed | - | 15 | _ |
|----|---|---|----|--------------------------|
| | (b) Published | - | - | - |
| | (c) Granted | | - | - |
| 9 | Centre of excellence in emerging areas of Technology/ Science / Management & allied areas | - | 1 | Academic Year 2020-21 |
| 10 | Commercially sustainable Products | - | ¥ | - |
| 11 | Number of research laboratories | 1 | 1 | Academic Year 2020-21 |
| 12 | MOUs with National & International Institutions / Organizations | | 1 | Academic Year 2020-21 |

^{*}As per dtu.irins.org

Faculty & Staff

| SI. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|-------------------------|-----------------|------------------------|
| 1 | Number of sanctioned teaching posts | ā | | |
| | (a) Professor | 2 | - | - |
| | (b) Associate Professor | 4 | - | 34 |
| | (c) Assistant Professor | 13 | 墨() | |
| 2 | Number of faculty in position | | | |
| | (a) Professor | 1 + 1 | 50 0 | ÷ |
| | | (contractual) | | |
| | (b) Associate Professor | 1 | = | 18 |
| | (c) Assistant Professor | 11 + 1 (contractual) | • | i i |
| 3 | Number of sanctioned technical posts | | | |
| | (a) Technical Officer / Foreman | - | #-X | 1.5 |
| | (b) Senior Technical Assistant | - | - | - |
| | (c) Technical Assistant | - | Ð | ÷ |

| | (d) Junior Technical Assistant (e) Others | - | - | - |
|---|--|--------------------|----------|------------|
| 4 | Number of technical staff in position | | | |
| | (a) Technical Officer / Foreman | - | - | - |
| | (b) Senior Technical Assistant | | - | ₩ 8 |
| | (c) Technical Assistant | 1 (contractual) | | ₩. |
| | (d) Junior Technical Assistant | - | | ₩. |
| | (e) Others | - | | |
| 5 | Number of Ministerial Staff | 1 | <u> </u> | 8 |
| 6 | Number of Multi-Tasking Staff | 3 | . | =. |

10. Infrastructure

10.1 Details of new Laboratories proposed for UG Programs

- 10.2 Details of new Laboratories proposed for PG Programs
 - Exploring possibility of setting up Analytics lab. Proposal being worked out for procuring tools such as XL Miner. Also, in-house analytics capabilities using R, Python are being explored
 - II. Exploring integration of various Industry recognized CRM tools such as Salesforce
 - III. Possibilities of building partnerships with organizations like Oracle, SAP are being explored to strengthen the lab infrastructure

11. Details of ongoing research projects (more than 05 lacs)

| SI. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|--|-------------------|-----------------|--------------------------------|---|
| 1 | ICSSR sponsored project on E- waste management | ICSSR | Rs 8.75 lacs | Dec-2019 | PI / Co-PI : Dr. Deep Shree / Dr. Sonal Thukral |



12. Details of proposed Research Projects

13. Details of ongoing Consultancy Projects (more than 05 lacs)

| SI. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---|-------------------|-------------------|--------------------------------|---|
| 1 | Impact study of O & A Level courses at NIELIT, Delhi | NIELIT | Rs 6,41,920.00 | Nov- 2019 | PI / Co-PI : Dr. Archana Singh / Dr. Vikas Gupta |
| 2 | Youth engagement on mental health issues | IIT Delhi | Rs 15 Lacs | Aug- 2019 | PI/Co-PI: Prof. Rajan Yadav/ Dr. Shikha N Khera / Dr. Deep Shree |

- 14. Details of proposed centers of excellence in emerging areas of Technology/ Science/ Management & Allied Areas
 - Exploring for possible tie-up with Small Industries Development Bank of India (SIDBI) for setting up a Centre for Microfinance
- 15. Details of existing research laboratories

 Department has 1 lab equipped with following,
 - I. CMIE-Prowess database
 - II. Thomson Reuters (SDC) database
 - III. SPSS statistical package
- 16. Details of proposed research laboratories

Possibilities of building partnerships with organizations like Oracle, SAP are being explored to strengthen the existing lab infrastructure. In addition, following

- Proposal being worked out for procuring tools such as XL Miner. Inhouse analytics capabilities using R, Python being explored
- Exploring integration of various Industry recognized CRM tools such as Salesforce
- III. Following Harvard simulations have been identified for students,
 - 1. Change Management Simulation: Power & Influence
 - 2. Design Thinking: New Venture Simulation: The Food Truck Challenge



17. Details of MOUs with National & International Institutions/ Organizations

- I. MOU with NIC underway for student participation in live-projects
- II. Possibility of establishing linkages for student exchange, faculty training and research collaboration are being explored with Universities such as Pusan National University (Korea), Curtin University (Australia).

Henley Business School (University of Reading, UK)

11. University School of Management and Entrepreneurship

1. Name of Department

: University School of Management and

Entrepreneurship

2. Year of Establishment

: 2017

3. Introduction

The USME was established in East Delhi campus (EDC) of DTU in the year 2017, to impart quality education and research in management, and to provide a platform for research and key social initiatives as well as become a nodal centre for entrepreneurship. The school aims at becoming a practise school with an integrated series of programs aimed at research, education, training and incubation programs in management and entrepreneurship.

EDC, DTU is located in the prime location of East Delhi at Vivek Vihar, Phase II, which is in very close vicinity of Scope Minar, a hub of all major multinational companies and public sector undertakings. USME offers programmes at undergraduate (UG), post graduate (PG) as well as at doctoral level (PhD, in Management and Economics areas). Currently the UG level programmes offered includes Bachelor of Business Administration (BBA), Bachelor of Arts (BA (H)) in Economics. At the PG the level Master of Business Administration (MBA) programmes, MBA (General) and MBA (Business Analytics) are offered. The redical and pioneering program MBA Innovation, Entrepreneurship and Venture Development in line with the AICTE's MBA Start-up program, has been launched in 2019. It also serves the family businesses which are a major driver of the economy, through the MBA Family Business and Entrepreneurship, launched in 2019. The doctoral level PhD in Management was initiated in 2018.

All programmes offered at USME are designed with a professional orientation. The curriculum has been designed by academic experts, senior professionals from industry, and DTU - DCE alumni that includes successful and recognised entrepreneurs. The school focusses on the holistic development of students by imparting knowledge and skills relevant to the present times industry and societal requirements. The academic curriculum is effectively integrated with a variety of enrichment and co-curricular activities such as workshops, industry exposure and seminars conducted by eminent speakers from industry, academia and other institutions, encouraging students participation in conferences, seminars and competitions, facilitating organization of several co-curricular activities.

4. Vision

To develop and nurture the spirit of management leadership and entrepreneurship with a sense of social conscience for the common good of the society.

5. Mission

USME has been following the mission outlined below, in pursuit of its vision:

- To impart management education through portfolio of professionally designed programmes with focus on entrepreneurship and family business, public policy, business analytics, finance market and many more
- To establish centre of excellence in entrepreneurship development, innovation incubation and organization development.
- To create a new knowledge based ecosystem through relevant and useful research in the context of changing technology and societal needs.
- To encourage and foster the spirit of enquiry and develop scientific temper.
- To nurture responsible ethical leaders.
- To contribute towards enrichment of corporate and professional life by providing consultancy and training.

6. Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|----------------------------------|------------------|------------------|--|
| 1 | B.A. (Hons) Economics | 132 | 2017 | 128 |
| 2. | BBA | 132 | 2017 | 132 |
| 3. | MBA | 60 | 2017 | 21 |
| 4. | MBA - Business Analytics | 30 | 2018 | 23 |
| 5. | MBA - IEV | 33 | 2019 | 16 |
| 6 | MBA-FBE | 33 | 2019 | 11 |
| 7. | PhD: Economics; Management | | 2018 | 6 |

7. Key Achievements of Department:

USME has successfully graduated the first batch of its MBA program, with placement or career advancement in higher degree of over 80 % students. It has also successfully completed the MBA-IEV design and launched PG programs in entrepreneurship through MBA-IEV and MBA-FBE. The first batch of MBA BA is also well with over a third of students placed already. Its Entrepreneuship Center is now on its way to become a major center for

venture development with its support to the IEV program, its mentor network development, and recently key MOU signed with ni-msme for training programs.

It has also held student events where business case study and business idea competitions, where in the past two years, participants from lading institutions such as IIMs Lucknow, Rohtak, Shillong, IIT have participated, along with cultural events where leading colleges of the coutry such as Hindu and LSRcolleges have participated. Students have done University proud by being awarded with top positions in competitions at the national and state level, such as Business Plan competitions, debate competitions in Economics, MUN, cultural events at the state level, paper presentations and case studies at state and National level at leading institutions such as IIM Kozhikode, Symbiosis, Pune, IMT Ghaziabad etc. Over twenty such awards have been won at this level in the past two and a half years.

8. Education

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|-----------|--|------------------------|
| 1. | Number of UG Students | | | |
| 2. | Number of PG Students | 113 | 380 | 2021-22 |
| 3. | Number of Ph.D. Students | 9 | 40 | 2021-22 |
| 4. | Annual Intake:- (a) UG | 132*2=264 | 264 | |
| | (b) PG | 150 | 190 | |
| 5. | Number of UG Programs | 2 | 2 | |
| 6. | Number of PG Programs | 4 | 4+ design of Masters in Applied Economics | 2020-22 |
| 7 | DTU Ph.D. Teaching- cum- Research Fellowships | | 10 | 2022 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 6 | 30 | 2022 |
| 9. | Development of MOOCs Courses | 2 | 10 | 2022 |
| 10. | Percentage of Female Students in the Department | | | |

| 11. | Number of Foreign Students:- (a) UG | nil | 2% | 2022 |
|-----|---|-----|-----|------|
| | (b) PG | nil | 5% | 2022 |
| | (c) Ph.D. | Nil | 2-3 | 2022 |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|---------------------|--------------------------------|--|
| 1. | UG Programs | 264 | 262 |
| • | (a) BA(H) Economics | 132 | 28 |
| | (b) BBA | 132 | 132 |
| | (c) - | - | - |
| 2. | PG Programs | | |
| | (a) MBA | 60 | 23 |
| | (b) MBA-BA | 30 | 21 |
| | (c) MBA-IEV | 33 | 16 |
| | (d) MBA - FBE | 33 | 11 |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|----------------------|---------------|-----------------------------------|
| 1, | MA Applied Economics | 30 | 2022-23 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|--|-----------|------------------------|
| 1. | h-index of the department | Not traceable in INRiS at present | 10 | 2021-22 |
| 2. | Citations of the department | Not traceable at present | 100 | 2021-22 |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 100 papers | 150 | 2021-22 |
| 4. | Number of Ph.D. students in the department | 11 | 40 | 2021-22 |

| 5. | Number of Research | | | |
|-----|----------------------------|---|---|---------|
| | Projects (more than 5 | | | |
| | Lacs each) | | | |
| 6. | Number of Consultancy | | | |
| | Projects | | 1 | |
| | (More than 5 Lacs each) | | | |
| 7,, | Number of Consultancy | | | |
| | Projects | | | |
| | (between 1 Lac to 5 Lac) | | | |
| 8., | Number of Patents:- | | | |
| | (a) Filed | | | |
| | (b) Published | | | |
| | (c) Granted | | | |
| 9. | Centre of excellence in | 3 | 3 | 2020-21 |
| | emerging areas of | | | |
| | Technology/Science/ | | | |
| | Management & allied | | | |
| | areas | | | |
| 10. | Commercially | | | |
| | sustainable Products | | | |
| 11, | Number of research | 0 | 1 | 2021-22 |
| | laboratories | | | |
| 12. | MOUs with National & | 1 | 2 | 2020-21 |
| | International | | | |
| | Institutions/Organisations | | | |

