

**SELF-STUDY REPORT (SSR)
FOR
QUALITY ASSURANCE AND ACCREDITATION (QAA)**



Submitted to

Quality Assurance and Accreditation Council
University Grants Commission
Sanothimi, Bhaktapur.



Submitted By

Purwanchal Campus

Institute of Engineering, Tribhuvan University
Dharan Sub-Metropolitan City, Ward no. 8, Province No. 1

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Acknowledgments

Quality is achieved only by creating excellence in work, work environment, human resources, etc. Besides, the creation of financial sustainability and uplifting institute at the international level are other areas to attain the quality. The faculties, staffs, and students are essential stakeholders apart from infrastructures to achieve quality. The faculty is; a scholar, an effective teacher, an experienced professional, and a positive role model. The staffs are the actual aids for effective delivery. The students are the ultimate receiver and reflect quality on their competency and capability.

We would like to express our special regards to the Campus Management Committee and all the constituent committees, departments, and units of Purwanchal Campus who share a common platform for preparing the Self Study Report (SSR). Additionally, we are thankful for the QAA division, Tribhuvan University, who provides valuable suggestions and feedback for finalizing the report. After all, we would like to acknowledge all the working teaching and non-teaching staff of the campus for contributing to running the campus as one of the pioneer engineering campuses of the country.

Declaration from Head of the Institution



त्रिभुवन विश्वविद्यालय
Tribhuvan University
इन्जिनियरिङ अध्ययन संस्थान
Institute of Engineering



पूर्वाञ्चल क्याम्पस
PURWANCHAL CAMPUS

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पु.सं.फा.सं. () सं. ०८६-०८०/०८१
To,

मिति २०८०/०४/२६

The University Grant Commission,
Sanothimi, Bhaktapur, Nepal

Subject: Declaration by head of the institution

I am pleased to submit our Revised Self Study Report (SSR) of Purwanchal Campus, Dharan. We have updated the SSR by answering the recommendation provided by Peer Review Team (PRT) visited on . I hereby declare that the data and information included in this revised Self Study Report are genuine and no part of the report has been copied nor reused from other source by any means. Furthermore, we are committed for the additional improvement in the report as per suggestions by UGC if required any. Furthermore, we are fully prepared for the further procedures to be performed.

Thank you

Asst. Prof. Er. Kaji Ram Karki
Campus Chief

Campus Chief
Purwanchal Campus
Dharan-8

Executive Summary

The Institute of Engineering (IOE), founded in 1930 (1987/11/19BS) as Nepal's first technical school and reformed to present shape in 1972, is producing outstanding engineering technicians and engineers for more than 80 years. The tradition of excellence in the IOE is further intensifying in the course of time. IOE is also becoming more and more responsive to the ever-changing needs of the students and the engineering profession. The Institute is experiencing a period of significant growth. The Institute of Engineering is enormously benefited by the wide range of perspectives and talents brought in by the students, faculty and staff from a variety of backgrounds. IOE offers an impressive range of Academic resources. Student in IOE mean more than simply preparing for a career. IOE strive to produce brains who can contribute to the growth of Nepal in all sense. IOE inVolumeves students not only in the acquisition of a formal qualification valued in society but also in the excitement of investigation, the pursuit of ideas and the satisfaction that comes from applying knowledge.

IOE is running its programs through its five constituent and ten affiliated campuses in the country. Purwanchal Campus (PC), formerly known as Eastern Region (ERC) Campus is one of constituent campuses of Tribhuvan University (TU) and one of the associate engineering campuses of Institute of Engineering (IOE) which is a comprehensive, non-profit making institution and pioneering institution of higher education level in Nepal funded by Government of Nepal. With the upgrade to a higher level of courses, the need to adopt the recent technological development and initiate research and development activities to better deal with related engineering problems, the Purwanchal campus is committed to achieving better quality results.

It is true that quality is achieved only with creating excellence in work, work environment, human resources, etc. Besides, creation of financial sustainability and uplifting institute in international level are other areas to attain the quality. The faculties, staffs and students are important stakeholders apart from infrastructures to achieve quality. The faculty is; a scholar, an effective teacher, an experienced professional and a positive role model. The staffs are the true aide for the effective delivery. The students are the ultimate receiver and reflect quality on their competency and capability. Within the framework of development objectives and strategy, IOE/ Purwanchal Campus has been proposed to developed as focused in center of excellence in engineering education in eastern region of the country. Till now there are seven BE engineering programs and three master programs running in the campus and all trade level courses, three years diploma engineering programs was phased out as per policy of IOE/TU which was started since

beginning of the establishment of the campus. At present there are more than 1800 students are studying in different programs.

Introduction

Purwanchal Campus is one of the pioneers in starting engineering education in Nepal. It is a comprehensive, not-profitable, autonomous engineering campus funded by the Government of Nepal. Having been established in the Eastern region of Nepal, Purwanchal Campus has contributed a lot to providing skilled human resources nationwide and on an international basis. The campus had been established as a constituent campus of Tribhuvan university initially in 2037 BS to provide trade-level courses on Mechanical, Electrical, and Civil engineering streams, with the support of the Asian Development Bank (ADB). Further, with the technical assistance of the United Kingdom (UK) government, Purwanchal Campus had got an opportunity for further development on its infrastructure. As a result, the campus was formally organized under the Institute of Engineering (IOE), Tribhuvan University (TU), and all the construction works were completed on 2043 BS. The campus is formerly known as the Eastern Region Campus (ERC).

Initially, offering the trade level course, the campus officially started the diploma in engineering courses specialized in mechanical, electrical, and Civil. Further, additional Refrigeration and air conditioning engineering programs are on 2052 BS. Moreover, the computer and electronics engineering program diploma began in 2059 BS. In the attempt to further up-gradation, Purwanchal Campus introduced a bachelor-level course Bachelor of Engineering in Agricultural Engineering, in 2057 BS. This course is still being taught only in Purwanchal Campus throughout the country.

Further, Bachelor in Civil Engineering course was established in 2004. Continuation development in the infrastructure and facilities on campus, Purwanchal campus now runs seven different bachelors in engineering programs. Moreover, with the vision to provide skilled workforces in specialized courses, the Purwanchal campus started Masters of science in engineering courses. The campus now runs three master programs on M.Sc. On Land and Water Resource Engineering, M.Sc. On Sanitation Engineering and M.Sc. In Information and Knowledge Engineering. have also been started. The campus possesses more than 200 faculties and staff with more than 1500 students in the present context.

Apart from the campus infrastructure and physical development, Purwanchal Campus has begun restructuring the Campus Management system. The campus, along with the important campus management committee, has established an Internal Quality Assurance Cell (IQAC) to standardize and maintain the quality academic environment on the campus. Furthermore, to uplift the campus academia to research-oriented study and development, the campus has established the Research

Management Cell in 2077 BS. Apart from this, to secure staff and student placement rights and duty, the campus has established the Human Resource Management Committee (HRC) in the campus. Moreover, supporting the Human Resource Management Committee, Student counselling and employment cell and Public Information cell has also been established in the campus. These unit both independently and in collaboration work together to enhance the outreach of students and even staffs outside the campus.

CAMPUS MANAGEMENT COMMITTEE

- Chairman: Asst. Prof. Kaji Ram Karki, Campus chief
- Member: Assoc. Prof. Anu Shrestha , Assistant Campus Chief (administration)
- Member: Assoc. Prof. Dr. Bhoosan Kafle (Academic)
- Member: Asst. Prof. Lal Babu Prasad (Facility)
- Member: Asst. Prof. Manoj Kumar Guragain (Hod. Department of Electronics and Computer Engineering)
- Member: Asst. Prof. Deependra Neupane (Hod. Department of Electrical Engineering)
- Member: Asst. Prof. Prabhat Pratap Dev (Hod. Department of Civil Engineering)
- Member: Asst. Prof. Roshan Ghimire (Hod. Department of Mechanical Engineering)
- Member: Assoc. Prof. Sanjaya Maharjan (Hod. Department of Architecture)
- Member: Asst. Prof. Alankar Kafle (Coordinator, RMC-PC)
- Member: Inst. Tantra Nath Jha (Coordinator, EMIS)
- Member: Asst. Prof. Bishnu Chaudary (Msc. Coordinator, Information and Knowledge Engineering)
- Member: T.A. Deependra Neupane (D. Hod. Department of Electrical Engineering)
- Member: Asst. Prof. Bhisana Bhujel (D. Hod. Department of Civil Engineering)
- Member: T. A Dipendra Subba (D. Hod. Department of Architecture)
- Member: Asst. Prof. Tirtha Karki (D. Hod. Department of Agricultural Engineering)
- Member: Asst. Prof. Aditya Bimal (D. Hod. Department of Mechanical Engineering)
- Member: Mrs. Shanta Kumari Neupane (Chief Administrator)
- Member: Mr. Bhadra Bahadur Tamang
- Member: Mr. Murari Rajbhandari (Chief Accountant)
- Member: Prof. Dev Kumar Raut
- Member: Prof. Dr. Kamal Bahadur Thapa

IQAC COMMITTEE

| | |
|-------------|--|
| Coordinator | : Asst. Prof. Anu Shrestha, Campus Chief |
| Member | : Assoc. Prof. Bhoosan Kalfley, |
| Member | : Asst. Prof. Lal Babu Prasad |
| Member | : Prof. Dev Kumar Raut |
| Member | : Assoc. Prof. Javed Alam |
| Member | : Asst. Prof. Deependra Neupane |
| Member | : Mr. Bhadra Bahadur Tamang |

SELF ASSESSMENT TEAM (SAT) COMMITTEE

The preparation, revision, and finalization of the SSR have been done by the following team of faculties and personnel for assessment for Accreditation of the Institution:

| | |
|------------------|----------------------------------|
| Coordinator | : Asst. Prof. Om Prakash Dhakal |
| Member | : Asst. Prof. Lal Babu Prasad |
| Member | : Asst. Prof. Dr. Alankar Kafle |
| Member | : Er. Tantra Nath Jha, Instrutor |
| Member Secretary | : Mr. Bhadra Tamang |

EMIS COMMITTEE

| | |
|------------------|--------------------------|
| Coordinator | : Instr. Tantra Nath Jha |
| Member | : Er. Pravin Sangroula |
| Member | : Mr. Roshan Mainali |
| Member Secretary | : Mr. Sadnanda Paneru |

RESEARCH MANAGEMENT CELL (RMC) COMMITTEE

| | |
|-------------|---------------------------------|
| Coordinator | : Asst. Prof. Dr. Alankar Kafle |
| Member | : Asst. Prof. Kajiram Karki |

Member : Asst. Prof. Bharosh Kumar Yadav

Member : Asst. Prof. Sashi Kumar Mandal

Member : Asst. Prof. Deependra Neupane

HUMAN RESOURCE MANAGEMENT COMMITTEE

Coordinator : Mr. Ram Nath Guragain

Member : Er. Keshav Kumar Acharya

Member Secretary : Er. Nabaraj Poudel

SECTION A: DATA COLLECTION FORMAT FOR INSTITUTIONAL SELF-STUDY REPORT

SECTION A: INFORMATION FOR INSTITUTIONAL PROFILE

1. Institutional Information

| | |
|--|-------------------------|
| Name of the Institution | Purwanchal Campus |
| Province | Province No.: 1 |
| District | Sunsari |
| Metropolitan City/Sub-Metropolitan City/ Municipality/Rural Municipality | Dharan Sub-Metropolitan |
| Ward No. | 08 |
| Street (Tole) | Gangalal-Marg |
| Post Box No. | 56700 |