10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1. | Number of sanctioned teaching posts :- | | | |
| | (a) Professor | 8 | 8 | |
| | (b) Associate Professor | 15 | 15 | |
| | (c) Assistant Professor | 45 | | |
| 2. | Number of faculty in position :- | | | F |
| | (a) Professor | 3 | 5 | 2020-21 |
| | (b) Associate Professor | 0 | 8 | 2020-21 |
| | (c) Assistant Professor | 15 | 30 | 2020-21 |
| 3. | Number of sanctioned technical posts:- | | | |
| | (a) Technical Officer/Foreman | | | |
| | (b) Senior Technical Assistant | 1 | 1 | |
| | (c) Technical Assistant | 2 | 2 | |

| | (d) Junior Technical Assistant | 2 | 2 | |
|----|---|----|----|-----------------------------------|
| | (e) Others | 53 | 53 | |
| 4. | Number of technical staff in position:- | | | |
| | (a) Technical Officer/Foreman | 0 | | |
| | (b) Senior Technical Assistant | 0 | 1 | 2020-21 |
| | (c) Technical Assistant | 0 | 1 | 2021-22 |
| | (d) Junior Technical Assistant | 0 | 2 | 2021-22 |
| | (e) Others | 0 | 22 | 2020-21 (Ministerial Staff) |
| 5. | Number of Ministerial Staff | 7 | 11 | 2020-21 |
| 6. | Number of Multi-Tasking Staff | 9 | 11 | 2020-21 |
| 7. | Number of International faculty engaged | 0 | 2 | 2021-22 |
| 8. | Number of faculty deputed for higher studies/PDFs | 0 | 2 | 2021-22 |
| 9, | Number of faculty members sent to industry | 0 | 4 | 201-22 |
| 10 | Number of Adjunct/Honorary Faculty | 2 | 5 | |

11. Infrastructure:-

11.1 Details of new Laboratories proposed for UG Programs:-

11.2 Details of new Laboratories proposed for PG Programs:-

Advanced Analytics lab for MBA-BA and doctoral research. It would be built around research theme identified by faculty within USME, and would leverage the lab for connecting with industry, attracting funded research. It is planned to fund it with a UGC major research grant. This would be initiated in 2020-21.

12. Details of proposed Research Projects:-

Broad details of two research projects are as follows:

- 1. Industry practice efficiency in alternate analytics approaches in marketing and supply chain analytics, where new theoretical approaches and technologies may be researches.
- 2. Research on major challenges at the ideation stages and acceleration stages in start-ups operating in the critical verticals in the economy, such as energy, transport, analytics, supply chain etc; innovation challenges, and as part of the mission of the OD center, the people issues related organizational challenges.



13. Details of existing centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:-

The three centres at USME at present are the following:

- 1. The Entrepreneurship Development Center: The aim of the centre is to develop an institutional mechanism to create entrepreneurial culture in science and technology and to foster techno entrepreneurship and knowledge enterprise development for generation of wealth and employment by personals. This envisions the creation of awareness, identification of potential ventures and facilitating their development and scaling through various services of the center. It also aims at programmatic efforts at capacity building, through short term training of both students and community members in entrepreneurship, as well and supporting long term programs such as the MBA-IEV and MBA-FBE which may help develop ventures and attain scale for family businesses. It is headed by the consultant EDC, and has staff to facilitate student requirements in EDC. It has a governing board and an advisory council. It has helped facilitate student events such as business plan and business idea competitions in the past.
- 2. The Innovation and Incubation Center: it houses the incubates of the DTU-IIF at the Campus, as part of the larger entrepreneurship ecosystem, and supports through various ways the incubates and budding MBA-IEV student ventures. It is also governed by a board comprising
- 3. The Centre for Organizational Development: The aim of this centre is to provide research, education, consultancy and extension services which enable organizations to transform its human resources effectively for consistent improvement and enable efficient change management. A major challenge for start-ups is that of managing growth and acceleration, with the structure and functioning of the organization at this stage of initiation, acceleration and scaling being a key issue. The COD would endeavour to provide research based insights and solution to these issues.

14. Details of MOUs with National & International Institutions/Organisations:-

An MOU has been established with the National Institute of Micro Small and Medium Enterprises – *ni-msme* - to collaborate on establishing world class education, training and research programs and undertake capacity building in the area of entrepreneurship.

15. Any other details:-

At present the strategy is to consolidate the footprint, rigour and impact of the current programs. Further, to establish greater industry connect and also start corporate training programs.

Finally to establish the EDC the research program at USME through enhancing the pool of researchers an scholars, and enhance publishable research projects.



12. Department of Information Technology

1. Name of Department : Department of Information Technology

2. Year of Establishment : 2003

3. Introduction

The Department of Information Technology endeavours to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. The curriculum defined, lays greater emphasis on design principles and development of system software for Operating Systems, Database management systems, Artificial Intelligence, Data Mining, computer graphics and networks. Department has developed state-of-the-art laboratories in the various fields of Information Technology-Computer Networks Lab, Web Engineering Lab, Programming Lab, Information and Security Lab, Biometric Research Lab and many others. Currently the department offers Doctorate, post-graduate & undergraduate courses. The department also has an active student chapter of Computer Society of India (CSI) and contributes significantly in professional activities undertaken by IEEE and IET student chapters.

4. Vision:

To be a centre of excellence in education and research, producing Creators of Innovative Technology to serve humanity.

5. Mission:

The Mission of the department is as follows: **M1** To develop human resources with sound knowledge and intellectual capability for innovation, research and excellence in the field of Information Technology.

M2 To provide conducive academic environment for achieving world class standards in teaching and cutting-edge research in the field of Information Technology.

M3 To inculcate professional ethics and social responsibility in students and faculty to contribute in the overall development of society. M4 To facilitate the development of academia-industry collaborations and societal outreach programmes.

Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|---------|---------------------------------|------------------|------------------|--|
| 01 | B.Tech.(Information Technology) | 122 | 2019-20 | 121 |
| 02 | M.Tech (ISY) | 20 | 2019-20 | 20 |



7. Key Achievements of Department:-

- One US Patent is granted in the year 2019.
- The Department of IT conducted two faculty Training and development programs namely Machine Learning for Pattern Recognition (MLPR 2019) and STTP on AIML ("Artificial Intelligence and Machine Learning during the months of June and July 2019 respectively.
- The department also got three research excellence-awards for its faculty members namely Prof. Kapil Sharma (HOD, IT), Dr. Dinesh Kumar Vishwakarma (Assoc. Prof.) & Dr. Seba Susan.
- Faculty and students of IT Department also presented their research work at various platforms globally.

8. Education

To acquire in-depth knowledge of software and hardware techniques, which provide a solid foundation to pursue continuing education and nurture the talent for innovation and research. Further, to nurture talent in leadership qualities, at levels appropriate to their experience, which addresses issues in a responsive, ethical, and innovative manner. To excel in careers by being a part of success and growth of an organization with which they are associated. Holistic development of students by active participation in self-study courses, seminars, research projects focusing on workshops, conferences for lifelong continuous learning.

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1, | Number of UG Students | 579 | 1160 | 01/08/2021 |
| 2. | Number of PG Students | 33 | 80 | 01/08/2021 |
| 3. | Number of Ph.D. Students | 30 | 60 | 01/08/2021 |
| 4. | Annual Intake:- (a) UG | 122 | 240 | 01/08/2021 |
| | (b) PG | 25 | 50 | 01/08/2021 |
| 5. | Number of UG Programs | 01 | 01 | 01/08/2021 |
| 6. | Number of PG Programs | 01 | 02 | 01/08/2021 |
| 7. | DTU Ph.D. Teaching- cum- Research Fellowships | 06 | 10 | 01/08/2021 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 03 | 06 | 01/08/2021 |

| 9. | Development of MOOCs Courses | 00 | 02 | 01/08/2021 |
|-----|---|-------|-------|------------|
| 10. | Percentage of Female Students in the Department | 13.82 | 20.00 | 01/08/2021 |
| 11. | Number of Foreign Students:- (a) UG | 20 | 30 | 01/08/2021 |
| | (b) PG | 02 | 04 | 01/08/2021 |
| | (c) Ph.D. | 00 | 05 | 01/08/2021 |
| 12. | Minor Specialization:- (a) UG | 00 | 02 | 01/08/2021 |
| | (b) PG | 00 | 02 | 01/08/2021 |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019- 20 |
|------------|--|-----------------------------|--|
| 1, | UG Programs (a)B.Tech (Information Technology) | 122 | 121 |
| 2. | PG Programs (a) M.TECH (ISY) | 25 | 20 |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|---|------------------|-----------------------------------|
| 01 | M.Tech (Information Technology) Specialization Information Security | 20 | 01/08/2021 |
| 02 | M.Tech (Information Technology) Specialization Internet on Things | 20 | 01/08/2022 |
| 03 | M.Tech (Information Technology) Specialization Data Science | 20 | 01/08/2021 |

8.4 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|---|-----------------------|--------------------------------|
| 01 | IoT with Cloud Computing and its applications | Mr. Jasraj Meena | 14-18 June 2021 |
| 02 | High Speed Networks and Applications | Ms Anamika Chauhan | 01 December 2020 |
| 03 | Digital Forensics | Ms Ritu Agarwal | 14-18 December 2021 |



9. Research

To encourage students for publication in B.Tech/M.Tech Projects. New research groups will be formed for filling patents. Hackathons provide platform for hands on learning which leads to new ideas for patents filling.

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|----------|-----------|------------------------|
| 1. | h-index of the department | 11 | 15 | 01/08/2021 |
| 2. | Citations of the department | 252 | 300 | 01/08/2021 |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 150 | 200 | 01/08/2021 |
| 4. | Number of Ph.D. students in the department | 30 | 50 | 01/08/2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 01 | 02 | 01/08/2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | 00 | 01 | 01/08/2021 |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | 00 | 01 | 01/08/2021 |
| 8 | Number of Patents:- (a) Filed | 00 | 02 | 01/08/2021 |
| | (b) Published | 02 | 04 | 01/08/2021 |
| | (c) Granted | 01 | 03 | 01/08/2021 |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | 00 | 02 | 01/08/2021 |
| 10. | Commercially sustainable Products | 00 | 01 | 01/08/2021 |
| 11 | Number of research laboratories | 02 | 05 | 01/08/2021 |
| 12. | MOUs with National & International Institutions/Organizations | 00 | 01 | |



10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|-----------|-----------|------------------------|
| 1, | Number of sanctioned teaching posts :- | | | E |
| | (a) Professor | 04 | 04 | 01/08/2021 |
| | (b) Associate Professor | 06 | 06 | 01/08/2021 |
| | (c) Assistant Professor | 19 | 19 | 01/08/2021 |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | 01 | 04 | 01/08/2021 |
| | (b) Associate Professor | 02 | 06 | 01/08/2021 |
| | (c) Assistant Professor | 04 | 19 | 01/08/2021 |
| 3. | Number of sanctioned technical posts:- | | | |
| | (a) Technical Officer/Foreman | 00 | 00 | 01/08/2021 |
| | (b) Senior Technical Assistant | 00 | 00 | 01/08/2021 |
| | (c) Technical Assistant | 02 | 02 | 01/08/2021 |
| | (d) Junior Technical Assistant | 14 | | |
| | (e) Others | *** | | |
| 4. | Number of technical staff in position:- | | | |
| | (a) Technical Officer/Foreman | *** | - | |
| | (b) Senior Technical Assistant | | • | |
| | (c) Technical Assistant | 01 | 02 | 01/08/2021 |
| | (d) Junior Technical Assistant | | 44 | |
| | (e) Others | MI M | | |
| 5. | Number of Ministerial Staff | 01 | 02 | 01/08/2021 |
| 6. | Number of Multi-Tasking Staff | 05 | 08 | 01/08/2021 |
| 7. | Number of International faculty engaged | 00 | 00 | 01/08/2021 |
| 8. | Number of faculty deputed for higher studies/PDFs | 00 | 00 | 01/08/2021 |

| 9. | Number of faculty | 00 | 00 | 01/08/2021 |
|----|--------------------------|----|----|------------|
| | members sent to industry | | | |
| 10 | Number of | 00 | 00 | 01/08/2021 |
| | Adjunct/Honorary | | | |
| | Faculty | | | |

11. Infrastructure:-

11.1 Details of new Laboratories proposed for UG Programs:-

A new Deep learning lab for study of advance neural networks. Approx. cost is Rs. 90 lakh for GPU based machine.

11.2 Details of new Laboratories proposed for PG Programs:-

Machine Learning lab carries out research and develops different theoretical foundations for machine learning such as Reinforcement Learning, Deep Learning, Statistical Learning Theory, Multi-agent Systems, Game Theory and Mechanism Design, Blockchains, Explainable and Fair Al. Approx. cost is 95 lakh.

12. Details of ongoing research projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---|-------------------|------------------------|--------------------------|---------------------|
| 01 | Classification and Analysis of Suspicious Codes based on their Static and Dynamic Features using multiple classifiers | DRDO | Rs. 22.3518 Lakh | 20.12.2016 | Dr. Kapil Sharma |

13. **Details of proposed Research Projects:-**Automation of calibration software (analog meter) – Indian Air Force

14. Details of Patents:-

| Name of the Applicant | Name of the inventor | Patent Number | Title of the patent | Date of Publishing of the patent | Date of Grant of patent |
|--------------------------------------|----------------------------|----------------|---|---|-------------------------------|
| Delhi Technological University | Kapil Sharma | US20180331738A | Beam forming method for a transmitting antenna and a device thereof | 05-09-2018 | 01-06- 2019 |

15. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:-

Cyber Security Centre that will reduces risk of cyber security threats by protecting University technology assets. Services include secure computing such as data protection and encryption, and vulnerability scans by employing High Performance Computing machines through approx. rupees one crores investment by 2022.

Data Analytic Center that will be used for research and analysis. Approx. rupees 80 lakh will be invested by 2022.

16. Details of existing research laboratories:-

BIO-METRIC RESEARCH LAB

The aim of Lab is to tackle high dimensionality and volume of multimedia data, the need for high-performance computing machines has become essential to develop and test the performance of the algorithms. Presently there are 05 systems that are equipped with latest processor and open source software. The lab was established in the year 2019.

CYBER FORENSIC & MALWARE ANALYSIS LAB

The aim of Lab is to create a state-of-the-art facility which can provide a better platform to the undergraduate and postgraduate students of Information Technology programme to perform the experiments with the latest hardware supports and computing facility. There are 07 systems that are equipped with latest processor and open source software for malware analysis. The lab was established in year 2019. Till now 03 research paper has been published.

17. Details of proposed research laboratories:-

Pattern Recognition and Machine Intelligence Lab:

- ✓ A new laboratory for research in pattern recognition and machine intelligence is planned.
- The Laboratory is planned for the design and development of new algorithms and techniques for pattern recognition machine learning for real world applications.
- ✓ The new algorithms will be tested on real world datasets in Computer vision, natural language processing and data mining.
- ✓ The aim would be to achieve high performance using faster algorithms. It will benefit B.Tech and M.Tech Students and approx.. cost will be Rs. 90.00 Lacs.

IoT and Cloud Computing Laboratory:

- ✓ We are planning to proposed a new laboratory for research
 in the IoT and Cloud Computing.
- ✓ Cloud computing and the IoT both serve to increase efficiency in everyday tasks and both have a complementary relationship. The IoT generates massive amounts of data, and cloud computing provides a pathway for this data to travel.
- ✓ This laboratory will good qualities of computing resources such as (workstations, GPUs, etc.) and different sensors as per requirements for researchers and approx. cost will be Rs. 50.00 Lacs



• Multimedia Data Analytics Research Laboratory:

Aim To perform real-time data analytics for the following applications:

Data analysis and multimedia information retrieval

Multimodal sentiment analysis

Social media data analytics

3D Computer Vision

Image processing and pattern recognition

Social multimedia signal processing

13. Department of Applied Chemistry

1. Name of Department : Applied Chemistry

2. Year of Establishment : 1941

3. Introduction

The Department of Applied Chemistry is an integral part of Delhi Technological University. The department aims to provide state-of-art knowledge and practical skills to the UG and PG students in the diverse fields of Applied Chemistry, Polymer Science and Chemical Technology. In addition, the department provides fundamental knowledge of Applied Chemistry to all the first-year engineering students of B.Tech.

4. Vision

To be a Centre of Excellence in the area of Applied Chemistry, Polymer Science & Chemical Technology.

5. Mission

- a) Be a world class centre for Education, Research and Innovation in the field of Applied Chemistry, Polymer & Chemical Technology, focus on cutting edge Technologies for Education delivery and foster Environment of seamlessness between Academics and Industries.
- b) Meet the need for Engineers and Scientists at all levels of tertiary education, UG, PG and Doctoral levels.

6. Details of UG & PG Courses: -

| Sr. | Program | Annual Intake | Year of | Number of |
|-----|----------------------------------|---------------|---------|-------------------|
| No. | | | Start | students |
| | | | | admitted in 2019- |
| | | | | 20 |
| 1 | M. Tech. (Polymer Technology) | 25 | 1986 | 5 |

| 2 | B. Tech. (Polymer | 62 | 1998 | 62 |
|---|--------------------|--------------|------|----|
| | Science & Chemical | | | |
| | Technology) | | | |
| 3 | PhD | Depends upon | NA | 16 |
| | | vacancy with | | |
| | | faculty | | |
| | | members | | |

7. Key Achievements of Department: -

- (i) Published 49 research paper in peer reviewed journals in last year.
- (ii) Five sponsored research projects are ongoing in the department.
- (iii) One faculty member is going for higher education in foreign university.
- (iv) 11 JRF from CSIR/UGC has joined the department for the PhD degree.
- (v) Two PhD student visited United Kingdom to present their papers. One student got best poster award in another International conference held in India.
- (vi) One B Tech student visited British Columbia University, Canada for Internship.

8. Education

8.1 Academic details: -

| Sr. | Action | Existing | Target(s) | Date of |
|-----|---|----------|-----------|----------------|
| No. | | | | Achievement(s) |
| 1 | Number of UG Students | 235 | Nil | NA |
| 2. | Number of PG Students | 12 | 15 | July 2021 |
| 3. | Number of Ph.D. Students | 46 | 50 | July 2021 |
| 4. | Annual Intake: - (a) UG | 62 | Nil | NA |
| | (b) PG | 25 | 15 | July 2021 |
| 5. | Number of UG Programs | 01 | Nil | NA |
| 6. | Number of PG Programs | 01 | 01 | July 2020 |
| 7. | DTU Ph.D. Teaching- cum-Research Fellowships | Nil | 02 | July 2021 |
| 8. | Junior Research Fellowship of UGC, CSIR, DST, DBT etc. funding agencies | 19 | 25 | July 2021 |
| 9. | Development of MOOCs Courses | Nil | 06 | July 2021 |

| 10. | Percentage of Female Students in the Department | 15% | NA | NA |
|-----|---|-----|----|-----------|
| 11, | Number of Foreign Students: - (a) UG | 00 | 00 | NA |
| | (b) PG | 01 | 05 | July 2021 |
| | (c) Ph.D. | 01 | 03 | July 2021 |
| 12. | Minor Specialization: - (a) UG | | | |
| | (b) PG | | | |

8.2 Details of admitted students: -

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|--------------------|--------------------------------|--|
| 1, | UG Programs | | |
| | (a) PSCT | 62 | 62 |
| 2. | PG Programs | | |
| | (a) PT | 25 | 05 |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|-----------------|---------------|-----------------------------------|
| 1 | MSc (Chemistry) | 30 | July 2020 |

8.4 Details of minor specialization(s): -

8.5 Details of proposed MOOCs Courses to be developed: -

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|--------------------------------------|------------------------|-----------------------------|
| 1 | Plant extraction process | Dr Ram Singh | July 2021 |
| 2 | Green solvents for organic synthesis | Dr Richa Srivastava | July 2021 |
| 3 | Membrane Separation Technology | Dr Manish Jain | July 2021 |
| 4 | Biomedical applications of polymers | Dr Roli Purwar | July 2021 |
| 5 | Bio and bond bonding materials | Dr Deenan Santhiya | July 2021 |
| 6 | Rigid polyurethane foams | Dr Raminder Kaur | July 2021 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|-----------|-----------|------------------------|
| 1. | h-index of the department | 32 | 40 | July 2021 |
| 2. | Citations of the department | 12000 | 15000 | July 2021 |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 49 (2019) | 60 | July 2021 |
| 4. | Number of Ph.D. students in the department | 46 | 50 | July 2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 05 | 07 | July 2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | 00 | 02 | July 2021 |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | 00 | 02 | July 2021 |
| 8 | Number of Patents: - (a) Filed | 01 | 02 | July 2021 |
| | (b) Published | 01 | 01 | July 2021 |
| | (c) Granted | 02 | 01 | July 2021 |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | 00 | 01 | July 2021 |
| 10. | Commercially sustainable Products | 00 | 01 | July 2021 |
| 11, | Number of research laboratories | 05 | 03 | July 2021 |
| 12. | MOUs with National & International Institutions/Organizations | 01 | 01 | Dec 2020 |