2. Information for Communication

a. Office

| Name | Telephone with Extension Number | Fax | E-mail |
|--|---------------------------------|------------|----------------------------------|
| Executive Head of the Institution: Asst. Prof. Kaji Ram Karki (Campus Chief) | 025-520120 9852045805 | 025-520410 | <i>kajiramkarki@ioepc.edu.np</i> |
| Management Committee Chairperson: Asst. Prof. Kaji Ram Karki (Campus Chief) | 025-520120 9852045805 | 025-520410 | <i>kajiramkarki@ioepc.edu.np</i> |

b. Residence

| Name | Telephone | Fax | E-mail |
|------|-----------|-----|--------|
|------|-----------|-----|--------|

| | | | |
|--|------------|--|-------------------------------|
| Executive Head: Asst. Prof. Kaji Ram Karki | 9851133564 | | <i>karkikajiram@gmail.com</i> |
| Management Committee Chairperson: Asst. Prof. Kaji Ram Karki | 9851133564 | | <i>karkikajiram@gmail.com</i> |

3. Type of Institution

- Constituent
- Affiliated
- Degree Awarding Autonomous Institution

4. Institutional Management

- Public
- Community
- Private
- Other (please specify)

5. Financial category of the institution

- Government Funded
- Self-financing
- Community
- Other (please specify)

6. Dates Related to the Institution

a) Date of establishment of the Institution (B.S. : 25/09/2034):

b) Date of commencement of the Bachelor or higher level Program(s)

| SN | Programs | Date |
|----|--|--------------|
| 1 | B.E. in Agricultural Engineering | Bhadra 2057 |
| 2 | B.E. in Civil Engineering | Bhadra 2062 |
| 3 | B.E. in Computer | Bhadra 2067 |
| 4 | B.E. in Mechanical | Bhadra 2069 |
| 5 | B.E. in Electronics & communication | Bhadra 2067 |
| 6 | B.E. in Electrical Engineering | Bhadra 2071 |
| 7 | B.Arc. in Architecture | Bhadra 2072 |
| 8 | MSc. in Land and Water Engineering | Chaitra 2074 |
| 9 | MSc. in Sanitation Engineering/Science | Baisakh 2078 |
| 10 | MSc. in Computer System Engineering | Baisakh 2078 |

c) Date of Government/UGC approval (only for Institution affiliated to foreign universities):
None

7. University to which the Institution is affiliated/related:

Purwanchal Campus is a constituent campus of Institute of Engineering, Tribhuvan University

8. Is the institution autonomous in terms of

- Financing
- Administrative Management
- Academic Management
- None

9. Institution’s Land area in Ropanees/Bighas/Square Meters:

The total land areas of the campus on Bigas-kattha-dhur is 34-13-11.75 approximately 2,34,674 sq. meters

Annex

a. Annex S1_I9_9A: Photocopy of Land Ownership document , Volume-1, Page- 2

10. Location of the Institution

- Urban
- Semi-urban
- Rural

11. Current number of academic programs offered in the Institution under the following categories: (Enclose the list of academic programs offered)

| Academic Programs | Number of Program |
|--|-------------------|
| Certificate course (PCL 2 years),10+2(HSEB), or CTEVT programs | None |
| Bachelors:- | 7 (Seven) |
| Masters:- | 3 (Three) |
| MPhil | 0 |
| PhD:- | 0 |
| Any other (specify) | |
| Total | BE-7 & MSc-1 |

Annex S1_I11_11A: Approval letter from higher authority , Volume-1, Page- 10

12. List the Departments in the Institution (faculty/institute-wise)

| Institute of Engineering(IOE), Purwanchal Campus |
|--|
| Departments: <ol style="list-style-type: none">1. Department of Agricultural Engineering2. Department of Civil Engineering3. Department of Mechanical Engineering4. Department of Applied Sciences5. Department of Electrical Engineering6. Department of Electronics & Computer Engineering7. Department of Architecture |

13. Give details of the self-financing/self-initiated courses, if any offered by the institution (for public institutions only).

| Programs | Level of Study | Eligibility requirement for student admission | Student Number (Enrolment/C apacity) |
|--------------------------|----------------|---|--------------------------------------|
| Civil Engineering | Bachelor | +2 in Science/Certificate level | 144 |
| Agricultural Engineering | Bachelor | +2 in Science/Certificate level | 48 |

| | | | |
|---|----------|---|------------|
| Mechanical Engineering | Bachelor | +2 in Science/Certificate level | 96 |
| Architecture | Bachelor | +2 in Science/Certificate level | 48 |
| Electrical Engineering | Bachelor | +2 in Science/Certificate level | 48 |
| Electronics communication & Information | Bachelor | +2 in Science/Certificate level | 48 |
| Computer Engineering | Bachelor | +2 in Science/Certificate level | 96 |
| Total BE Intake Capacity | | | 528 |
| Land and water Engineering | M.Sc. | B.E (Civil or Agriculture) or equivalent | 20 |
| Sanitation Engineering | M.Sc. | B.E (Civil or Agriculture) or equivalent | 20 |
| Information System Engineering | M.Sc. | B.E (Electronics or Computer) or equivalent | 20 |
| Total MSc Intake Capacity | | | 60 |

14. State the norms and procedures for recruitment of teaching and non-teaching staff of the Institution (Enclose the details):

IOE-Purwanchal campus recruits the teaching and non-teaching staffs on two basis-*one*-directly recruits through university service commission and *second*-on contract basis either through Dean Office or directly by the campus itself as per rules of TU service commission. The concerned academic department demands the necessity of the teacher and staff as per the class load (Theory and practical) and other tasks. There is an IOE guideline for the classes load of the teacher. The details regulation of the recruitment of the staffs on the campus is mentioned on 'TU service commission Teacher staff recruitment rule and regulation book.'

Annex S1_I14_14A: TU Service Commission Teacher staff recruitment rule and regulation book. , Volume -1, Page- 11

15. Number of faculty members at present

| Particulars | Academic Qualification | | | | Grand Total |
|-----------------------------------|------------------------|----------|-----------|------------|-------------|
| | PhD | M. Phil | Master's | Bachelor's | |
| Professor | 1 | | 1 | | 2 |
| Associate Professor/Reader | 1 | | 5 | | 6 |
| Assistant Professor/Lecturer | | | 52 | 6 | 58 |
| Teaching Assistant/Instructors | | | | 33 | 33 |
| Full Time Teachers (Total) | 2 | | 58 | 39 | 99 |
| Professor | | | | | 0 |
| Associate Professor/Reader | | | | | 0 |
| Assistant Professor/Lecturer | | | | | 0 |
| Teaching Assistant/Instructors | | | | | 0 |
| Visiting Professors | 3 | | 5 | | 8 |
| Part Time Teachers (Total) | 3 | 0 | 5 | 0 | 0 |
| Total | 5 | 0 | 63 | 39 | 107 |

16. Give the details of average number of hours/week (class load)

| Courses | Full Time Teachers (Total) | Part Time Teachers (Total) | Total |
|--|-----------------------------------|-----------------------------------|--------------|
| Science | | | |
| Management | | | |
| Humanities and Social Science | | | |
| Education | | | |
| Law | | | |
| Institute of Engineering, Purwanchal Campus | 15 hrs/week | 6 hrs./week | |
| Please add other courses if applicable | | | |

Annex:

a. Annex S1_I16_16A: Master Routine , Volume-1, Page-47

17. Number of the non-teaching staff of the institution at present

| Particulars | Disadvantaged / Janajatis | | | Others | | | Grand Total |
|-----------------------------------|----------------------------------|-----------|-----------|---------------|-----------|-----------|--------------------|
| | F | M | T | F | M | T | |
| Administrative Staff | 8 | 16 | 24 | 5 | 14 | 19 | 43 |
| Technical Staff | 1 | 12 | 13 | - | 10 | 10 | 23 |
| Non-Teaching Staff (Total) | 9 | 28 | 37 | 5 | 24 | 29 | 66 |

The detail list of Staffs is included on Annex.

Annex:

a. S1_I17_17A: Staff name list , Volume-1, Page-49

18. Regional profile of the students enrolled in the institution for the current academic year 2079

| No of Students Enrolment in 2076 | BE | | MSC | |
|--|------------|------------|------------|-----------|
| | F | T | F | T |
| Same district where the institution is located | 14 | 55 | 0 | 2 |
| Other districts | 52 | 425 | 0 | 5 |
| SAARC countries | - | - | - | - |
| Other countries | - | - | - | - |
| Disadvantaged/Janajatis/Madhesi | 37 | 268 | 0 | 4 |
| Total | 103 | 748 | 0 | 10 |

19. Details of the last two batches of students

| Particulars | Admitted to the program Civil Engineering | Admitted to the program Computer Engineering | Admitted to the program Electrical Engineering |
|--------------------|--|---|---|
| | | | |

| | Batch 1: All 071 batch | Batch 2: All 072 batch | Batch 1: All 071 batch | Batch 2: All 072 batch | Batch 1: All 071 batch | Batch 2: All 072 batch |
|--|---|-----------------------------------|--|-----------------------------------|--|------------------------------------|
| | Year: Graduation year 2076 Bhadra | Year: Graduation year 2077 Bhadra | Year: Graduation year 2076 Bhadra | Year: Graduation year 2077 Bhadra | Year: Graduation year 2076 Bhadra | Year: Graduation year 2077 Bhadra |
| | Bachelor | Bachelor | Bachelor | Bachelor | Bachelor | Bachelor |
| | 48 | 96 | 48 | 48 | 48 | 48 |
| Drop-outs | | | | | | |
| a. Within four months of joining | 0 | 0 | 0 | 0 | 0 | 0 |
| b. Afterwards | 6 | 3 | 0 | 2 | 3 | 1 |
| Appeared for the final year examinations | 42 | 93 | 48 | 46 | 45 | 47 |
| Passed in the final examinations | 30 | 29 | 24 | 13 | 30 | 22 |
| Pass % of number appeared(Total) | 71.42857 | 31.1828 | 50 | 28.26087 | 66.66667 | 46.80851 |
| Pass % with distinctions | 0 | 0 | 0 | 1 | 1 | 0 |
| Pass %, (First class) | 25 | 27 | 21 | 11 | 23 | 18 |
| Pass %, (Second class) | 5 | 2 | 3 | 1 | 6 | 4 |
| Pass %, (Third class) | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of students expelled from examination hall if any | | | | | | |
| Particulars | Admitted to the program Electronics and Communication Engineering | | Admitted to the program Mechanical Engineering | | Admitted to the program Agricultural Engineering | |
| | Batch 1: All 071 batch | Batch 2: All 072 batch | Batch 1: All 071 batch | Batch 2: All 072 batch | Batch 1: All 071 batch | Batch 2: All 072 batch |
| | Year: Graduation year 2076 Bhadra | Year: Graduation year 2077 Bhadra | Year: Graduation year 2076 Bhadra | Year: Graduation year 2077 Bhadra | Year: Graduation year 2076 Bhadra | Year: Graduation year 2077 Chaitra |
| | Bachelor | Bachelor | Bachelor | Bachelor | Bachelor | Bachelor |
| | 48 | 48 | 48 | 48 | 48 | 48 |
| Drop-outs | | | | | | |
| a. Within four months of joining | 0 | 0 | 0 | 0 | 0 | 0 |
| b. Afterwards | 5 | 2 | 4 | 0 | 2 | 0 |
| Appeared for the final year examinations | 42 | 46 | 44 | 48 | 46 | 48 |
| Passed in the final examinations | 23 | 12 | 40 | 23 | 29 | 28 |
| Pass % of number appeared(Total) | 54.7619 | 26.08696 | 90.90909 | 47.91667 | 63.04348 | 58.3333 |
| Pass % with distinctions | 0 | 0 | 2 | 1 | 1 | 1 |
| Pass %, (First class) | 15 | 11 | 32 | 22 | 26 | 3 |
| Pass %, (Second class) | 8 | 1 | 6 | 0 | 2 | 0 |
| Pass %, (Third class) | 0 | 0 | 0 | 0 | 0 | 0 |
| Number of students expelled from examination hall if any | | | | | | |

20. Give the last annual budget of the Institution with details of income & expenditure:

Purwanchal Campus strictly follows Central Budget according to TU. The approximate annual budget of PC is Nrs. 12 cores in which major expenses about 50 percent is for salary for staffs and faculties. The PC, as being government campus, the expenses for permanent faculties and staffs is provided by government (Tribhuvan University). Among the total budget, about 30 percent is shared by the running cost that includes the maintenance cost. Moreover, about 10 percent expenditure goes for departmental fund for existing department of PC. The detail budget and expense data can be found in Annex.

Annex:

a. Annex S1_I20_20A: Budget book and audit copy, Volume-1, Page- 52

21. What is the institution's 'unit cost' of education? [unit cost = total annual expenditure budget (actual) divided by the number of students enrolled]. Also give unit cost calculated excluding salary component.

Total Annual expenditure budget (actual) of 2075/76 =Rs.15,71,66,135.70

Number of Students enrolled (2075/76) = 1703 (BE + MSc students)

The institution's unit cost of education as per **NRs. 92,287.81 per student per annum**

Salary component per annum (2075/76)

| | |
|---|-----------------------------|
| Teacher's Salary | NRs. 4,21,37,437.71 |
| Staff Salary | NRs. 2,24,22,377.91 |
| Allowances of Teachers and Staff | NRs. 5,2,92,924.83 |
| Provident Fund | NRs. 51,64,251.55 |
| Citizen investment fund Teacher's and Staff | NRs. 17,32,779.29 |
| Internal source teacher's salary | NRs. 55,19,960.00 |
| Package Teachers + Teacher's DSA | NRs. 2,29,50,694.92 |
| Staff DSA | NRs. 1,01,18,437.75 |
| Post allowances (Teacher's and Staff) | NRs. 26,82,860.56 |
| Total Salary components | NRs. 11,80,21,724.52 |

The institution's unit cost of education excluding salary component = **22,985.56 per student per annum**

22. What is the temporal plan of academic work in the Institution?

- Semester System
- Annual System
- Any other (specify)

23. Tick the support services available in the institution from the following:

- Central library/Library
- Departmental library
- E - Library
- Computer centre
- Health centre/unit
- Play ground
- Printing press
- Seminar hall
- Hostel
- Guest house

- Canteen
- Common room for students
- Changing room for students
- Any other (specify) Workshop, learning centers and clubs, badminton court and so on.

24. Whether a duly formed Institution Management Committee is in place?

- Yes
- No

If yes provide the composition of the committee in separate sheet.

Purwanchal campus do not have CMC but all these works are done by IOE Steering Committee. With the appointment of campus chief in every four years, the steering committee is formed on the chairmanship of campus chief. The formation of steering is, generally, by default as per the regulation of University. The steering committee includes the assistant campus chiefs, departmental Hods, program coordinators, account heads, administration and exam section heads.

Annexes

- a. **Annex S1_I24_24A: Organization chart of Purwanchal Campus, Volume-1, Page- 74**
- b. **Annex S1_I24_24B: University Organogram , Volume-1, Page- 76**

25. Furnish the following details (in figures) for the last three years:

| Particulars | Year I 2074 | Year II 2075 | Year III 2076 |
|---|----------------|-----------------|------------------|
| Working days of the institution | 271 | 270 | 252 |
| Working days of the library | 271 | 270 | 252 |
| Teaching days of the institution | 234* | 233* | 215* |
| Teaching days set by the university | 180 | 181 | 180 |
| Books in the library | <u>42268</u> | <u>43768</u> | <u>45338</u> |
| Journals/Periodicals subscribed by the library | - | - | - |
| National: 1 International: 2 | | | |
| Computers in the institution | 272 | 278 | 302 |
| Research projects completed and their total outlay | - | - | - |
| Teachers who have received national recognition for teaching/research/consultancy | - | 1 | - |
| Teachers who were resource persons at national seminars/workshops | - | - | 1 |
| No. of hours of instruction against the plan (per year or per semester) | 96 | 102 | - |

Annex S1_I25_25A: Annual calendar of operations of the institution , Volume-1, Page-75

26. Give the number of ongoing research projects and their total outlay.

| SN | Name of the Project | Principle Researcher | Funding Agency | Funds |
|----|--|-------------------------|-----------------------------------|------------|
| 1 | Enabling sustainable and climate-smart agriculture in Nepal through mechanization solutions for integrated management of straw residue | Assoc. Prof. Jawed Alam | China-ESCAP Cooperation Programme | USD 47,720 |
| | | | | |
| | | | | |

Annex S1_I26_26A: Agreement Letter , Volume-1, Page-85

27. Does the Institution have collaborations/linkages with international institutions?

- Yes
- No

If yes, list the MoU signed and furnish the details of active MoU along with important details of collaborations.

The list of MoU signed by Purwanchal campus is listed below:

| S. N | Year | Organization | Important Details of Collaboration |
|------|------|---|--|
| 1 | 2018 | IIT Kharagpur India with IOE-Purwanchal campus | <ul style="list-style-type: none"> • Higher study facility for up gradation of the faculties of Purwanchal campus Dharan, Nepal at IIT Kharagpur Indian for M.Sc. and Ph.D. • Exchange of students and faculty • Joint research activities • Participation in seminars and academic meetings • Exchange of academic materials and other information • Special short term academic programs |
| 2 | 2020 | Melinda & Bill Gates/IHE Delft/KU/-IOE-Purwanchal Campus Dharan | Joint M.Sc. Program in sanitation Engineering. Joint workshop and short term training. |

Annexes

- a. **Annex S1_I27_27A: Copy of MOU with IIT , Volume-1, Page-77**
- b. **Annex S1_I_27_27B: Copy of MOU with KU/IHE , Volume-1, Page-82**

28. Does the management run other educational institutions besides the institution?

- Yes
- No

If yes, give details.

29. Give details of the resources generated by the institution in the last year through the following means:

| Source of Funding | Amount(NRs.) |
|-------------------|--------------|
|-------------------|--------------|

| | |
|--|------------------------|
| TU Regular grants | 7,15,83,819.98 |
| Fee from Self-financed/initiated courses | 6,37,60,474.82 |
| Fees from regular programs | 18,40,927.55 |
| HERP | 69,00,000.00 |
| Research and Consultancy | 9,15,102.00 |
| Any others, specify (Rent) | 1,72,556.00 |
| Total | 14,51,72,880.35 |

Annex:

a. Annex S1_I20_20A: Budget Book and Audit Copy , Volume-1, Page-52

SECTION B: BENCHMARK-WISE INPUTS FOR INSTITUTIONAL SSR

CRITERION 1: POLICY & PROCEDURES (15 MARKS)

1. Are there clearly defined vision, mission, goals, and objectives of the Institution in written?
Yes No If yes, mention and attach the document.

Purwanchal Campus (PC) is one of the constituent campuses under the Institute of Engineering (IOE), Tribhuvan University (TU). Therefore, the campus has set VMGO similar to IOE. The institution's strategic plan has been prepared for 2021 – 2025, considering the VMGO as mentioned.

The IQAC team of the institution has approved the strategic plans prepared.

Vision: To be a pioneer Institute in Engineering education in Province no. 1, Nepal.

Mission: It envisioned providing quality engineering education and research in the frontierengineering areas relevant primarily to the nation.

To accomplish this mission, IOE/PC will;

- Offer a broad array of academic programs.
- Employ highly dedicated faculty members who are effective teacher-scholars committed to maintaining a genuinely academic environment emphasizing student mentoring.
- Provide quality education and training in the engineering field as required by the developmental policies and programs of the country.
- Endeavor to serve the nation and the people of Nepal and thereby enhance national development.
- To offer quality engineering education and research in broad disciplines as required by the developmental policies and programs of the country.
- Continuously scaling up in all aspects.

Objectives: After presenting the above vision and mission, we set five broad objectives of Purwanchal Campus:

- **Academic Programs:** Through enhanced academic programs- on education, research works, training programs, exam, and evaluation, develop new knowledge at the forefront of engineering and technology that enhances the well-being of individuals, society, and the nation.
- **Advocacy on Engineering Policies:** Through advocacy on engineering policies, develop leadership in emerging engineering issues and challenges, addressing national development issues.
- **Law and Regulations:** The compulsory implementation of laws and regulations enhances the management and leadership skills of faculty, staff, and students.
- **Resource Planning:** Through resource planning and fund management, obtain financial sustainability of the institute. Make optimum use of resources and infrastructures.
- **Technology Transfer:** Through the national and international collaboration and joint programs, enhance mechanisms for technology transfer and capacity building activities and detail action package fixing with a strategic plan to achieve goals and objectives.

Goal: Above objectives are followed by the following goals with measurable outcomes in the areas of research, educational, and resource excellence:

Goal 1: Enhance Academic Excellence

- Goal 2: Research and Development Think
- Goal 3: Improved Working Environment
- Goal 4: Financial Sustainability
- Goal 5: Collaboration and Cooperation
- To obtain excellence in responding, through engineering academic programs and research, to the national development process of Nepal
 - To create an academic niche in South Asia by recasting its international contacts and supports so as to provide an enhanced forum for research, study, and exchange of information and technology on issues of national importance and of regional and international interest
 - To consistently and distinctly stay ahead through program innovation and quality education
 - To perform various research and development work so as to strengthen national engineering capabilities and development problems
 - To offer various types of trainings, sponsored courses, conducting problem based research, and providing engineering consultancy services

Annex:

- a. **Annex C1_I1_1B: VMGO of Purwanchal Campus , Volume-2, Page-81**
- b. **Annex C1_I1_1A: Strategic Plan of Purwanchal Campus , Volume-2, Page-8**
- c. **Annex C1_I1_1C: Minutes and Approval of Strategic Plan, VMGO and Organogram , Volume-2, Page-402**

2. Are there clearly defined plans, programs and strategies to achieve its specific goals and objectives?

Yes No If yes, mention and attach the document.

Yes, the campus has set its plans, programs, and strategies to achieve its specific goals and objectives. It has been mentioned in the Strategic Report of the campus. Additionally, the campus annually publishes annual reports, brochures and prospectus. The annual report includes the overall activities of a year in general. Moreover, the yearly report also consists of the annual work plan of the campus. Yearly plans and programs with application letters developed and assistant campus chief have been included. Moreover, the IQAC prepares its own annual plan for the internal quality assessments in campus. Additionally, PC conducts meeting with HoDs on weekly basis to discuss upon the academic environment of individual departments and formulates plans on the possible problem and issues. Each of the department keeps the student pass records and discuss on the possible solution on those having lower indexes.

Annex:

- a. **Annex C1_I1_1A: Strategic Plan of Purwanchal Campus, Volume-2, Page- 8**
- b. **Annex C1_I2_2B: Annual action plan, Volume-2, Page- 79**
- c. **Annex C1_I22_22C: IQAC Minute, Volume 10 (Additional), Page 207**
- d. **Annex C1_I22_22D: HoD's Weekly Meeting Minutes, Volume 10 (Additional), Page 97**
- e. **Annex C1_I22_22E: Student Pass Fail Record, Volume 10 (Additional), Page 53**

3. Are there duly formed organizational structures where the policies of the Institution are formulated, reflected, reviewed and updated?

Yes No If yes, mention the organizational chart and member compositions.

Yes. The campus is the constitute campus of the Institute of Engineering, Tribhuvan University. The University possesses a comprehensive organizational structure shown in the form of organogram of Tribhuvan University. Additionally, the IOE Dean office has formulated makes or revised new policies for Engineering Faculties. Being one of the constituent campuses under the IOE Dean's Office, the campus organizational structure is linked with the Dean's office. Furthermore, the campus has its organizational structure included in the annex.

Annex:

- a. **Annex S1_I24_24A: Organization chart of Purwanchal Campus , Volume-1, Page-74**
- b. **Annex S1_I24_24B: University Organogram , Volume-1, Page-76**
- c. **Annex C1_I1_1C: Minutes of approval , Volume-2, Page-402**

4. Has the Institution adopted any mechanism/process for internal quality monitoring and checks?

Yes No Justify with supporting documents.