10. Faculty & Staff:-

| Şr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|-------------|-----------|------------------------|
| 1. | Number of sanctioned teaching posts :- | | | , . |
| | (a) Professor | 03 | 01 | July 2021 |
| | (b) Associate Professor | 09 | 02 | July 2021 |
| | (c) Assistant Professor | 15 | 04 | July 2021 |
| 2, | Number of faculty in position: - | | | |
| | (a) Professor | 05 (3+2) | 01 | July 2021 |
| | (b) Associate Professor | 03 | 08 | July 2021 |
| | (c) Assistant Professor | 07 | 12 | July 2021 |
| 3. | Number of sanctioned technical posts: - | | | |
| | (a) Technical Officer/Foreman | 00 | NA | |
| | (b) Senior Technical Assistant/ Sr Mechanic | 09 | NA | |
| | (c) Technical Assistant | 00 | NA | |
| | (d) Junior Technical Assistant/ Jr Mechanic | 10 | NA | |
| | (e) Others | 00 | NA | |
| 4. | Number of technical staff in position: - | | | |
| | (a) Technical Officer/Foreman | 00 | NA | |
| | (b) Senior Technical Assistant/ Sr | 01 | 09 | July 2021 |
| | Mechanic | (contract) | | |
| | (c) Technical Assistant | 00 | NA | |
| | (d) Junior Technical Assistant/ Jr | 1 (Regular) | 09 | July 2021 |
| | Mechanic | + 3 | | |
| | | (contract) | | L- |
| | (e) Others (Lab attendants) | 09 | 06 | Aug 2020 |
| | | (contract) | | |
| 5. | Number of Ministerial Staff | 01 | 01 | July 2021 |
| | | (contract) | | , |
| 6. | Number of Multi-Tasking Staff/ | 01 | NA | |
| | Safai Karmchari | | | |
| 7.: | Number of International faculty engaged | 00 | 01 | July 2021 |
| 8. | Number of faculty deputed for higher studies/PDFs | 01 | 03 | July 2021 |

| 9. | Number of faculty members sent | 00 | 01 | July 2021 |
|----|--------------------------------|----|-----|-----------|
| | to industry | | | |
| 10 | Number of Adjunct/Honorary | 02 | Nil | |
| | Faculty | | | |

11, Infrastructure: -

- 11.1 Details of new Laboratories proposed for UG Programs: 02 (Membrane Tech laboratory and General Chemistry Lab)
- 11.2 Details of new Laboratories proposed for PG Programs: 03(One each for Organic, Inorganic and Physical chemistry)

12. Details of ongoing research projects (more than 05 lacs): -

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|--|---------------------------|-----------|--------------------------------|------------------------|
| 1 | Environmental Applications of Composites Based on Layered Double Hydroxide | UGC | 10,00,000 | Ongoing | Dr. Poonam |
| 2 | Graphene Based Lab-on- Chip Platform for Detection of Cancer Biomarkers | DST | 35,00,000 | Ongoing | Dr. CM Pandey |
| 3 | Design and Development of antibacterial nanofibrous membranes from regenerated non-mulberry silk fibroins and its blends for medical textiles applications | DST | 26,58,480 | Ongoing | Dr. Roli Purwar |
| 4 | Delivery of therapeutic loaded bioglass assembly for bone regeneration | DST | 35,00,000 | Ongoing | Dr. Deenan Santhiya |
| 5 | Study the factors effecting peeling of cashew nut, and suggest chemical/process/machine methods to increase the peeling of the cashew nut without effecting the colour/taste/shape/breaking the kernel | Olam Internatio nal | 5,04,000 | Ongoing | Dr Ram Singh |

13. Details of proposed Research Projects: -

Two research proposals are expected to be submitted.

14. Details of Patents: -

Patent filed: 01 (2019)

Dr R Kaur (AC), along with Ms A Agarwal (AC) and Dr RS Walia (ME) filed a patent on the topic 'Bio-based rigid polyurethane foam composition and method thereof"

15. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas: - One



16. Details of existing research laboratories: -

The department has five research laboratories where 11 faculty members are working.

17. Details of proposed research laboratories: -

The department requires three more research laboratories so that all the regular 12 faculty members can have individual laboratory to work efficiently.

18. Details of MOUs with National & International Institutions/Organizations:-

01 Approved (Amicures research – A pharmaceutical company, Delhi) and 01 in process (The Centre for Fire, Explosive and Environment Safety, DRDO, Delhi)

14. Department of Biotechnology

1. Name of Department : Department of Biotechnology

2. Year of Establishment : 2004

3. Introduction

Department of Biotechnology, DTU, continues to maintain its stand of excellence in providing holistic education and aspires to be the one of its kind in the field. We have a student-centred approach to imparting education and believes in empowering students with knowledge, values, unique skillset, and wisdom. Students are prepared to face a challenging world and to tackle problems, scientifically and with cognizance. Our students inculcate our core values (integrity, compassion, commitment, creativity, collaboration, inclusion) and shall become responsible citizens that contribute to a sustainable future. We firmly believe in the right to education and quality education. We have taken measures to ensure that aforementioned goals are achieved.

The Department is a research-driven department. It has incorporated various research opportunities in its curriculum so as to encourage students to pursue research in new and emerging fields. The laboratories are equipped with state-of-the-art technology and are routinely upgraded to meet the demands in various areas of research. The department aims to establish centres for excellence in emerging areas to promote research. Department promotes innovation and entrepreneurship through policies and regulations. A student-force with unique skillset and trained in cutting-edge research are brimming with innovative ideas and we provide them with the required encouragement and platform to inspire students to take up the entrepreneurial path.

The faculty and staff form the foundation on which the whole education process relies. To inculcate an ever-improving teaching pedagogy, the department ensures that highly qualified and talented professionals are assigned. The department policies and frameworks are designed and developed to provide a wide range of opportunities to faculty and staff for professional and personal development. The faculty and staff undergo trainings at regular intervals to keep pace with the new and advanced method of learning.

We are committed to providing a world-class research and learning experience to our students. The research facilities are well equipped and the classrooms are all ICT enabled.

4. Vision

To promote innovation, invention and employability in Biotechnology through education and research for the service of humanity

5. Mission

- a. To establish Centers of Excellence in various fields of Biotechnology
- To create awareness about potentials of Biotechnology with socio-ethical implications
- c. To impart quality education for life-long professional growth and career development
- d. To initiate multi-disciplinary programs through academia-industry interface

Details of UG & PG Courses:-

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|-----------------------------------|---------------|------------------|--|
| 1 | B.Tech Biotechnology | 62 | 2004 | 62 |
| 2 | M.Tech (Bioinformatics) | 25 | 2010 | 06 |
| 3 | M.Tech (Industrial Biotechnology) | 25 | 2013 | 05 |
| 4 | M.Tech (Biomedical Engineering) | 25 | 2013 | 05 |
| 5 | M.Sc (Biotechnology) | 35 | 2019 | 34 |

7. Key Achievements of Department:-

- Extramural grant: 6 crores (approx.)
- Cumulative IF of publications: 1528 (approx.)
- Cumulative citation index: 16,024 (approx.)
- Multi-country project- BBSRC (UK) and DBT
- National & International collaborations
- Establishment of state-of-the-art laboratories: 06



8. Education

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(ş) | Date of Achievement(s) |
|------------|--|----------------------------|-----------------|------------------------|
| 1. | Number of UG Students | 147 (2016-2019) | 200 | 31-07-2021 |
| 2. | Number of PG Students | 69 | 100 | 31-07-2021 |
| 3. | Number of Ph.D. Students | 57 | 100 | 31-07-2021 |
| 4. | Annual Intake:- (a) UG | 62 | 62 | 31-07-2021 |
| | (b) PG | 69 | 110 | 31-07-2021 |
| 5. | Number of UG Programs | 01 | 20 | 31-07-2021 |
| 6. | Number of PG Programs | 04 | 05 | 31-07-2021 |
| 7. | DTU Ph.D. Teaching- cum-Research Fellowships | - |) () | 31-07-2021 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 19 | 25 | 31-07-2021 |
| 9. | Development of MOOCs Courses | 2 | - | 31-07-2021 |
| 10. | Percentage of Female Students in the Department | 82/216 (UG & PG) 38% | 50 | 31-07-2021 |
| 11. | Number of Foreign Students:- (a) UG | 01 | 04 | 31-07-2021 |
| | (b) PG | NIL | 04 | 31-07-2021 |
| | (c) Ph.D. | NIL | 02 | 31-07-2021 |
| 12. | Minor Specialisation:- (a) UG | | | |
| | (a) UG (b) PG | | | |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|-------------------------|--------------------------|--|
| 1. | UG Programs | | |
| | B.Tech Biotechnology | 62 | - |
| | (b) | | |
| | (c) | | |
| 2. | PG Programs | | |
| | M.Tech (Bioinformatics) | 25 | 06 |
| | M.Tech (Industrial | 25 | 05 |
| | Biotechnology) | | |
| | M.Tech (Biomedical | 25 | 05 |
| | Engineering) | | |
| | M.Sc (Biotechnology) | 35 | 34 |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|-----------------------|---------------|-----------------------------------|
| 1 | M.Sc. Food Technology | 35 | 01/08/2021 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|---|----------|--------------------------|------------------------|
| 1 | h-index of the department | 171 | 200 | 31-07-2021 |
| 2. | Citations of the department | 16,029 | 20000 | 31-07-2021 |
| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | 290 | 325 | 31-07-2021 |
| 4 | Number of Ph.D. students in the department | 57 | 70 | 31-07-2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 4 | 10 | 31-07-2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | 91 | 2 | 31-07-2021 |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | | 4 | 31-07-2021 |
| 8 | Number of Patents:- (a) Filed | Ī. | 1 | 31-07-2021 |
| | (b) Published | | 2 | 31-07-2021 |
| | (c) Granted | - | 2 | 31-07-2021 |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | - | 1 | 31-07-2021 |
| 10. | Commercially sustainable Products | - | 2 | 31-07-2021 |
| 11, | Number of research laboratories | 06 | 1 (New), 3 (Upgradation) | 31-07-2021 |
| 12. | MOUs with National & International Institutions/Organisations | 01 | 02 | 31-07-2021 |



10. Faculty & Staff:-

| Sr. No. | Action | Existing | Target (s) | Date of Achievement(s) |
|------------|---|------------|------------|------------------------|
| 1. | Number of sanctioned teaching posts :- | | | |
| | (a) Professor | 02 | 04 | 31-07-2021 |
| | (b) Associate Professor | 04 | 06 | 31-07-2021 |
| | (c) Assistant Professor | 08 | 10 | 31-07-2021 |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | 02 | 04 | 31-07-2021 |
| | (b) Associate Professor | 02 | 06 | 31-07-2021 |
| | (c) Assistant Professor | 07 | 10 | 31-07-2021 |
| 3. | Number of sanctioned technical posts:- | | | |
| | (a) Technical Officer/Foreman | - | - | |
| | (b) Senior Technical Assistant | - | - | |
| | (c) Technical Assistant | 03 | 10 | 31-07-2021 |
| | (d) Junior Technical Assistant | 04 | 12 | 31-07-2021 |
| | (e) Others | - | - | |
| 4. | Number of technical staff in position:- | | | |
| | (a) Technical Officer/Foreman | - | 01 | |
| | (b) Senior Technical Assistant | - | 02 | |
| | (c) Technical Assistant | 03 | 06 | 31-07-2021 |
| | (d) Junior Technical Assistant | 02 | 06 | 31-07-2021 |
| | (e) Others | | | |
| 5. | Number of Ministerial Staff | - | - | |
| 6. | Number of Multi-Tasking Staff | 03 | 07 | 31-07-2021 |
| 7. | Number of International faculty engaged | | | |
| 8. | Number of faculty deputed for higher studies/PDFs | 2 0 | Ħ | |
| 9. | Number of faculty members sent to industry | 22 | * | |
| 10 | Number of Adjunct/Honorary Faculty | 01 | 02 | 31-07-2021 |

11. Infrastructure:-

11.1 Details of new Laboratories proposed for UG Programs:-

Upgradation of Computational Biology Laboratory:

8 Desktop PCs with latest configuration: Intel i7 8th gen Processor, 8GB Ram, 1TB Hard Disk, 2GB Graphics, WiFi etc will be procured for replacing the outdated PCs.