HOD meetings in campus and departmental faculty meetings are regularly conducted for internal quality monitoring and checks. Academic Campus chief calls for academic updates in every last day of week in the campus. These weekly meeting have created an essential interaction environment for HoD to share the academic status of department with higher authorities of campus. The assessment of students is one of the essential elements to check internal academic quality. The monitoring of the progress and achievement of students is done regularly by taking class tests and semester internal exams. The internal assessment also provides valuable information for the institution to evaluate teaching effectiveness. Faculty members should fill up the logbook kept in the Department. Regular faculty meetings are conducted to check whether the class is running as per the schedule or correct it accordingly.

The detailed pass rate in exam/subject is discussed in department meetings for enhancement. A provision to keep the pass record in each semester has been started in every department. Furthermore, the campus carried out teacher performance evaluations and feedback from the students. There is a standard format for self-evaluation and peer-reviewed assessment of teachers' overall performance.

All the procedures carried out in departments are as per the academic calendar published by IOE. This ensured the smooth operation of educational activities on the campus.

A comprehensive guideline for committees, including IQAC and associate departments unit and individual, has been prepared. Being constitute campus of the institute of engineering, T.U., most of the duties responsibilities and write of departments, Campus chief and assistant campus chief, and HODs are predefined in Tribhuvan University union education and administration regulation. The guidelines for different units such as research, human resource management, consultancy, library, and so on have been prepared and approved by

IQAC. All the department units and individuals perform as per the regulation and guidelines.

The performance of contract base teachers is evaluated based on evaluation reports prepared by the HOD of respective departments. Campus Chief evaluates the performance of permanent faculties.

Annexes

- a. **Annex C1_I4_4A: Internal Assessment Routine , Volume-2, Page- 266**
- b. **Annex C1_I4_4B: Internal Marks Submission Notice by Examination Division , Volume-2, Page-267**
- c. **Annex C1_I4_4C: Internal Marks Submission Notice by Campus Administration , Volume-2, Page-268**
- d. **Annex C1_I4_4D: Internal Marks Submission Notice by Department**
- e. **Annex C1_I4_4D: Internal Assessment Student's Attendance , Volume-2, Page-270**
- f. **Annex C1_I4_4E: IQAC Committee Minutes and Decisions , Volume-2, Page-230**
- g. **Annex C1_I4_4F: Internal Assessment Marks , Volume-2, Page-272**
- h. **Annex C1_I4_4H: Teacher's Log Book , Volume-2, Page-308**
- i. **Annex C1_I5_5I: Self-Assessment Form Filled up by Teachers , Volume-2, Page-345**
- j. **Annex C1_I4_4J: Assessment Form of Teachers (University Regulation) , Volume-2, Page-384**
- k. **Annex C1_I4_4K: Minutes of IQAC , Volume-2, Page-405**
- l. **Annex C1_I4_4L: Letters of IQAC , Volume-2, Page- 425**
- f. **Annex C1_I22_22D: HoD's Weekly Meeting Minutes, Volume-10 (additional), Page- 97**
- g. **Annex C1_I22_22E: Student Pass Fail Record, Volume-10 (additional), Page-53**

5. Is there any document of the institution to specify the job responsibilities of departments, units and individuals?

Yes No If yes, give details/reference.

The PC follows and circulates the JD/TOR for each units, section officers, department heads and so on developed by the university (As TU Rules and Regulation). Furthermore, Campus itself have developed job responsibilities for the unit formed in the campus and indorse by the campus management committee.

Annexes

- a. **Annex C1_I5_5A: University Guidelines for Departments, Examination Section, Student Union, Library, Research Unit, Campus Chief , Volume-2, Page-244**
- b. **Annex C1_I6_6: Comprehensive Guidelines and ToR , Volume-2, Page-83**

6. Is there any defined and written scheme to evaluate the pre-defined job responsibilities of departments, units and individual staff?

Yes No If yes, produce those schemes and examples of some practices.

Purwanchal Campus periodically evaluates the performance and monitors the responsibilities of faculties and staff. Every department developed a faculty performance evaluation sheet to assess the academic and research performance. At the same time, the performance of the non-teaching team is also evaluated using different schemes.

Annexes

c. **Annex C2_I25_25A: TU Rules , Volume-3, Page-130**

d. **Annex C1_I6_6: Comprehensive Guidelines and ToR , Volume-2, Page-83**

e. **Annex C1_I5_5I: Self-Assessment Forms Filled up by teacher, Volume-2, Page-345**

7. Does the institution have strategic plan and action plan emphasizing on team work and participatory decision making and a scheme for information sharing?

Yes No If yes, give details.

The strategic plan of Purwanchal Campus has emphasized teamwork, participatory decision-making, and information sharing (the detail is in the attached strategic plan report). Therefore, the campus will disseminate information to every stakeholder (Students, Government agencies, etc.) by conducting various meetings, publishing information on campus websites, and sometimes to the newspaper (as an advertisement).

Annex:

a. **Annex C1_I1_1A: Strategic Plan of Purwanchal Campus , Volume-1, Page-8**

8. Does the institution have program(s) to strengthen the regular academic programs through other self-sustaining programs/courses and others?

Yes No If yes, give details.

To strengthen the regular academic programs, Purwanchal campus has the provision of **full fee** program in all faculties of BE and MSc Programs, Consultancy Services, Civil Engineering material testing laboratory, and facilities as Cricket Ground, Football Ground, Basketball Court.

Purwanchal Campus has been running full fee schemes on all programs, short term training programs, Master level Programs and research program.

Out of these, Purwanchal campus is planning for giving the unused land for lease which will help to increase the income of campus. Moreover, campus has provided the rooms at campus gate to for grocery store, canteen, stationary and for bank. This not only help students and faculties to get services but also generates revenue for the campus.

Moreover, the campus organizes the training program for the faculties time to time to strengthen the quality of faculties teaching learning process. Especially, Research Management Cell (RMC), Purwanchal Campus has taken the responsibility for these works.

Annexes

a. **Annex C3_I26_26A: Admission Rules and Regulation for BE programs, Volume-4, Page-4**

- b. Annex C1_I8_8A: Canteen, grocery and stationery and Bank contract, Volume-2, Page-438**
- c. Annex C1_I8_8B: Consultancy service for MMC, Volume-2, Page- 444**
- d. Annex C1_I8_8C: Activities by RMC, Volume 5, Page-82**

9. Are there any formal provisions under which the institution brings “stakeholders or community feed backs and orientation” in its activities?

Yes No If yes, give details.

The campus will regularly organize meetings with students (students’ clubs, student societies, etc.), parents, local stakeholders, and government officials to take their feedback. And campus organizes an orientation program for the new intake students every year on the first day of their campus, and also different departments organize orientation programs in their departments. The campus also encourages each department and student society to organize a social/academic/cultural/farewell program for the graduate students, where it will take feedback from the recent graduates.

We have made an arrangement to obtain feedback from stack holders/ community through a suggestion box placed at the main entrance of the administrative block.

Receptionists have been appointed to collect and compile feedback from visitors at regular intervals.

Community adviser commute. Moreover, the Human resource management cell (HRC) has also been formed to perform all human resources, social responsibility, and interaction with the campus.

The findings obtained by students and faculties while doing their project work and thesis will be disseminated to the concerned authorities by encouraging students’ societies to publish technical journals annually and also by organizing different seminars.

Apart from these, the campus has no any specific mechanisms and procedures that is incurred in a specific interval to the stakeholders and communities.

Annexes

- a. Annex C2_I16_16A: Notice regarding orientation program to newly admitted students , Volume-3, Page-4**
- b. Annex C8_I118_118A: Photos of Feedback box (Sujhav Petika), Volume-9, Page-9**
- c. Annex C7_I105_105G: Online feedback form (for public), Volume-8, Page-39**
- d. Annex C1_I6_6G: Human Resource Management Guideline, Volume-2, Page-112**
- e. Annex C1_I6_6DD: Receptionist ToR, Volume-2, Page-391**
- f. Annex C8_I113_113C: Photograph of reception, Volume-9, Page-11**

10. Were any committees/external agencies appointed during the last three years to improve the organization and management?

Yes No If yes, what were the recommendations?

As there are central entrance examination systems at IOE, there is computerized entrance exam system, online application systems and results of the admission also published online. The campus also has e-library as the conventional card is replaced by bar code and each student has provided identity card along with library bar code sticker.

Annexes

- a. Annex C5_I87_87A: Agreement letter for library software, Volume-6, Page- 96**
- b. Annex C3_I26_26A: Admission rules and regulation, Volume-4, Page-4**

11. Are the students in Volunteered in institution management system and quality assurance?
Yes No If yes, give details.

Purwanchal Campus organizes interaction with students on regular basis on institutional management system and quality assurance. FSU Representation is in the member of Campus Management Committee, Hostel Management Committee, Library Committee, Canteen Committee, etc. Students complain verbally or written form related to various academic issues and corrective action will be taken immediately asap. Due to several political issues, there is no existing FSU in campus. However, to undertake major policy decision directly related to students, student representatives from various students facet.

Annexes

- a. **Annex C1_I11_11A: Free Student Union (FSU) minutes , Volume-2, Page-213**
- b. **Annex FSU updated**
- c. **Annex C1_I11_11B: Student scholarship minutes , Volume-2, Page-203**
- d. **Annex C1_I11_11C: Student hostel distribution minutes , Volume-2, Page- 200**
- e. **Annex C1_I11_11D: Student on campus management committee , Volume-2, Page-448**

12. Has there been an academic audit? Justify it.

by the university

by the Institution

Please attach the copies

The academic audit (Example: Exam, appointment, Curriculum approval, Thesis Defense etc.) is done according to TU rules and Regulations 2050. Time and often we discuss on teaching methods and academic results of students and check if the methods of teaching are appropriate or not. The campus has decided to perform academic audit and has been appointed the expert for the review and report writing process.

Annexes

- a. **Annex C2_I25_25A: TU Rules, Volume-3, Page-130**
- b. **Annex C1_I12_12A: Minute of management committee for academic audit, Volume-2, Page-451**
- c. **Annex C1_I12_12B: Academic Audit Appointment, Volume-5, Page-85**

13. Is there any specific mechanism to combine teaching and research?

Yes No If yes, give details

There is mandatory project work for BE final year students and thesis for MSc 2nd year students. Students will not get their degrees unless they complete their projects and thesis. BE students conduct a project in a group work under the supervision of faculties, and individual MSc students conduct thesis work under the supervision of the faculties. There is a mandatory provision to assign external supervision as well.

Theoretical knowledge acquired in the classroom is applied in the relevant practical field as per the need of society and the industries.

- Each group contains four students under the direct supervision of a faculty member.
- Project work need to submit for the jury

- In the master's degree program, students submit thesis work on the second year second part individually
- Midterm and final presentation

Annex:

- a. **Annex C4_I50_50B: List of operating projects in campus , Volume-5, Page-16**
- b. **Annex C4_I50_50A: List of faculties published research articles in journals , Volume-5, Page-15**
- c. **Annex C4_I50_50C: MSc student thesis list , Volume-5, Page- 44**

14. Have you observed any positive outcomes of combination of teaching and research?

Yes No If yes, give details.

Some of the projects conducted by students have shown potential for entrepreneurship, and students have also started entrepreneurship and business by continuing their project findings. Different department students and patrons form a robotics club on campus by faculties. Every year, this club organizes various workshops and competitions to encourage students in robotics and participate in national and international competitions. For the last two years, students have been participating in the agri-robotics competition in China every year. The campus also has encouraged students to organize exhibitions of different departments, such as Agritech Expo, Civil Exhibition, and Architectural Exhibition are the positive outcomes of a combination of teaching and learning.