11.2 Details of new Laboratories proposed for PG Programs:-

Upgradation of Environmental Biotechnology Lab:

Air monitor system, Water monitor system, Noise monitor system, heavy metal and elements measuring system.

12. Details of ongoing research projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---|--|----------------|--------------------------------|---------------------------|
| 1 | Valorisation of potato peel waste for bioplastic production of suberin components | DBT(Ramalinga swami reentry project) | 24.72 Lakhs | 1 st July 2019 | Dr.Rashmi Kataria |
| 2 | Genetic Analysis of dermatoligical disorders | Department of Biotechnology, Govt.of India | 44.77 Lakhs | 06 th July 2017 | Dr.Yasha Hasija |
| 3 | Study the metabolome, transcriptome and proteome of Khera Dapini (Premna herbacea), an important medicinal and wild vegetable crop widely used in Northeast India | Science and Engineering Research Board, Govt. of India | 42.18 Lakhs | 20 th May 2019 | Dr.Nirala Ramchiary |
| 4 | Dissemination and demonstration of fish culture technology among women selfHelp groups in NCR region of Delhi as a self employment activity | DBT | 58 Lakhs | 3rd Sept 2018 | Prof. Jai Gopal Sharma |



13. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:-

Center for Translational Biotechnology

We are setting up a centre for translational biotechnology to encourage students to carry out impactful research that can be adopted into clinical practice. The centre is to be equipped with world-class technologies to facilitate innovation and enable translational research in fields like nanobiotechnology, bioinformatics, environmental biotechnology, immunology, metabolic engineering etc.

14. Details of existing research laboratories:-

- 1. Environmental Biotechnology Laboratory
- 2. Plant Biotechnology Laboratory
- 3. Genome Informatics and complex system Laboratory
- 4. Immunotherapeutics Laboratory
- 5. Medical neurosciences and functional genomics Laboratory
- 6. Nano bioelectronics Laboratory

15. Details of proposed research laboratories:-

a. Development of Central Instrumentation Facility

Following equipments will be procure to upgrade the Central Instrumentation Facility-

- NMR
- Amino acid analyzer
- GC-MS/MS
- LC-MS/MS
- FACS
- Confocal microscope
- Green House
- Animal House
- GPU Server
 - 2 x Intel® Xeon® Xeon E-2176M processors
 - GPU: 8 x Nvidia Quadro P5000 with 16GB
 - RAM: 128GB (4 x 32GB) DDR4-2666 ECC RDIMM
 - HDD: 6 x 2000GB, 7200RPM, Enterprise SATA

8-

- High performance computing facility
 - Servers
 - GPUs
 - 64 Intel Xeon core processors, 256-500 RAM, HDD 50 TB
- 80 °C Refrigerator
- Sequencing Facility
- Real Time PCR Facility
- ICP-MS
- Growth Chamber for plants
- FTIR
- Muffle Furnace
- TGA (Thermogravimetric Analysis)
- Moisture Analysis
- Pressure reactor

b. Development of Nutritional biotechnology

16. Details of MOUs with National & International Institutions/Organisations:-

Rajiv Gandhi cancer Research Institute from 2016

15. Electronics and Communication Engineering

1. Name of Department : Electronics & Communication Engineering

2. Year of Establishment 1976

- The department of Electronics and 3. Introduction Communication Engineering supports education, research and innovation in the fundamental and applied areas of electronics, VLSI design, signal processing, image processing along with wireless, optical and microwave communication. The department offers undergraduate, graduate and doctoral degrees in the various areas of Electronics and Communication Engineering. The curriculum of the various undergraduate and graduate courses is designed with an objective of absorbing the latest developments in the area of Electronics and Communication into class teaching. The department also offers research programs in all areas of Electronics and Communication along with many allied/ interdisciplinary areas. The department is also actively involved in professional activities undertaken by IEEE Delhi chapters. The faculty members have strong collaborations with international partners throughout the world. Numerous expert lectures, seminars, short-term courses, workshops and faculty development programs are conducted regularly for the benefit of the faculty and the student community. The consistent placement statistics have always proved the strength of the undergraduate and graduate courses offered by the department. The faculty is dedicated towards the creation of comprehensive, intellectual and socially responsible world-class engineers with a scientific and design-oriented attitude to problem-solving. The department strives to achieve a 'networked academic and research atmosphere' by incubating the talents of the student community.
- 4. Vision : To promote education, research and innovation in the areas of Electronics and Communication Engineering, and to foster a sustainable and progressive environment for the development of globally and socially relevant technologies

5. Mission:

- Creation of comprehensive and socially responsible world-class engineers, scientists and entrepreneurs.
- Encouraging a 'networked academic and research atmosphere' by interactions with academic institutions and research labs of repute.
- Establishment of centres of excellence in the frontier areas of Electronics and Communication Engineering.
- Imparting knowledge through training programs for academic development of faculty and students.



6. Details of UG & PG Courses: -

| Sr. No. | Program | Annual Intake | Year of Start | Number of students admitted in 2019-20 |
|------------|----------------|------------------|------------------|--|
| 1. | B.Tech. (ECE) | 183 | 1976 | 214 |
| 2 | M. Tech (VLSI) | 20 | 2009 | 24 |
| 3 | M. Tech (SPDD) | 20 | 2009 | 24 |
| 4 | M. Tech (MOCE) | 20 | 2009 | 03 |

- 7. **Key Achievements of Department:-**(i) Four R&D Projects sponsored by Govt.and Private agencies
- (ii) One DTU Sponsored R&D Project

Both (i) and (ii) were obtained in the year 2019.

Education 8.

8.1 Academic details:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-------------------------------|----------------------------------|
| 1,: | Number of UG Students | 180 | 240 | 2020 |
| 2. | Number of PG Students | 41 | 60 80 | 2020 2021 |
| 3. | Number of Ph.D. Students | 87 | 100 | 2021 |
| 4. | Annual Intake:- (a) UG | 183 | 240 | 2020 |
| | (b) PG | 64 | 2 New Specialization 00 | 2021 |
| 5. | Number of UG Programs | 01 | Nit | Nil |
| 6. | Number of PG Programs | 03 | 05(02 New) | 2021 01 in 2020 01 in 2021 |
| 7. | DTU Ph.D. Teaching- cum-Research Fellowships | Nil | 05 | 2021 |
| 8. | Junior Research Fellowship of UGC,CSIR, DST, DBT etc. funding agencies | 04 | 10 | 2021 |
| 9. | Development of MOOCs Courses | NiL | 01 01 | 2020 (Dec) 2020(Dec) |

| 10. | Percentage of Female Students in the Department | UG 9% PG 40% | UG 15% PG 45% | 2021 2021 |
|-----|---|-----------------|------------------|--------------|
| 11. | Number of Foreign Students:- | | | |
| | (a) UG | 31 | 50 | 2021 |
| | (b) PG | 05 | 10 | 2021 |
| | (c) Ph.D. | 03 | 10 | 2021 |

8.2 Details of admitted students:-

| Sr. No. | Programs (UG & PG) | Annual Sanctioned Intake | Actual Admitted Students in 2019-20 |
|------------|--------------------|--------------------------------|--|
| 1 | UG Programs | | |
| | (a)ECE | 183 | 214 |
| 2. | PG Programs | | |
| | (a)VLSI | 20 | 24 |
| | (b)SPDD | 20 | 24 |
| | (c)MOC | 20 | 03 |

8.3 Details of new UG/PG Program(s)

| Sr. No. | Program | Annual Intake | Proposed date of start of program |
|------------|---------------------------------|---------------|-----------------------------------|
| 1. | M.Tech. (Communication Systems) | 20 | 2020 |
| 2. | M.Tech. (IoT) | 20 | 2021 |

8.4 Details of minor specialization(s):- Not Applicable

8.5 Details of proposed MOOCs Courses to be developed:-

| Sr. No. | Title | Name of Faculty | Proposed date of Completion |
|------------|-----------------------|-----------------|-----------------------------|
| 1. | Communication Systems | Prof. Asok De | 2020 |
| 2. | Embedded System | Prof. S. Indu | 2021 |

9. Research

9.1 Research Parameters/Metrics

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|-----------------------------|----------|-----------|------------------------|
| 1. | h-index of the department | 24 | 30 | 2021 |
| 2. | Citations of the department | 2414 | 2500 | 2021 |

-

| 3. | Number of SCI/SCIE/SSCI/Scopus Indexed Publications | Scopus 720 | 800 | 2021 |
|-----|---|------------|--|------|
| 4. | Number of Ph.D. students in the department | 87 | 100 | 2021 |
| 5. | Number of Research Projects (more than 5 Lacs each) | 04 | 10 | 2021 |
| 6. | Number of Consultancy Projects (More than 5 Lacs each) | Nil | Nil | |
| 7. | Number of Consultancy Projects (between 1 Lac to 5 Lac) | Nil | Nil | |
| 8 | Number of Patents:- (a) Filed | 02 | 05 | 2021 |
| | (b) Published | 02 | (RAMANA) | |
| | (c) Granted | Nil | 5 | 2021 |
| 9. | Centre of excellence in emerging areas of Technology/Science/ Management & allied areas | Nil | 02 (01 in VLSI, & Embedded systems, 01 in Wireless Communication) | 2021 |
| 10. | Commercially sustainable Products | Nil | Nil | Nil |
| 11, | Number of research laboratories | 03 | 04 | 2021 |
| 12. | MOUs with National & International Institutions/Organisations | 04 | 08 | 2021 |

10. Faculty & Staff: -

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|--|----------|-----------|------------------------|
| 1 | Number of sanctioned teaching posts :- | | 9 | |
| | (a) Professor | 07 | 07 | |
| | (b) Associate Professor | 14 | 14 | |
| | (c) Assistant Professor | 40 | 40 | |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | 11 | 11 | 2021 |
| | (b) Associate Professor | 05 | 14 | 2021 |
| | (c) Assistant Professor | 11 | 36 | 2021 |
| 3. | Number of sanctioned technical posts:- | | | |

| | (a) Technical Officer/Foreman | 01 | 03 | |
|----|---|-------------------------|----|--|
| | (b) Senior Technical Assistant | 04 | 12 | |
| | (c) Technical Assistant | 01 | 06 | |
| | (d) Junior Technical Assistant | 02 | 06 | |
| | (e) Others | | 30 | |
| 4. | Number of technical staff in position:- | | | |
| | (a) Technical Officer/Foreman | 01 | 03 | |
| | (b) Senior Technical Assistant | 04 | 12 | |
| | (c) Technical Assistant | 02 | 06 | |
| | (d) Junior Technical Assistant | 02 | 06 | |
| | (e) Others (lab Attendant's) | 10 | 25 | |
| 5. | Number of Ministerial Staff | 01 | 05 | |
| 6. | Number of Multi-Tasking Staff | 01 | | |
| 7. | Number of International faculty engaged | 305 500 505 400 305 400 | | |
| 8. | Number of faculty deputed for higher studies/PDFs | 01 | 05 | |
| 9. | Number of faculty members sent to industry | Nil | 05 | |
| 10 | Number of Adjunct/Honorary Faculty | 01 | 05 | |

11. Infrastructure: -

11.1 Details of new Laboratories proposed for UG Programs:-

| Sr.no. | Name of lab | No. | Remarks |
|--------|-------------------------|-----|--|
| 1. | Basic electronics lab | 2 | The lab for other department Students (49 batches of students,25 each) |
| 2 | Digital Electronics lab | 3 | The lab for other department students also (49 batches of students,25 each) |
| 3 | Signals & system lab | 01 | |



11.2 Details of new Laboratories proposed for PG Programs:-

UG Labs

| Sr. No. | Name of lab | No. | Remark |
|---------|---------------------------|-----|---|
| 1 | Signals & Systems lab | 01 | Presently no lab. This lab is required as it is a core subject. |
| 2 | PCB lab | 01 | Presently no lab. This lab is required as it is a core subject. |
| 3 | Optical Communication lab | 01 | Presently no lab. This lab is required as it is a core subject. |

PG labs

| Sr. No. | Name of lab | No. | Remark |
|---------|--------------------------|---|---|
| 1. | Communication System lab | ystem 01 Presently no lab lab is required a core subject. | |
| 2, | VLSI Lab | 01 | To enhance existing lab |
| 3 | Antenna lab | 01 | Presently no lab. This lab is required as it is a core subject. |

12. Details of ongoing research projects (more than 05 lacs):-

| Sr. No. | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|------------|---------------------------------|--------------------------------------|--------|--------------------------------|-------------------|
| | Development of Optical Fiber | Delhi Technological University | Rs4.45 | July 2019 | Dr.Gurjit Kaur |

| Sr. No | Title | Funding Agency | Grant | Date of start of Project | Name of PI |
|-----------|-------------------------------|-------------------|---------------|--------------------------------|----------------------|
| 1. | IAF Meher BABA Competition | Adani | 2.5 Crores | 13.09.201 9 | Prof.N.S.Ragha va |
| 2. | Development for | DST | Rs.27 | 13.03.19 | Prof. S. Indu |
| | framework for | (Departmen | Lakhs | | |
| | Imaging, Restoring | t of Science | | | |

| | and Archiving Inscriptions and Manuscripts approv ed | and Technology | | | |
|---|---|---|--------------------|-----------|-----------------------|
| 3 | Development & deployment of Motor Controller for Low to Medium Power Electric Vehicles" In collaboration with EED, DTU and Lithion Power Ltd Approved on 8th Aug 2019 | Ministry of Electronics and Information Technology (Meity) | Rs.33.7 6 Lakhs | 08.08.19 | Prof. S. Indu |
| 4 | Design of Ultrasonic Pattern Generator and 3-D View generation using Fusion for RCT | DST (Departmen t of Science and Technology | Rs. 40 lakhs | 2018 | Prof. Rajiv Kapoor |
| 5 | Development of Optical Fiber | Delhi Technologic al University | Rs4.45 | July 2019 | Dr.Gurjit Kaur |

13. Details of proposed Research Projects: -

- 1. Sensagri- Sensible Agriculture
- 2. IoT enabled Local Power Generation (Green Power)

14. Details of Patents:- 02

| Sr. No. | Title of the invention | Name of the applicant | Date of Filing the application | Publication Date | Name of inventors |
|------------|--|--------------------------------------|--------------------------------|---------------------|--------------------------------------|
| 1 | A COMPACT HYPER BAND PASS POWER PROVIDER | Delhi Technological University | 12.11.2016 | 18.05.2018 | N.S.Raghava |
| 2 | Multi & Wide Band Millimeter wave PIFA antenna using multiple slot for 5G Applications | Delhi Technological University | 22.02.2018 | 09.03.2018 | Akhilesh Verma and N.S.Raghava |



15. Details of proposed centres of excellence in emerging areas of Technology/ Science/Management & Allied Areas:-

- (1) Center of Excellence in Wireless Communication
- (2) Center of Excellence in VLSI and Embedded Systems

16. Details of existing research laboratories: -

- 1. Computer Vision Lab
- 2. Freescale Lab
- 3. Robotics Lab

17. Details of proposed research laboratories: -

- 1. Antenna fabrication and measurement Lab
- 2. Internet of Things Lab

18. Details of MOUs with National & International Institutions/Organisations:-

- Memorandum of Understanding (MOU) between Delhi Technological University and Lithion Power Private Limited.
- 2. Memorandum of Understanding (MOU) between Delhi Technological University and NXP India Private Limited
- 3. Memorandum of Understanding (MOU) between Delhi Technological University and CSIR-Central Electronics Engineering Research Institute PILANI, India
- 4. IEEE for VLSI based certificate course
- Memorandum of Understanding (MOU) between Delhi Technological University and Adani Limited.
- 6. Memorandum of Understanding (MOU) between Delhi Technological University and Bio Electrical & Energy Systems, Malakpet, Hyderabad.
- 7. Memorandum of Understanding (MOU) between Delhi Technological University and University Malaysia Perlis (UniMAP) University Malaysia to be done in the year 2020.

Decision: The Planning Board took the progress report for two years Strategic Plan (2019-21) in respect of Academic Departments of the University on record and approved the plans of Applied Physics and Computer Science & Engineering departments.

In Applied Physics department number of students in one experiment set-up should not be more than three.

Each faculty should have at-least one laboratory for research.

The Board also stressed upon the need to start minor specialization programme in the department of Computer Science & Engineering.

Progress reports of remaining Head of the Departments have been taken on record.



Agenda 2.8 : Progress report for two years Strategic Plan (2019-21) in respect of Administration/ Examination/ Incubator Cell/ Sports Cell/ Engineering Cell/ Accounts Branch.

The Planning Board was informed that a review meeting of various activities of the University i.e. examination, incubator, sports and accounts coupled with infrastructural facilities was held on 20th January 2020. During the meeting the concerned the Head of the department reported the various achievements/ actions along with future activities including implementation of ERP project proposed to be undertaken during the next two years. Few suggestions were recommended by the members and accordingly, fresh strategic plan for 2019-2021 was placed before the Planning Board in the meeting.

ESTABLISHMENT BRANCH:

| S.N | Action | ExistIng | Target | Date of Achievement |
|-----|--------------------------|-----------------------|---------------------|--|
| 1 | Staff (Regular) | 03 | 20 | As and when the recruitment will be initiated |
| | Staff (Contract) | 06 | | |
| | Staff (Outsourced) | 04 (including 02 MTS) | | |
| 2 | Activities Time Limit | 10 to 15 Days | 07 Days | As and when the new staff will be allotted. |
| | | | | |
| 3 | Infrastructure | | | |
| | Computer | 12 | 18 | Proposal sent to S&P |
| | Printer | 06 | 18 | |
| 4 | Automation | Semi Automatics | Fully Automatics | The moment ERP model will be implemented |

PENSION CELL:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|--------------------------|--------------------|---------------------|--|
| 1 | Staff (Regular) | 00 | 05 | As and when the recruitment will be initiated. |
| | Staff (Contract) | 00 | | |
| | Staff (Outsourced) | 03 | | |
| 2 | Activities Time Limit | 10 to 15 Days | 07 Days | As and when the new staff will be allotted. |
| 3 | Infrastructure | | | |
| | Computer | 03 | 05 | Proposal sent to S&P. |
| | • Printer | 01 | 05 | |
| 4 | Automation | Semi Automatics | Fully Automatics | The moment ERP model will be implemented |



LEGAL CELL:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|-----------------------------|--------------------|---------------------|--|
| 1 | Staff (Regular) | 01 | 03 | As and when the recruitment will be initiated |
| | Staff (Contract) | 00 | O ne | |
| | Staff (Outsourced) | 00 | 0.20 | |
| 2 | Activities Time Limit | 10 to 15 Days | 07 Days | As and when the new staff will be allotted. |
| 3 | Infrastructure | .4 | | |
| | Computer | 01 | 03 | Proposal sent to S&P |
| | Printer | 01 | 03 | |
| 4 | Automation | Semi Automatics | Fully Automatics | The moment ERP model will be implemented |

1

RTI CELL:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|-----------------------|--------------------|---------------------|---|
| 1 | Staff (Regular) | 00 | 02 | As and when the recruitment will be initiated |
| | Staff (Contract) | 01 | PE) | |
| | Staff (Outsourced) | 01 (MTS) | and a | |
| 2 | Activities Time Limit | 10 to 15 Days | 07 Days | As and when the new staff will be allotted. |
| 3 | Infrastructure | | | |
| | Computer | 01 | 02 | |
| | • Printer | 01 | 02 | |
| 4 | Automation | Semi Automatics | Fully Automatics | The moment ERP model will be implemented |



GRIEVANCE CELL:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|-----------------------|--|---------------------|---|
| 1 | Staff (Regular) | 01 (Shared with Legal Br. Staff) | 01 | As and when the recruitment will be initiated |
| | Staff (Contract) | 00 | | |
| | Staff (Outsourced) | 00 | | |
| 2 | Activities Time Limit | 10 to 15 Days | 07 Days | As and when the new staff will be allotted. |
| 3 | Infrastructure | | | |
| | Computer | | 01 | Proposal sent to S&P |
| | Printer | | 01 | |
| 4 | Automation | Semi Automatics | Fully Automatics | The moment ERP model will be implemented |



GENERAL ADMINISTRATION:

| S.N | Action | Existing | Target | Date of Achievem ent |
|-----|--------------------------|---|---|--|
| 1 | Staff | 1 Section Officer-01 (regular) 2. Sr. O. A01 (Regular) 3. DEO-02 (Outsourced) 4. MTS-02 (Outsourced) | One more regular dealing asst. needs to be deployed. | 31.03.2020 |
| 2 | Activities Time Limit | Issue of DGEHS card in 10-15 working days Issue of Identity card in 10-15 working days Re-imbursement of Basic Facility to Officers in every 3 months | 1. Issue of DGEHS card in 7 working days. 2 Issue of Identity card in 7 working days 3. Re-imbursement of Basic Facility to Officers in every 2 months | 31.03.2020 |
| 3 | Infrastructure | Housekeeping and sanitation works are done manually. Use of Almira and racks in Record Room. | 3. Use of Machinery in Housekeeping work 4. Upgradation of Record Room and use of modern compactors for easy retrieval and storage of record. | 31.12.2020 |
| 4 | Automation | Extensive Use papers due to use of Manual systems and duplicity of data in individual computers. | After implementation of ERP, followings are proposed for automation in DTU: 1. Online real-time updated data of outsourced staff and system for leaves in respect of outsourced staff. 2. Re-imbursement of Basic Facility through ERP system. 3. Online submission of application form, verification and issuance of Identity Card to staff & faculty. 4. Monitoring of license fee through ERP. | As soon as ERP implemented by Computer Centre, DTU |

STORE AND PURCHASE:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|--|--|---|---------------------|
| 1 | Staff (i) Store (a) CSK (b) SK (c) ASK (d) Attendant (ii) Purchase (a) Consultant (b)OA (c) JOA (d) Attendant | 01 00 02 01 01 00 01 | 00 02 02 01 00 02 01 01 | 9 |
| 2 | Activities Time Limit (i) Purchase of consumable & non consumable items/instruments. (ii) Store records being maintaining manually (iii) Disposal of goods/materials | GeM & E- tendering in accordance with the procedure prescribed in GFR2017. Manually Through E- auction | GeM & E- tendering as per the Govt. guide lines. To take advantage of IT products(ERP, Store management software etc.) in house keeping and file management. As per the Govt. rule. | |



| S.N | Action | Existing | Target | Date of Achievement |
|-----|----------------|--|--|---------------------|
| 3 | Infrastructure | 2 large rooms. | One record room for store | |
| 4 | Automation | (i) To ensure the availability of sufficient stock at store to provide the best service to end users. (ii) To keep proper records of inventory items by physical verification and numbering of non-consumables in time bound manner. (iii) To make efforts in reducing the plastic waste by discouraging the purchase of Plastic products. | (i) To encourage the cost cutting by making arrangements for purchase of quality goods judiciously. (ii) To reduce TAT (Turn around time) of proposals/Files for increasing efficiency and procurement of items/goods/inventory. (iii) To reduce carbon footprint by adopting innovative ways in every possible arena of work. | |