Annexes

- a. **Annex C1_I14_14A: Certificate and award records , Volume-2, Page-392**

15. Provide institution specific other innovations which have contributed to its growth and development.

There are a few centers, clubs, and committees that regularly contribute to the institution's growth and development. For example, the robotics club organizes workshops, competitions, and training to motivate school students, high school students, and undergraduate students, significantly contributing to campus growth and development. Similarly, each department has different student societies, and different societies organize events annually (exhibitions, training, etc.): e.g., GIS training, agri-tech expo, publish journals by each department. There are also cultural and sports programs during the holiday/vacation period. FSU also organizes different programs to support students and for the campus's growth and development. Additionally, the group of students society (Delta) performs the unified exhibition and technical festival program every year to promote the innovations developed in campus to the community.

Annexes

- a. **Annex C2_I23_23A: Expo programs by students , Volume-3, Page-179**
- b. **Annex C2_I18_18F: Minutes of Robotics club , Volume-3, Page-78**
- c. **Annex C2_I18_18H: Notice and Banners Regarding Extra Curricular Activities , Volume-3, Page-91**
- d. **Annex C2_I18_18BCDE: Events organized by student society , Volume-3, Page-67**
- e. **Annex C1_I11_11A: Free Student Union (FSU) minutes , Volume-2, Page-213**
- f. **Annex C2_I15_15A: Delta Minutes, Volume 10 (Additional), Page 20**
- g. **Annex C2_I15_15B: Delta Prastav Pustaka, Volume 10 (Additional), Page 22**

CRITERION 2: CURRICULAR ASPECTS (10 MARKS)

16. Is there any provision for ensuring consistency of teaching and learning with the academic goals and objectives of the institution? (0.5)

Yes No If yes, give details.

In our strategic plan, we have included all the possible aspects of improving the teaching and learning environment on the campus (strategic report). In Our leadership, we developed a curriculum of M. Sc.in Land and water engineering and BE in agricultural Engineering. In addition, IOE-PC has developed the following provisions for ensuring consistency of teaching and learning with academic goals and objectives of the institution.

- a. Developed and published curriculum (M. Sc. and BE) with details of module and their objectives.
- b. Followed the M.Sc. research guideline prescribed by IOE and M. Sc. program coordinator disseminating that guideline to the research -centric students as the research rule.
- c. Organizes orientation to the faculties and students regularly. The notice of the orientation program has been included in annex
- d. Provision of continuous internal assessments and assignments. E.g. Chemistry practical record.
- e. Preparation of lab manuals, which is mandatory to the students to follow.
 - i. Elements of Soil Science
 - ii. Water supply
 - iii. Chemistry

(Note: some samples have been included in annex

- f. The campus has decided to submit the annual plan and programs of each department to ensure the effective learning environment.

Apart from these, the campus prepares the academic calendar for every annual year and carries out the activities on the basis of the annual calendar formulated by Institute of Engineering. All the departments conduct their tasks on the basis of calendar of PC. The annual calendar of campus has been also provided on campus website.

Annexes:

- a. **Annex C2_I16_16A: Notice regarding orientation program to newly admitted students, Volume-3, Page-4**

- b. Annex C2_I16_16B: Department Notice for submitting internal marks , Volume-3, Page-5
- c. Annex C2_I16_16C: Students Lab Report , Volume-3, Page-7
- d. Annex C2_I16_16D: Lab Report of Students conducted by student , Volume-3, Page-7
- e. Annex C2_I16_16E: Call for annual work plan of department. , Volume-3, Page-187
- f. Curriculums
- g. Annex C1_I4_4F: Internal Assessment Marks of Students , Volume-2, Page-272
- h. Annex C1_I4_4B: Internal Marks Submission Notice by Examination Division , Volume-3, Page-267
- i. AnnexC1_I4_4C: Internal Marks Submission Notice by Campus Administration , Volume-3, Page-268
- j. Annex C1_I4_4D: Internal Assessment Student's Attendance , Volume-3, Page-270
- k. Annex C2_I16_16A: Annual Calendar IOE, Volume 10 (additional), Page 50
- l. Annex C2_I16_16B: Annual Calendar PC, , Volume 10 (additional), Page 51
- m. Annex C6_I92_92A: Newly Admitted Student List, Volume-10 (Additional), Page 111

17. Are programs flexible enough to offer students the following benefits? (0.5 x 3 = 1.5)

- a. Time frame matching student convenience
- b. Horizontal mobility
- c. Elective options

a. Purwanchal campus follows academic calendar maintained by IOE-TU with minor modification and details focusing on the convenience of students. Departments prepare academic routine under the supervision and close association with Assistant Campus Chief (Academic)

b. For Horizontal mobility, IOE-PC allows students from other affiliated colleges and Universities including foreign students to participate in class lectures and practical classes. Even, Institute of Engineering has founded a committee for facilitation of lateral entry.

| S. N. | Descriptions | University | Practical | Duration |
|-------|---|-----------------------|-------------------------------|----------|
| 1 | Student of BE in Electrical Engineering | Purwanchal University | Electrical Engineering lab | |
| 2 | Mr. Nutan Luitel | India | Theory Class Lateral Entry | |

| | | | | |
|---|--------------------|------|-----------------|--|
| 3 | Miss Junu Dhungana | USA. | Credit Transfer | |
|---|--------------------|------|-----------------|--|

c. IOEPC-TU has offered the following elective courses in different program:

| S.N. | Programs | No. of elective | Remarks |
|------|---|-----------------|---------|
| 1 | M. Sc. in Land and Water Engineering | 16 | |
| 2 | Bachelor's in Degree Agricultural Engineering | 12 | |
| 3 | Bachelor's in Degree in Architecture | 12 | |
| 4 | Bachelor's in Degree Civil Engineering | 39 | |
| 5 | Bachelor's in Degree in Electronics and Communication Engineering | 26 | |
| 6 | Bachelor's in Degree in Computer Engineering | 28 | |
| 7 | Bachelor's in Degree in Mechanical Engineering | 20 | |
| 8 | Bachelor's in Degree in Electrical Engineering | 9 | |

Annexes

- a. **Annex S1_I25_25A: Annual calendar of operations of the institution , Volume-1, Page-75**
- b. **Annex C2_I17_17A: Decision letter regarding Lateral Entry of Students , Volume-3, Page-50**
- c. **Annex C2_I17_17B: Letter from Campus regarding lateral Entry , Volume-3, Page-51**
- d. **Annex C2_I17_17C: Application for lateral entry to campus , Volume-3, Page-52**
- e. **Annex C2_I17_17D: Letter from University Office regarding Lateral Entry , Volume-3, Page-53**
- f. **Annex C2_I17_17E: Guidelines for Lateral Entry , Volume-3, Page-55**
- g. **Annex C2_I17_17F: Elective Paper List, Volume 10 (Additional), Page 192**

18. Indicate the efforts to promote quality of education with provision of skills transfer among the students such as (0.5 x 5 = 2.5)

- a. Capacity to learn
- b. Communication skills
- c. Numerical skills
- d. Use of information technology
- e. Work as a part of a team and independently

Please give evidence

Campus encourages with the following methods to enhance capacity to learn, communication skill, numerical skills, use of information technology and work as a part of team and independently among the students facilitated by.

- a. Capacity to learn:

- i. Lab / practical classes
 - ii. Workshop practice
 - iii. Audio/ visual classes on MM
 - iv. Tractor driving
 - v. Field/ Industrial survey/visit
- b. Communication skills:
- i. Seminar
 - ii. Communication English
 - iii. Poem competition
 - iv. Talk program
 - v. Presentation competition
- c. Numerical skills:
- a. Robot competition
 - b. Event as ethical hacking
 - c. SPSS
 - d. SAP/ETAB
 - e. Software based problem solving techniques
- d. Use of information technology
- i. 22 Mbps dedicated line internet
 - ii. Use of multimedia for classes
 - iii. GIS Training
 - iv. KOIKA- Lab on IT
 - v. E-Library
 - vi. Online form fills up and finance activities
 - vii. Use of different apps.

- viii. Use of campus Portal.
- e. Works as a part of a team and independently
 - i. CR appointment
 - ii. Group/Individual project work in BE
 - iii. Individual Thesis in M. Sc.
 - iv. Title based presentation

Annex:

- a. **Annex C2_I18_18A: Minutes of Student Societies for extracurricular activities , Volume-3, Page-59**
- b. **Annex C2_I18_18B: Events organized by Civil engineering Student's Society , Volume-3, Page-67**
- c. **Annex C2_I18_18C: Events organized Unified student societies. , Volume-3, Page-71**
- d. **Annex C2_I18_18D: Events organized by Computer student society. , Volume-3, Page-73**
- e. **Annex C2_I18_18E: Events organized by Electrical Engineering Society. , Volume-3, Page-75**
- f. **Annex C2_I18_18F: Notices of Robotics club, PC. , Volume-3, Page-78**
- g. **Annex C2_I18_18G: Minutes of Student societies for training and orientation. , Volume-3, Page-79**
- h. **Annex C2_I18_18H: Notice and Banners regarding extracurricular activities. , Volume-3, Page-91**
- i. **Annex C2_I18_18I: Minutes of Robotics Club , Volume-3, Page-95**
- j. **Annex C2_I18_18J: Other Extracurricular Activities and programs organized by students' groups. , Volume-3, Page-109**
- k. **Annex C2_I18_18K: Student Society List, Volume 10 (Additional), Page 228**
- l. **Annex C2_I18_18L: Student Visit, Volume 10 (Additional), Page. 230**

19. Are there any additional focused programs and electives offered by the institution? (1)

Yes No If yes, give details.

IOE Purwanchal Campus in conjunction with IOE-TU provides focused programs on the contemporary subjects to enhance student's knowledge and skills. For example,

- a. SAP training for BE civil students
- b. GIS training for BE civil and BE agricultural students
- c. SPSS training
- d. Proposal writing training
- e. Computer training for staff

- f. Technical writing
- g. Special elective course
- h. Guest lecture for electrical engineering students and many more

Annex:

- a. **Annex C2_I18_18B: Events organized by Civil engineering Student's Societ, Volume-3, Page-67**
- b. **Annex C2_I18_18C: Events organized Unified student societies, Volume-3, Page-71**
- c. **Annex C2_I18_18D: Events organized by Computer student society, Volume-3, Page-73**
- d. **Annex C2_I18_18E: Events organized by Electrical Engineering Society, Volume-3, Page-75**
- e. **Annex C2_I17_17F: Elective Paper List, Volume 10 (Additional), Page 191**

20. Has the institution taken any initiative to contribute/feedback to the curriculum of the university? Give evidence with the examples of last 4-5 years. (1)

IOE revises the curriculum regularly, taking the feedback of various stakeholders. A permanent institution at the IOE Dean's office -CIMDU- is responsible. The campus itself collects the input from faculties regarding the curriculum. The same will be forwarded to the CIMDU office. The course of B.E. Agricultural engineering was started in the academic year 2000/2001 A.D. Curriculum development workshop was conducted in 2000 A.D. with the support of experts from GBPUAT Panta Nagar, India, PAU Ludhiyana, and IIT Kharagpur India. IOE had revised all the syllabus of the B.E. program in the year 2066 B.S. Before starting the M. Sc. program in Land and water engineering, vigorous integration was done at IIT Kharagpur in Feb-2018 A.D. The course for B.E. electronics and communication was revised in 2018 A.D. to forward the advanced course change to the field name B.E. Electronics information and communication engineering. The central subject committee of Institute of Engineering calls the invitation for the teachers of PC whenever requires the discussion on subjects and syllabus matters. Recently, Department of Mechanical Engineering have submitted a report on discussing the syllabus revision and upgrading.

Annex:

- a. **Annex C2_I20_20A: Committee formed to reform current curriculum , Volume-3, Page-100**
- b. **Annex C2_I20_20B: Letter from IIT Kharagpur about mutual co-operation , Volume-3, Page-102**
- c. **Annex C2_I20_20C: Appointment letter for subject committee , Volume-3, Page-106**

21. Is there any mechanism to obtain feedback from academic peers and employers? (1)

Yes No If yes, give details.