TRANSPORT AND SECURITY:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|----------------------|----------|--------|------------------------|
| 1 | Staff | 01 | 00 | |
| | Transport & Security | 01 | 00 | 3000) |
| | (a) TO & SO | 01 | 00 | |
| | (b) TC & DSO | 00 | 01 | Urgently Needed |
| | (c) Attendant | 07 | 00 | <u> </u> |
| | (d) DA | 01 | 00 | : === 8 |
| | (e) Driver | 00 | 01 | Urgently Needed |
| | (f) Bus Helper | 00 | 03 | Urgently Needed |
| | (g) CCTV Technician | | | |
| | (h) CCTV Operator | | | |
| | (in 03 shift, 24×7) | | | |

TO=Transport Officer

SO=Security Officer

TC=Transport Consultant DSO=Deputy Security Officer

DA=Dealing Assistant

| S.N. | Action | Existing | Target | Date of Achievement |
|------|---|-------------------------------------|--|---|
| 2 | Activities Time Limit (a) All records are maintained manually (b) Disposal of old vehicles (c) Security checks of all students, staffs, etc | Manually Through E-auction Manually | Need of IT support (ERP, Transport & Security management) As per the govt. rule & regulations Requirement of Access Control System through Smart Card with flap barrier along with card reader at all main entry & exit points | 01(Immediate) 01(in June, 2020) Urgent Needed |
| 3 | Infrastructure | | ě | |
| | (a)Office (b)CCTV Control Room (c)Store | 01 01 01 | 00 00 00 | |



RECRUITMENT:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|--------------------------|---|---|-------------------------------|
| 1 | Staff | 10 (Including OSD and Team of 3) | 15 | BY 30.01.2020 |
| 2 | Activities Time Limit | Recruitment of 1. Asstt. Prof. 167 Posts 2. Asstt. Prof. 87 Posts 3. Asso. Prof. 17 Posts 4. Professor 05 Posts 5. Registrar 01 Posts | | By September 2020 |
| 3 | Infrastructure | 05 Nos of Big Almirah + 3 Nos of Small Almirah | | |
| | | 09 Tables + 30 Chairs | 05 Nos of open racks to stack application forms | |
| | | 02 Computer | 04 | 1 st March 2020 |
| | | 02 Printer | 04 | 1 st March 2020 |
| | | 01 Shredder | | |
| | | 01 Hot Case + 02 Room Heater + 02 Air Conditioner + 03 Telephone Instruments | 01 Photostat machine | 1 st March 2020 |
| 4 | Automation | The receipt of application form and fees for the recruitment on various posts. | Dairy and Dispatch of the section to be automated | June 2020 |



EXAMINATION CELL

Two Years Strategic Term Plan For Two Years From August 2019 To July 2021

1. Name of Department

: EXAMINATION

2. Year of Establishment

: 2009

3. Introduction

The Examination Department is the backbone of the University and is responsible to conduct examinations and confer the degrees to the candidates who fulfill the requisite qualification/conditions. The Examination Department deals with the appointment of paper setters, examiners, tabulators, moderators and scrutinizers, preparation of schedule of examinations, conduct of examinations, assessment and timely declaration of results and confer degrees to the candidates. The entire work of examinations is being governed by various provisions of the Act, Statutes, Ordinances and Rules & Regulations made therein by the authorities of the Delhi Technological University established by Govt. Of NCT of Delhi vide Act of 6 of 2009.

The Examination Department of the University functions through four sections namely Conduct & Evaluation, Secrecy, Results and General Administration

4. Vision

Smooth conduct of Examinations and timely declaration of Results.

5. Mission

The Examination Department is committed for smooth conduct of Examinations, timely declaration of Results & proper maintenance of the Records with utmost accuracy in accordance to the provisions of the Act, Statutes, Ordinances and Rules & Regulations of the University. It is ensured that due Secrecy and Sanctity is maintained in each activity of the Examination Department.



6. Faculty & Staff:-

| Sr. No. | Action | Existing | Target(s) | Date of Achievement(s) |
|------------|----------------------------------|----------|-----------|------------------------|
| 1, | Number of sanctioned | | | |
| | teaching posts :- | | | |
| | (a) Professor | | | |
| | (b) Associate Professor | | | |
| | (c) Assistant Professor | | | |
| 2. | Number of faculty in position :- | | | |
| | (a) Professor | | | |
| | (b) Associate Professor | 01 | | |
| | (c) Assistant Professor | | | |
| 3. | Number of sanctioned | | | |
| | technical posts:- | | | |
| | (a) Technical Officer/Foreman | | | |
| | (b) Senior Technical Assistant | | | |
| | (c) Technical Assistant | | | |
| | (d) Junior Technical Assistant | | | |
| | (e) Others | | | |
| 4. | Number of technical staff in | | | |
| | position:- | | | |
| | (a) Technical Officer/Foreman | | | |
| | (b) Senior Technical Assistant | | | |
| | (c) Technical Assistant | | | |
| | (d) Junior Technical Assistant | | | |
| | (e) Others | 02 | | |
| 5. | Number of Ministerial Staff | 14 | | |
| 6. | Number of Multi-Tasking Staff | 03 | | |
| 7. | Number of International faculty | | | |
| | engaged | | | |
| 8. | Number of faculty deputed for | | | |
| | higher studies/PDFs | | | |
| 9. | Number of faculty members | | | |
| | sent to industry | | | |
| 10 | Number of Adjunct/Honorary | | | |
| | Faculty | | | |

7. Any other details:-

Targets:

- CBCS based for All Programs by 2021
- Adaptive System of Registration by 2021
- To conduct examination at multiple campuses by 2021
- To build capacity to conduct examinations for 20000 students by 2021
- To implement Screen Marking for Evaluation by 2021

- To reduce the average time taken to declare results to 15 days by 2021
- To make 100% automation of Examination Department by 2021
- To build strong rooms to secure keeping of records by 2021
- To digitally store all records by 2021
- To upload all degrees on NAD platform by 2021
- To incorporate latest security features in the marksheets and degrees
- To periodically audit the quality of question of papers and publish reports

INCUBATION CENTRE

Technology Business Incubator (TBI)

Strategic Plan of DTU INOVATION AND INCUBATION FOUNDATION (DTU-IIF)

- CURRENT SITUATION: There are 19 startups incubating at DTU IIF (in 2019)
- FUTURE INTENT: As per the Strategic Plan 2019-2030 (on page 20, DTU IIF is required to increase it to 100 startups) that requires DTU IIF has to add 10 number of companies every year i.e. 10X10 Companies.

| 2020 (Projected) | 2021 (Projected) | Remarks | |
|--|---|--|--|
| 30 Startups | 40 Startups | Expected Revenue/Grants | |
| Manpower: | Manpower: | Expected Sources of | |
| CEO(1)+JAO(2)+ | CEO(1)+JAO(2)+ | funds: | |
| Attender(2) | Attender(4) | From Govt. : (i)State Govt. (ii) Central Govt. Schemes (| |
| (As we have already shifted 4 startups in DTU East Campus + Manager (1) | (As we shall have already shifted 17 startups in DTU East Campus as new dedicated space is in pipeline + Manager (2 for each campus) | (iii) CCD from corporate (i | |
| 7.5Laks X 30 = 2.25 Cr (Seed | 7.5Laks X 40 = 3.0 Cr (Seed Funds for | There is proposal in | |
| Funds for Startup Companies | Startup Companies | consideration at DST, Gol | |
| (i) Seed fund= 2,25,00000.00 | (i) Seed fund= 3,00,00,000.00 | for 17.5 Crs (15 Cr from DST+ 2.5 Cr from own | |
| (ii) Salary and Misc. Expenses= 75,00,000=00 | (ii) Salary and Misc. Expenses= 1,25,00,000=00 | funding from host institution, i.e. DTU) | |



| Total: 3,00,00,000.00 (3 Crores) | Total: 4,25,00,000.00 (4.25 Crores) 3.5 Cr. For one floor in new building in East Campus TOTAL= 7.75 Crores | |
|--|--|--|
| 7.5Laks X 30 = 2.25 Cr (Seed Funds for Startup Companies | 7.5Laks X 40 = 3.0 Cr (Seed Funds for Startup Companies | |
| Seed fund= 2,25,00000.00 Salary and Misc. Expenses= 75,00,000=00 | Seed fund= 3,00,00,000.00 Salary and Misc. Expenses= 1,25,00,000=00 | |
| Total: 3,00,00,000.00 (3 Crores) | Total: 4,25,00,000.00 (4.25 Crores) 3.5 Cr. For one floor in new building in East Campus | |

Physical Education Department

1. PRESENT SPORTS INFRASTRUCTURE

- 1.1 Badminton Indoor (3 Synthetic) and outdoor (5 Hard) courts.
- 1.2 Basketball (2 Hard) outdoor courts.
- 1.3 Cricket Main ground and Six Practice pitches.
- 1.4 Football grassy ground.
- 1.5 Gymnasium (2 gymnasiums of 30 x 50 feet)
- 1.6 Kabaddi mud court. (Three)
- 1.7 Lawn Tennis (3 Hard) outdoor courts.
- 1.8 Table Tennis Indoor court.
- 1.9 Volleyball (2 Mud) outdoor courts.
- 1.10 400 M Cinder Running Track. (8 Lanes)

2. STRATEGIC SPORTS INFRASTRUCTURE PLAN 2020-2030

- 2.1 To develop World Class Gym along with the Meditation Centre.
- 2.2 To develop the present 400 M running cinder Track into Synthetic Track.
- 2.3 To develop Football grass ground into Polygrass ground.
- 2.4 To develop Flood Light facilities for Cricket and Football grounds.
- 2.5 To develop Indoor sports facilities for Basketball, Lawn Tennis, Volleyball.
- 2.6 To develop International level swimming pool.
- 2.7 To develop Squash court.



- 2.8 To develop Lawn Tennis hard court and Basketball hard court into synthetic surface.
- 2.9 To develop Hockey ground.
- 2.10 To develop Handball ground.

3. PRESENT SPORTS TOURNAMENTS

DTU organizes various tournaments in the campus as mentioned below:

- 3.1 Inter Hostel sports tournament.
- 3.2 Inter Department Sports Tournament.
- 3.3 Tri-Quetra collaboratively organized by DTU, NSUT and IIIT-D.
- 3.4 Professional colleges sports tournament (AAHVAAN).

DTU Sports contingent participates in various sports tournaments in outside Universities.

4. FUTURE STRATEGIC PLAN FOR SPORTS TOURNAMENT

- 4.1 To organize Inter University tournaments for various games.
- 4.2 To organize league tournaments for various games in the University campus.
- 4.3 Invitational sports tournament.
- 4.4 To organize open sports competition

5. PRESENT FEC-SPORTS

DTU started FEC Sports in the Academic year 2018-2019. Below mentioned activities were started:

- 5.1 FEC Sports-1
- 5.2 FEC Sports-2
- 5.3 FEC Sports-3
- 5.4 The Number of students of FEC sports in various semester is mentioned below:
 - 5.41 August to November 2018 Number of Students 483
 - 5.42 January to April 2019- Number of Students 481
 - 5.43 August to November 2019 Number of Students 640
 - 5.44 January to April 2020- Number of Students 801
- 5.5 Nine games facilities were used in FEC sports.