Primarily, the Dean's office of IOE, TU, has the sole responsibility for formulating and implementing the curriculum in its campuses. However, at the campus level, Purwanchal Campus invites academic peers while finalizing its syllabus and guidelines. This institution takes feedback from academic peers and employers from other national and international universities during cooperation programs such as seminars, talks shows, guest lecturers, and conferences through online media such as mail. The syllabus of BE Agricultural engineering was developed with the feedback of different stakeholders from Nepal and IIT Kharagpur, India, PAU Ludhiana, and GBPUAT Pantnagar. A provision is made to take input from the suggestion box and through the website, www.ioepc.edu.np, as well as through the visitor logbook.

The PC conducts the Msc programs which curriculum are designed and prepared by the respective program faculties of the campus. However, in the context of BE program most of the campus has not recently submitted any feedbacks on the curriculum.

Annex:

- a. **Annex C2_I20_20B: Letter from IIT Kharagpur about mutual co-operation , Volume-3, Page-102**
- b. **Annex C2_I21_21A: Format of Mail for feedback from guest lecturers , Volume-3, Page-450**
- c. **Annex C2_I21_21B: Response Mail for feedback from guest lecturers , Volume-3, Page-450**
- d. **Annex C2_I21_21C: Msc. Programme syllabus**
- e. **Annex C2_I21_21D: Feedback from students, Volume 10 (Additional), Page 52**

22. Give details of institution-industry-neighborhood networks if any? (1)

The campus is helping and collaborating with the local community, Langhali Samudayik Ban, to prepare a bio briquette and in Volunteer research work to upscale it. There is an MOU to the Belaka Municipality Belaka, Udayapur for “Chakla-bandi Krishi” to enhance the production of crops by students and faculties of Agricultural Engineering. Students are sent for their industrial attachments to know the various processes in industries and industrial culture/mechanisms to produce various consumable goods available in the marketplace.

The campus has signed MOU with Kathmandu University to utilize the finance supported by Bill gates and Malinda foundation for starting the M. Sc. program in Sanitary engineering.

Annex:

- a. **Annex C2_I22_22A: Selection of faculty member as expert , Volume-3, Page-105**
- b. **Annex S1_I27_27A: Copy of MOU with IIT , Volume-1, Page-77**
- c. **Annex S1_I_27_27B: Copy of MOU with KU/IHE , Volume-3, Page-82**

23. Does the institution inculcate civic responsibilities among the students? Give brief explanation in terms of activities (0.5)

Realizing its responsibility towards the society and its members, the campus organizes various programs to engage its students to support the society. As part of civic responsibility, we engage the students in the following activities regularly.

- Exhibitions

- Robotics competitions
- Environment awareness campaign
- Health awareness campaign
- Traffic awareness

Annex:

- a. **Annex C2_I23_23A: Expo programs by students and student societies , Volume-3, Page-179**
- b. **Annex C2_I18_18G: Minutes of Student societies for training and orientation. , Volume-3, Page-79**
- c. **Annex C2_I18_18J: Other Extracurricular Activities and programs organized by students' groups. , Volume-3, Page-109**
- d. **Annex C2_I23_23B: Unified Campus and student society organizing event , Volume-3, Page-186**
- e. **Annex C2_I15_15A: Delta Minutes, Volume 10 (Additional), Page 20**
- f. **Annex C2_I15_15B: Delta Prastav Pustika, Volume 10 (Additional), Page 22**
- g. **Annex C2_I15_15C: Delta Proposal, Volume 10 (Additional), Page 33**

24. What are the efforts of the institution towards all-round personality development of the learners? Give brief explanation in terms of activities. (0.5)

Purwanchal Campus provides following platforms for its graduate students towards all-round personality development:

- a. Welcome Programs: It is organized by students along with various cultural, sports, EC activities.
- b. Farewell program: It is organized for the outgoing graduates. This program also includes various cultural and EC activities.
- c. Sports week: organized by free student union (FSU)
- d. Participation:
 - i. Students are nominated to participate in various environmental activities and creative connection such as: Photo, shield, cheque, trophy, and certificate)
 - ii. Agricultural robotic computation in China, Yantra 8.0 Nepal
- f. Stall exhibition: Agricultural National expo, delta 1.0-, Tech fest organized by FSU. (photo, date venue)
- g. Presentation and conference: Students and facilities are parting in various paper presentation and conferences
- h. Unified technical festival organized annually.

Annex:

- a. **Annex C2_I18_18J: Other Extracurricular Activities and programs organized by students' groups. , Volume-3, Page-109**
- b. **Annex C2_I15_15A: Delta Minutes, Volume 10 (Additional), Page 19**

- c. **Annex C2_I15_15B: Delta Prastav Pustika, Volume 10 (Additional), Page 21**
- d. **Annex C2_I15_15C: Delta Proposal, Volume 10 (Additional), Page 32**

25. What are the practices of the institution to impart moral and ethical value based education? Give examples of some practices (0.5)

IOE-PC maintains the practice of ethics by the following activities:

- a. Orientation on academic ethics and departmental code of conduct.
- b. Students are trained to strictly follow the ethical guidelines while carrying out the research of M. Sc. and BE(project)
- c. Guidelines how to conduct in laboratory and library.
- d. Faculties are providing awareness to take care about the plagiarism.
- e. institution is taking the action to those students through the T.U. act 2050 B.S. and TU. Decentralized act 2055 B.S.

Annex:

- a. **Annex C2_I25_25A: TU rules (Tri. Bi. Ain) , Volume-3, Page-130**
- b. **Annex C2_I25_25B: Tribhuvan University Decentralize rules , Volume-3, Page-148**

CRITERION 3: TEACHING LEARNING AND EVALUATION (15 MARKS)

26. Which of the following methods do you apply in **admitting the new graduates**? Select as many as apply. (1)

Yes, with justification = 0.25, Yes without justification = 0.10 No = 0, otherwise stated

- Through academic records
- Through written entrance tests via computer test
- Through group discussions
- Through interviews (for foreign student)
- Through combination of above all

Each candidate willing to enroll in the B.E/ B. Arch programs must appear and pass the entrance examination held by TU, IOE Entrance Examination Control Board. The entrance examination is computer-based, and all the questions are Multiple Choice Questions (MCQs). The entrance examination is intended to test candidates' knowledge of the subject matter. Furthermore, candidates willing to take admission in the B.Arch program must appear and pass the aptitude test conducted by the admission committee of the campuses. The score obtained by the respective students is used as selection criteria, and the admission is carried out on a merit basis. During admission, the students must submit necessary documents of Higher secondary school and should have scored at least 50% or C grade in average in physics, chemistry, and mathematics.

The admission process for MSc programs is similar to that of BE/ BArch programs.

Annexes

- a. **Annex S1_I25_25A: Annual calendar of operations of the institution , Volume-1, Page-75**
- b. **Annex C3_I26_26A: Admission Rules and Regulation for BE programs , Volume-4, Page-4**
- c. **Annex C3_I26_26B: Admission policy/ process for MSc Programs , Volume-4,**

Page-32

- d. Annex C3_I26_26C: BE Result Notice and Details , Volume-4, Page-59**
- e. Annex C3_I26_26D: MSc. Admission Notice , Volume-4, Page-173**
- f. Annex C3_I26_26E: Admission schedule of MSc , Volume-4, Page-175**
- g. Annex C3_I26_26F: Decisions of admission committee , Volume-4, Page-176**

27. Is there any provision for **assessing students' needs and aptitudes** for a course? (0.5)

Yes No If yes, Cite examples.

Additional Aptitude Test is conducted for Bachelors in Architecture (B Arch) program by Admission Committee.

The admission committee and FSU provide individual counseling for candidates willing to admit in B.E/ B. Arch programs about its academic programs, requirements and future scopes. Course of study, learning materials are provided to the admitted students. The departments have been conducting orientation programs for the newly admitted students every year. The aptitude of students is also tested during entrance test.

Annexes

- a. Annex C3_I27_27A: Monitoring and Aptitude test paper and result notice , Volume-4, Page-184**

28. Does the institution provide **bridge/remedial courses to the academically weak and disadvantaged students**? (0.5)

Yes No If yes, Cite examples (UGC or other supports received in this regard may be indicated).

Seniors' students in collaboration with Departmental Student Societies carry out tuition / training classes related to courses to the weak and interested students. The institute encourages such activities by making arrangement of classes and providing teaching materials.

Annexes

- a. Annex C3_I28_28A: Minutes of departmental student societies regarding training and extra classes , Volume-4, Page-195**
- b. Annex C3_I28_28B: Model of test papers of internal exams , Volume-4, Page-206**
- c. Annex C3_I28_28C: Photos of class materials and room , Volume-4, Page-212**
- d. Annex C3_I28_28D: Result of internal examination of a class , Volume-4, Page-217**

29. Does the institution encourage the **teachers to make a teaching-plan**? (0.5)

Yes No If yes, gives details.

At the beginning of each semester, the Head of Department (HOD) assigns courses after departmental meeting to individual faculties and requests to prepare and submit teaching plan of each course within the stipulated time. The progress of courses in accordance to teaching plan is discussed in each departmental meeting.

Annex:

- a. Annex C3_I29_29B: Lesson Plan , Volume-4, Page-423**
- b. Annex C3_I29_29A: Sample Syllabus , Volume-4, Page-221**

30. Are syllabi in harmony with **the academic/teaching calendar**? (0.5)

Yes No

IOE prepares academic calendar each year based on actual calculations of lecture hours. The calendar is strictly followed by the campus with only minor variations. Each semester course is designed for 90 working days. HOD meeting of different departments is held frequently to discuss the status of courses. Courses are completed within specified time and teacher is responsible to do so. The syllabus of each subject of each department, semester wise has been included in android app. The app can be found in official google play store. However, some of the samples of syllabus is included in annex.

Annexes

- a. **Annex S1_I25_25A: Annual calendar of operations of the institution , Volume-1, Page-75**
- b. **Annex C3_I29_29A: Sample Syllabus , Volume-4, Page-221**
- c. **Annex C2_I16_16A: Annual Calendar IOE, Volume 10 (additional), Page 50**
- d. **Annex C2_I16_16B: Annual Calendar PC, Volume 10 (additional), Page 51**

31. How does the institution **supplement the lecture method of teaching with other teaching methods** with specific weightage in terms of hours? (directed studies, assignments, presentations) (0.5) Produce some examples.

The campus provides facilities for different teaching methods such as audio-visual and presentation through multimedia projectors. The campus conducts field visits as per the syllabus to enhance students' practical knowledge. IOE course structure has general evaluation criteria of 80 (Final Examination Marks) + 20 (Internal Marks) + 25 (Laboratory Marks). Individual faculty members plan internal and laboratory evaluations and the evaluations may be based on laboratory tests, mini-projects, tutorials, and presentations. Lecture notes, tutorial sheets, lab sheets, and reference materials may provide by individual teachers either digital or paper medium.

The classrooms are standard size for 48 students, where theory classes are carried out. Students are divided into two groups for tutorial and lab classes, with each group having 24 numbers of students. This helps make the class more students centric and interactive.

Annex:

- a. **Annex C3_I31_31A: Photos of class room , Volume-4, Page-425**
- b. **Annex C3_I32_32C: ICT based classroom photos, Volume 10 (Additional), Page 128**

32. Is there a facility to prepare **audio visuals and other teaching aids**? (0.5)

Yes No

Each department is equipped with computers, laptops and multimedia projectors. The faculties can access internet, prepare lecture slides and deliver the lectures using multimedia projector. Central computer lab is equipped with computers for training, project and laboratory classes.

Annexes

- a. **Annex C3_I32_32A: List of laptops/computers and multimedia projectors in each department , Volume-4, Page-250**
- b. **Annex C3_I32_32B: Photos of each department , Volume-4, Page-251**
- c. **Annex C3_I32_32C: ICT based classroom photos, Volume 10 (Additional), Page 129**

33. Furnish the following for the last two years (1.5)

Teaching days per semester or per year against the requirement: 90 days/semester

Working days per week against the requirement: 6 days

Work load per week (for full time teachers): 15 Period in average

Work load per week (for part time teachers): 6 period in average

Ratio of full-time teachers to part-time teachers: 4:1 overall

Ratio of teaching staff to non-teaching staff: 4:3

Percentage of classes taught by full-time faculty: about 85%

Number of visiting professors/practitioners: 105 persons/year

Annexes

- a. **Annex C3_I33_33A: Class loads of faculties of different departments , Volume-4, Page-329**
- b. **Annex C3_I33_33B: Master Routine of two semester , Volume-4, Page-230**
- c. **Annex C3_I33_33C: Updated Class Load, Volume -10(Additional), Page 135**

34. a. Are the students **oriented to the program, evaluation system, and codes of conduct**, other relevant institutional provisions and requirements?

Yes No If yes give evidence. (0.5)

The orientation programs are organized at the beginning of every semester by the campus and concerned department separately; the students are required to attend it, which is mandatory. The assistant campus chief (academic) shares academic rules and regulations with every student in the orientation program held by campus. Students are also provided with a code of conduct during the admission process. The code of conduct for students is clearly written in the booklet, which is available prior to admission on campus. In the orientation program organized by department, overall academic activities are shared, including course structure, evaluation system, and code of conduct. The library culture and laboratory precautions, and basic safety rules are described during the orientation program. Similarly, the faculty members are introduced to the program. The orientation on internal assessment and final exam system marks are also provided to students.

b. Are **evaluation methods communicated to students** at the beginning of the academic session? (0.5)

Yes No If yes give evidence

The department communicates with the students through evaluation methods. The particular subject teacher also communicates about the evaluation method at the beginning of the course. The campus has adopted a semester system with 20% internal

examinations and 80% final examinations in theory subjects per the Syllabus prescribed by IOE. The weightage of internal examinations is as follow:

- i. Attendance (5)
- ii. Assignments (5)
- iii. Internal assessment (10)

The marks allocation might vary depending upon subject teachers.

Annexes

- a. **Annex C3_I34_34A: Announcement of orientation program , Volume-4, Page-262**
- b. **Annex C3_I34_34B: Slides presentation of orientation class , Volume-4, Page-263**
- c. **Annex C3_I34_34C: Photos of orientation program , Volume-4, Page-271**
- d. **Annex C3_I34_34D: Code of conduct for students , Volume-4, Page-273**

35. Does the institution monitor the overall **performance of students** periodically? (0.5)

Yes No If yes, give details

Each department maintains attendance of the students. The students should have at least 80% attendance in order to appear in the final examinations. The department also schedule and conducts internal examination. The performance of each student is evaluated from the aforementioned criteria. In the lab class, students have to maintain lab report, which should be duly checked by the concerned instructor. There is internal and final viva-voce in certain subjects and some teacher may follow this method too for evaluation. Further, the examination section keeps record of internal and final examinations marks of each student. The performance of the students can also be monitored with the help of these records. The PC have started the provision to maintain a database of student pass fail record in each semester and publish in notice board. The departments are made responsible for these works.

Annexes

- a. **Annex C3_I28_28D: Result of internal examination of a class , Volume-4, Page-217**
- b. **Annex C3_I35_35A: Portfolio of student , Volume-4, Page-275**
- c. **Annex C3_I35_35B: Internal Evaluation of students (a sample) , Volume-4, Page-295**
- d. **Annex C1_I22_22E: Student Pass Fail Record, Volume 10 (Additional), Page 53**

36. In the case of new **appointment of the teaching faculty** made by the institution itself, select among the following funding criteria that are evidential in your institution. (1.5)

| Vacancy Category | Operational Mechanism | | | | | |
|---------------------|-----------------------|-------------------------------|------------------------------------|----------------------------|----------------------------------|--|
| | Job Advertisement | Selection Committee Formation | Examination by Selection Committee | Evaluation Of Demo Classes | Interview By Selection Committee | Job Contract Through Formal Appointment Letter |
| Self-Funded | Yes | Yes | Yes | Yes | Yes | Yes |
| Government Funded | Yes | Yes | Yes | Yes | Yes | Yes |
| Any other category: | No | No | No | No | No | Yes. Part time basis as required |

| | | | | | | |
|-----------------------|--|--|--|--|--|-------------------------------|
| a. Part Time | | | | | | on different specializations. |
| b. Guest Lecturer | | | | | | As per attached sheet. |
| c. Visiting Professor | | | | | | |

Department head proposes the requirement of teacher to the campus administration. Campus recruits' faculties with the permission from IOE, Dean Office as per requirement by advertising in national newspapers, taking written examination and interviewing by the selection committee. The campus mobilizes resources through full fee program.

Annexes

- a. **Annex C3_I36_36A: University act, rules and regulations regarding recruitment , Volume-4, Page-296**
- b. **Annex C3_I36_36B: Notice of vacancy announcement, examination and results , Volume-4, Page-307**
- c. **Annex C3_I36_36C: Updated Vacancy, Volume 10 (Additional), Page 54**

37. Provide the following information (in number) about the **teaching staff recruited** during the last two years. (0.5)

| Teaching staff recruited from | | |
|-------------------------------|--------------------|-----------------|
| the same district it operates | | other districts |
| same institution | other institutions | |
| Year I: 0 | Year I: 2 | Year I: 5 |
| Year II: 0 | Year II: 1 | Year II: 5 |
| | | |

Annexes

- a. **Annex C3_I36_36B: Notice of vacancy announcement, examination and results , Volume-4, Page- 307**
- b. **Annex C3_I37_37A: Appointment letter of faculties recruited within two years , Volume-4, Page-319**
- c. **Annex C3_I36_36C: Updated Vacancy, Volume 10 (Additional), Page 54**

38. a. Does the institution have the freedom and the resources to appoint and pay **temporary/ad hoc teaching staff**? Are such provisions defined in the institution act/board decision/minute?

Yes No If yes, give details of their salary structure and other benefits. (0.5)

The campus appoints teaching faculties on temporary basis as per the need of respective departments. The salary and benefits of such temporary faculties are covered from the full fee program and are strictly according to the rules and regulations of TU. Campus can hire internal contract teachers/staff with its own financial resource but campus has to get permission from IOE dean office. Additionally, PC have provision to pay the faculties for taking extra class loads.

b. Does the institution have provision and practice for inviting visiting/guest faculty on

regular basis?

Yes No if yes give details (0.5)

Departments invite visiting faculties for elective courses according to the need of departments.

Annexes

- a. **Annex C3_I38_38A: List of guests/visiting faculties and temporary teachers, Volume-4, Page-331**
- b. **Annex C3_I38_38B: Invitation for visiting/guest classes, Volume-4, Page-342**
- c. **Annex C3_I43_43D: DSA decisions, Volume 10 (Additional), Page 201**

39. Number of teaching staff who have **attended seminars/conferences/workshops** as participants/resource persons/organizer in the last two years: (1.5)

| Participant Name | Level | Seminar/ Conference/ Workshop |
|--------------------------------------|---------------|--|
| Associate Prof Jawed Alam | International | Workshop on “Sustainable Food System Under Climate Change in South Asia”, 24 – 30 June, 2018 |
| Associate Prof. JitendraChaudhary | International | Introduction training course on Nanofabrication Technologies organized by Indian Institute of Science (IISc), Bangaluru, 10 – 28 Sept, 2018 |
| Assistant Prof. Anil Verma | International | International Conference on Advances in Engineering Technology and Contemporary Management Trends (ICAETCMT - 19), Sept 20, 2019, Kathmandu, Nepal |
| Assistant Prof. SagarKafle | International | 12 th Thai Society of Agricultural Engineering International Conference, 14 – 15 March, 2019, Pattaya, Thailand |
| Assistant Prof. Sabin Kafle | National | Workshop on BEIE course organized by Office of the Dean, Ashad 24, 2075, Kathmandu, Nepal |
| Assistant Prof. Bianaya Lal Shrestha | | |
| Assistant Prof. Yaswant Bikram Shah | National | Training on “Research Proposal Writing” organized by Purwanchal University School of Engineering and Technology, 18 -20 June, 2018 |
| Assistant Prof. Kaji Ram Karki | National | Data Literacy Training organized by Kathmandu University School of Management (KUSOM), 2 – 6 February, 2020 |
| Assistant Prof. Sagar Kafle | | |
| Assistant Prof. Roshan Ghimire | National | Workshop on Energy Conservation Act, organized by Energy, Water Resources and Irrigation Ministry, Ashoj 01, 2076, Biratnagar, Nepal |

| | | |
|------------------------------------|----------|--|
| Lecturer Durga Raj Aveng | National | National Architect Conference organized by Society of Nepalese Architect (SONA), Poush 4 – 5, 2076 |
| Assistant Prof Sagar Kafle | National | Workshop on Research Writing and Publishing, organized by Research Management Cell, Mahendra Morang Adarsh Multiple Campus, 8 – 11 May, 2019 |
| Associate Prof. Jitendra Chaudhary | National | Workshop on TU Policy dissemination and implementation, HERP, 7- 8 Baishak, 2075 |
| Asst. Prof. Deependra Neupane | National | Hands on Training on High Voltage Testing, Pulchowk Campus, 2079 |

Annex:

a. Annex C3_I38_38B: Invitation letter and certificates for visiting/guest lectures , Volume-4, Page-342

40. Does the institution follow the **self-appraisal method** to evaluate the performance of the faculty in teaching, research and extension program? (0.5)

Yes No If yes, how are teachers encouraged to use the feedback? Provide justifications.

- Every faculty members are required to fill up self - appraisal form. The so filled forms are collected through head of department and submitted to Academic section. These forms are evaluated by Internal Academic Quality Evaluation Committee and corrective measures are taken accordingly.
- Campus encourages their faculty to publish paper in National and International journal and Campus Provide Partial Financial Support for the work.
- TU Service Commission evaluates books, paper publications and Master/PhD thesis supervision with marks during the promotion.

Annex:

a. Annex C3_I40_40A: Self-appraisal form , Volume-4, Page- 374

b. Annex C3_I41_41A: Self-aprasial form , Volume-4, Page-377

41. Does the institution follow any other **teacher performance appraisal method**? (0.5)

Yes No If yes, give details of the same and state how the results of the appraisal are used.

Internal Academic Quality Evaluation Committee carries out peer appraisal based on self - appraisal forms filled by individual teachers.

Furthermore, Head of department evaluates performance of semester contract faculties under different performance criteria and recommends whether to renew the contract to the Dean office via campus chief. The contract may be terminated if the performance is not satisfactory. Teachers are also provided with long-term service award and education service prize.

Annex:

- a. Annex C3_I41_41A: Format of performance appraisal/Peer Appraisal , Volume-4, Page-377**

42. Does the institution collect student evaluation on institution experience? (0.5)

Yes No If yes, what is the significant feedback from students and how has it been used?

- Campus conducts meeting with class representative/students along with head of departments to discuss on problems faced by the students and their solution.
- Different programs such as Orientation Program, welcome program, Farewell Program are organized by FSU for the student in which campus chief is the chief guest. During the program, different suggestion and comments are raised or written suggestion and comments are given to the campus by FSU/Students.
- Students can complain any grievances, important suggestion related to institution's activity either in suggestion/complain box or campus web page.

Annexes

- a. Annex C3_I42_42A: Meeting/Minutes with CR and student wings, Volume-4, Page-384**

- b. Annex C2_I21_21D: Feedback from students, Volume 10 (Additional), Page 52**

43. Does the institution conduct

refreshercourses/seminars/conferences/symposia/workshops/programs for faculty development? (0.5)

Yes No If yes, give details.