6. FUTURE STRATEGIC PLAN FOR FEC- SPORTS

- 6.1 New games will be included in FEC-Sports i.e.
 - 6.1.1 Handball
 - 6.1.2 Hockey
 - 6.1.3 Squash
 - 6.1.4 Swimming
 - 6.1.5 Archery
 - 6.1.6 Shooting.
- 6.2 Number of days will be increased in the curriculum.
- 6.3 Course curriculum will be revised.



7. PRESENT STAFF OF THE SPORTS DEPARTMENT

Coaches for various games as mentioned below:

- 7.1 Athletics (1 male)
- 7.2 Cricket (1 male)
- 7.3 Football (1 male)
- 7.4 Kabaddi (1 female)
- 7.5 Volleyball (2 male and 1 female)
- 7.6 Gym Trainer (2 male- 1 at Main Campus and 1 at East Campus)
- 7.7 Ground men (2 male)

8. STRATEGIC PLAN FOR FUTURE STAFF

- 8.1 New coaches will be appointed for the following games:
 - 8.1.1 Badminton Coach (1 male and 1 female)
 - 8.1.2 Basketball Coach (1 male and 1 female)
 - 8.1.3 Athletics Coach (1 female)
 - 8.1.4 Table Tennis Coach (1 male and 1 female)
 - 8.1.5 Cricket Coach (1 female)
 - 8.1.6 Lawn Tennis Coach (1 male and 1 female)
 - 8.1.7 Football Coach (1 female)
 - 8.1.8 Kabaddi Coach (1 male)
 - 8.1.9 Ground Men (2 male)
 - 8.1.10 Clarke (1 male)

Engineering Cell

Two Years Strategic Term Plan For Two Years From August 2019 To July 2021

1. Name of Department

: Engineering Cell

2. Year of Establishment

: 2010

- 3. Key Achievements of Department:-
 - > Renovation work of New DTU campus at East Delhi has been completed.
 - New building developed for Delhi School of Management.
 - Indian Flag Mast of 130 feet height has been installed in the lawn of DTU Campus.
 - > Sewerage Treatment Plant (STP) Waste based on Bio-Filter having capacity of 1 M.L.D. (Million Litre per Day) is functional & is working very well
 - > Waste to Energy Plant (WTE) of 1TPD (tonne per day) installed at DTU is fully functional.
 - > Pragyan Hall has been developed for meetings and conferences.



- > Sports facility has been upgraded and additional sports activities have been added.
- Creche facility has been constructed and developed for the staff of university.
- ➤ Solar power plant of capacity 432 Kwp has been installed for power generation.
- > Evaluation Hall of 100 sitting capacity for examination cell has been developed.
- > Additional Facilities for placement agencies at Training and Placement department.

4. Infrastructure Plan:-

| Sr.No. | Action | Target |
|--------|--|------------------------------------|
| 1. | Construction work of Two new multi-storeyed academic blocks (Basement+G+08) and Three multi-storeyed hostel blocks (Basement+G+11) is in progress. | |
| 2. | Single storeyed Block, Multi-purpose Hall (SPS Type), to accommodate 3,500 persons at a time is under construction. | To be completed by March, 2020. |
| 3. | Double storeyed Design Centre, SPS Building is under construction. | To be completed by March, 2020. |
| 4. | Double storeyed Faculty Block which will provide 36 number of faculty offices is under construction. | Will complete till February 2020. |
| 5. | Double storeyed Class rooms (12nos.) are under construction. | To be completed by March, 2020. |
| 6. | Water supply at DTU campus from Delhi Jal Board has been approved and the project will be operational shortly. | To be completed by March, 2020 |
| 7. | Vigyan Hall is being developed for meetings and conferences. | To be completed by February, 2020. |
| 8. | Opening of Kendriya Bandar | To be completed by April, 2020. |
| 9, | Provision of lifts in Class rooms/faculty blocks and Staff quarters, Gymnasium hall are in planning stage. | To be completed by December, 2020. |



| 10. | East campus Multi-storeyed Block (four storeyed SPS structure) for cafeteria, Gymnasium, Girls common room and other facilities is in planning stage. | To be completed by December, 2020. |
|-----|---|--|
| 11. | Development of four storeyed instrumentation center for research scholars | To be completed by December, 2020. |
| 12, | Record room of university is under construction at Administrative Block. | To be completed by April, 2020. |
| 13. | Construction of an alternative Entry/Exit of DTU Campus | To be completed by March, 2020. |
| 14. | Faculty offices in Civil Block for accommodating 36 faculty members are under construction. | To be completed by September, 2020. |
| 15, | Renovation of space structure between B.R. Ambedkar auditorium and OAT. | To be completed by October, 2020. |
| 16. | Development of Pond area | To be completed by June, 2021. |
| 17. | Dust free campus | To be completed by December, 2021. |
| 18. | Health center bedding facility to be enhanced. | Increase from 8 to 10 till August, 2021. |
| 19. | Renovation of washrooms in Academic Blocks & Hostels. | To be completed by March, 2021. |

ACCOUNTS & FINANCE:

| S.N | Action | Existing | Target | Date of Achievement |
|-----|--|----------------|---|------------------------|
| | (i) Activites Time Lime, TIME – FRAME FOR DISPOSAL OF WORK 1. Files/Proposals received for concurrence/comments/examination/approval 2. Release of payment on receipt of Sanction Order 3. All reimbursement personal claims 4. Pay arrears 5. Arrear Bills other than Pay arrears 6. URGENT Bill relating to Electricity, Water charges and Telephone Bills 7. Verification of proposal for refund of Security of Students 8. Verification of refund of fee to the students. 9. Emergent and Time bound | | 5 Working Days 3 Working Days 5 Working Days 12Working Days 08 Working Days 02 Working Days 05 Working Days 05 Working Days | As Soon As Possible |
| | Proposals/Bills | Came Day | ounce buy | |
| | (II) Payment of Contingency bills, Personal Claims, Scholarship etc. 1. Receipts of sanction order from the concerned branch. 2. Verification of sanction order. 3. Preparation of bills at the level of Dealing Assistant. 4. Checking of bills at the level of AAOs. 5. Passing of bills at the level of DDOs. 6. Issue of cheque duly signed by Authorized Signatory. 7. Issue advice to the bank for payment through ECS/RTGS/NEFT | 3 Working Days | 3 Working Days | |
| 3 | Infrastructure | | | |
| | For automation of reconcile the accounts needs 1. at least 3 computers 2. 3 regular Staff 3. Liaisioning with Chartered Accountant & SBI | Nil | As per Column 2 | As soon as possible |
| | n n | | | |



| 4 | Automation | | is . | |
|-----|--|--------------------------------------|---|--|
| | Needs to Automates accounts reconciliation & standardizes the reconciliation process to produce high quality & accurate financial statements. It drives accuracy in the financial close by providing Cashier / Accounts Officer with a streamlined method to verify the correctness & appropriateness of balance sheets. | NA | To be achieved | within 3 months subject to provide the infrastructure |
| | If we achieve the targets of Automation the accounts, then accounts officer/ cashier can quickly compare general ledger, bank & other data, investigate discrepancies, attach supporting documentation & take necessary action accordingly. | | | |
| 5 | Financial Position of Budget and Expenditure | | To utilize the allotted budget in the various heads. | At the end of the Financial Year i.e. up to 31st March 2020 subject to the sanction received from concerned departments of DTU |
| S.N | Details of Financial Receipts & Expenditure | Existing (Rs. in Cr.) | 1 | Date of Achievement |
| 6 | 1. Revenue/Receipts/UGF a. Fees from Students b. Rent and Incidental Charges c. Other Receipts 2. Expenditure Incurred (GIA/UGF/NGF) | 103.00 001.03 006.85 194.00 | 125.00 003.00 010.00 341.00 | |

ERP deployment in University

- 1. **Vision :** Achieve increased operational effectiveness and efficiencies in processes via an ERP solution
- Mission: Create centralized data repository and digitization of manual processes
- Infrastructure:-
- 3.1 Details of new Laboratories proposed for UG Programs:-
- 3.2 Details of new Laboratories proposed for PG Programs:-

Current Status of deployed modules/functionalities

- 1. Student and Faculty bulk data porting
- 2. SMS and Email facility
- 3. Timetable and Attendance
- 4. Intra DTU All Admissions Complete process
- 5. SBI MOPS Integration for online fees
- 6. Student Course Registration
- 7. Exam Schedule creation and Sitting Plan
- 8. Online Marks Entry along with grading modulation
- 9. Result preparation and marksheet printing
- 10. Hostel room entry
- 11. All Staff salary generation
- 12. Training and Placement

Plan for Future deployment (Target- June 2020)

- 1. Online File tracking System
- 2. CMS for Admissions
- 3. Finance module all functionality
- 4. Faculty & Staff Leave Management
- 5. IRD
- 6. IQAC
- 7. Online Bio-metric device detection and auto attendance generation

Plan for Future deployment (Target- March 2021)

- 1. Store
- 2. Security
- 3. Engineering Cell
- 4. Administrative Procedures
- 5. CMS of DTU website
- 6. Document Management System
- 7. Finance module all functionality

The Executive Engineer, DTU presented the two-year Strategic Plan of the Engineering Cell which was highly appreciated by the Planning Board.

Decision: The Planning Board considered and took the two years Strategic Plan (2019-21) in respect of Administration/ Examination/ Incubator Cell/ Sports Cell/ Engineering Cell/ Accounts Branch on record.



Agenda 2.9: Any other item with the permission of the chair.

The next meeting of the Planning Board has been fixed for 15th May, 2020. The Chairperson, Planning Board desired that henceforth all Deans and HODs should also be invited in the Planning Board meeting.

Meeting ended with a vote of thanks to the Chair.

The minutes are issued with the approval of the Vice Chancellor for circulation to the Hon'ble Members, who are requested to give their comments, if any, on these circulated minutes.

(Prof. Samsher) Registrar

Dated:

No. F.DTU/Council/Plg. Board/33/2019

To,

1. P.A. to V.C. for kind information to the Vice Chancellor

- 2. Padma Shri Prof. Pritam Singh (Former Director, IIM, Lucknow) A-14, PWO Complex, Sector 43, Gurugram, Haryana 122001.
- 3. Prof. Prem Vrat, Pro-Chancellor, NorthCap University, Sector 23A, Gurugram, Haryana 122017.
- 4. Prof. I.K. Bhat, Vice Chancellor, Manav Rachna University, Sector 43, Faridabad, Haryana 121004.
- 5. Prof. J.P. Saini, Vice Chancellor, Netaji Subhash University of Technology, Sector 3, Dwarka, Delhi 110078.
- Prof. Anu Singh Lather, Vice Chancellor, Ambedkar University Delhi Lothian Road, Kashmere Gate, Delhi 110006
- 7. Prof. S.K. Garg, Professor, Mechanical Engineering Deptt., DTU
- 8. Registrar, DTU
- 9. Guard File.

(Prof. Samsher) Registrar