In collaboration with the teachers' association and staff association, the campus has organized some programs in the past, which are not well documented. The institute has taken the initiative to organize such programs often to facilitate faculty development. Institute has envisioned forming Continuing Education Division (CED) on the campus to conduct training and workshops regularly in the coming future in collaboration with another institute or solely.

Apart from those programs, the institute supports the faculties to pursue higher education by providing study leave and financial assistance. The teacher's association also supports and encourages faculties to participate in conferences, seminars, and workshops by providing partial financial support. Additionally, the campus has prepared a career development plan for staff and teachers at the campus level. Moreover, the Institute of Engineering has prepared career development guidelines to assist the research works and participate in international training and conference programs.

Annexes

- a. Annex C2_I16_16E: Notice for faculty development plan , Volume-3, Page- 187**

- b. Annex C3_I43_43B: Career Development Guidelines IOE , Volume-4, Page- 390**

- c. Annex C3_I43_43A: Career Development Guidelines PC , Volume-4, Page-386**

- d. Annex C4_I57_57B: Activites by RMC, Volume-5, Page-82**

e. **Annex C4_I57_57C: Ioe Graudate Conference**

f. **Annex C3_I43_43C: Graduate Conference Updated, Volume 10 (additional), Page 59.**

44. Give details **faculty development programs** and the number of teachers who benefited out of them, during the last two years. (0.5)

| Faculty Development Programs | No. of Beneficiari |
|--|---------------------------|
| 1. PhD Study in Mechanical Engineering at IOE, Pulchowk Campus | 1 |
| 2. MTech Study in Civil Geotech engineering at KurukshetraUniversity | 1 |
| 3. IOE Graduate Conference organized by CARD | 2 |
| 4. PhD Study in Computer Engineering at IIT Mandi | 1 |
| 5. PhD study in Mechanical Design at IIT Mandi | 1 |
| 6. B.Tech in Mechanical Engineering at Kurukshetra University | 1 |
| 7. PhD in Chemistry at Mahendra Morang Adarsh Multiple Campus | 1 |
| 8. M. Phil leading PhD atTU | 1 |
| 9. PhD in Chemistry at IIT, Roper | 1 |
| 10. PhD in Physics at TU | 1 |
| 11. M.Phil. in Mathematics at TU | 1 |
| 12. PhD in Integrating Internet of Things (IoTS) with Block Chain at Howard University | 1 |

Annex:

a. **Annex C3_I44_44A: Study leave and financial assistances to the teachers , Volume-4, 400**

b. **Annex C3_I44_44B: Updated Teachers and Staff List with Study Leave, Volume 10 (Additional), Page 130.**

45. Furnish information about **notable innovations** in teaching. (0.5)

- Use of multimedia projector.
- Case studies
- Group discussion among students
- Talk program organize by Departments.
- Education tour organizes for different faculties as per their relevant subject.
- Survey Camp organizes each year for civil students from Campus.
- Different urban cities visit for Architecture students
- Online portal of institute
- Various contest among students related to subject matter
- Extensive course especially in IIT and industrial attachment
- Paper discussion in M.Sc classes

46. What are the national and international linkages established for teaching and/or research? (0.5)

Purwanchal Campus National & International linkage are as follows:

1. MoU between IOE Purwanchal Campus and Indian Institute of Technology (IIT),

Kharagpur

2. MoU between IOE Purwanchal Campus and Kathmandu University/IHE Delf

Annex:

1. **Annex S1_I27_27A: Copy of MOU with IIT , Volume-1, Page-77**
2. **Annex S1_I_27_27B: Copy of MOU with KU/IHE , Volume-4, Page- 82**

CRITERION 4: RESEARCH, CONSULTANCY AND EXTENSION (10 MARKS)

47. Research Budget of the institution in % of total operating budget.

Purwanchal campus (PC) has allocated about 5 % of the total budget for research work. For the planning and execution of research culture in campus, PC have established Research Management Cell. Research Management Cell, Purwanchal Campus, Campus have conducted several activities on research and development in campus. Apart from this, allowances have been provided in the regular and internal budget for thesis work and supervisor and external examiner. Internal and regular budget is included in the annex.

Annexes

- a. **Annex C4_I47_47A: Annual Budget Book, Volume-5, Page-3**

48. How does institution promote research?

The campus has recently established its own Research Management Cell (RMC) to promote and mobilize research work inside the campus. In addition, the campus has provision to provide study leave for teachers after a certain work time on campus as per the rule mentioned in Tribhuvan University regulation. For details, see RMC guidelines. The list of teachers who are/were on study leave is shown below: Apart these, as per IOE guideline, PC organizes graduate conference once in two year to promote research and providing the platform for presentation and publication of research works.

| Name | Faculty | Level for Study | Study Date |
|----------------------|-------------|-----------------|-------------------|
| Sabin Kafley | Electronics | Msc/Phd | 2067/69 2075 |
| Bimal Ghimire | Computer | Msc/Phd | 2067/69 |
| Anu Shrestha | Mechanical | Msc | 2066/68 |
| Ram Dayal Yadav | Mechanical | Msc/Phd | 2066/68 2074/76 |
| Javed Alam | Agriculture | Msc | 2064/2066 |
| Jeetendra Chaudary | Electrical | Msc/Phd | 2066/2068 2076 |
| Tantra Nath Jha | Computer | BE/Msc | 2059/2063 2070/72 |
| Bhusan Kafle | Chemistry | Phd | 2067/2070 |
| Kiran Shrestha | Mechanical | BE | 2073/75 |
| Yam Kumar Rai | Agriculture | Msc | 2067/2069 |
| Narendra Kumar Dangi | Civil | Msc | 2068/2068 |
| Yubaraj Shau | Chemistry | Phd | 2074 |
| Prabhat Pratap Dev | Civil | Msc | 2074/2076 |
| Sonalal Chaurasia | Mechanical | Msc | 2066/2068 |
| Ramesh Shah | Mechanical | Msc | 2065/2067 |

Research Committee:

Coordinator: Alankar Kafle

Member: Kajiram Karki

Member: Sashi Kumar Mandal

Member: Bharosh Kumar Yadav
Member Secretary: Deependra Neupane

Annexes

- a. **Annex C1_I6_6F: Guidelines of Research Management Cell , Volume-2, Page-98**
- b. **Annex C3_I43_43B: Career Development Guidelines IOE , Volume-4, Page- 390**
- c. **Annex C3_I43_43A: Career Development Guidelines PC , Volume-4, Page- 386**
- d. **Annex C4_I48_48A: Decision RMC formation and committee , Volume-5, Page-28**
- e. **Annex C4_I48_48C: RMC Minutes and Decision , Volume-5, Page-75**
- f. **Annex C4_I48_48B: University Rules and regulation for study leave , Volume-5, Page-29**
- g. **Annex C3_I43_43C: Graduate Conference Updated, Volume 10 (additional), Page 59.**

49. Is the institution engaged in PhD level programs?

Yes No If yes, give details.

The campus do not offer PhD program currently but it has planning to start by 2024, which is listed in strategic plan of the campus.

50. What percentage of teachers is engaged in **active research** – guiding research scholar, operating projects, publishing regularly, etc.? Give details.

There has been no regular publishing provision of a research article on campus; faculties publish their research independently. Campus possesses its own Research Management Cell through which research works have been started recently through internal competition within campus faculties. The list of operating projects on campus is depicted in the annex: The list of teachers guiding research students at the MSc level is mentioned in the annex.

Annexes

- a. **Annex C4_I50_50B: List of operating projects in campus , Volume-5, Page-15**
- b. **Annex C4_I50_50A: List of faculties published research articles in journals , Volume-5, Page- 16**
- c. **Annex C4_I50_50C: MSc student thesis list , Volume-5, Page-44**

51. Mention the admission status of M. Phil/PhD graduates in your institution.

No. There is no admission for M.Phil/PhD students. However, the faculties of different departments are currently perusing PhD on foreign as well as national universities.

52. How many PhDs have been awarded during the last five years?

Purwanchal Campus do not possess Phd programs until now. However, there are some of the faculties who have been awarded the Phd degrees:

1. Bhusan Kalfey (Phd, Chemistry)
2. Kamal Bdr. Thapa (Phd, Civil Engineering)

53. Does the institution provide financial support to research students?

Yes No If yes, give % of financial support from recurring cost.

Yes. Campus provide Rs. 4,500 per undergraduate and Rs. 5,000 per graduate student, which is clearly mentioned in IOE regulations and equally applicable in all constituents' campuses for helping them to work on final year thesis work. PC possess approximately 480 students in

their final year doing the final year project every year. This results the financial support for student is about Nrs. 21 lakhs per annum for graduate level. However, campus provides financial support from internal resources for some project work and thesis, which is prominent and has impact to society and campus. In addition, campus help seeking financial support from outside. This includes the proposal submission in University Grant Commission for funding and even in the United Nation Related Projects.

Annexes

- a. **Annex C3_I43_43B: Career Development Guidelines IOE , Volume-4, Page-390**
- b. **Annex C4_I53_53A: Campus in-house finance support for prominent project , Volume-5, Page-46**
- c. **Annex C4_I53_53B: Request proposal to outside for financial help , Volume-5, Page-51**

54. Provide details of the **ongoing research projects**

On the behalf of Department of Agriculture Engineering, several projects have been completed so far. Recently, department have worked on project “A Pilot Demonstration Site for In-Situ and Ex-Situ Straw Management in Province No. 1, Nepal”. However, there has no any ongoing research projects funded by campus itself. This is due to the low budget allocation from the campus to research work. However, the campus is planning to raise the budget to research work in next fiscal year. This would create the opportunities to carry out the research project work funded by the campus itself.

Annex:

- a. **Annex C4_I54_54A: Pilot and in-situ project detail , Volume-5, Page-25**

55. Give details of **ongoing research projects** funded by external agencies

The agricultural department of Purwanchal campus has been conducting a straw management related project.

Annex:

- a. **Annex C3_I54_54A: Pilot and in-situ project detail , Volume-5, Page-25**

56. Does the institution have **research/academic publication**? If yes, give details of publication in the last two years.

Faculties of campus published in some magazines and bulletin in different time by the student societies. The publications cover articles from external as well as internal individuals of campus. Campus has not yet published any research journals/publication but has mentioned in strategic plan to publish annual research publications in campus by organizing national/international conferences to be conducted with the major support of RMC.

Annex:

- a. **Annex C4_I55_55A: Cover page and authorization for publication. , Volume-5, Page-55**

57. Does the institution offer **consultancy services**?

Yes No If yes, give details.

Yes, the institution has been providing consulting service. Campus has provision to provide consultancy services using different faculties and laboratory. Campus has envisioned to set up consultancy service to do professional work in multi field which earns money and client get integrated engineering services. The list of consultancy services completed and

ongoing is shown below: The list of consulting works during the last fiscal year(2074/2075) is given below:

1. Architecture Studio Hall of Purwanchal Campus, Dharan.
2. Agriculture Classroom Building of Purwanchal Campus, Dharan.
3. Storey extension of Girls Hostel of Purwanchal Campus, Dharan.
4. Master Plan of Boys Hostel (200 std capacity) of Purwanchal Campus, Dharan.
5. Repair and Maintenance of CIT room of Purwanchal Campus, Dharan.
6. Repair and Maintenance of Boys Hostel of Purwanchal Campus, Dharan.
7. Girls Toilets of Purwanchal Campus, Dharan.
8. Various Lab Test conducted in Civil Lab eg. Cube test, bitumen test etc
9. Transformer oil test in Electrical engineering lab
10. Conduct Practical class to other institution's students.

Though the campus has done several activities on consultancy services on the basis of design and construction works, campus has not yet done any research consultancy services. However, campus is planning for performing SWOT analysis for the possibility of research-based consultancy service.

Annexes

- a. **Annex C1_I1_1A: Strategic Report of Purwanchal Campus , Volume-2, Page-8**
- b. **Annex C4_I57_57A: Test reports and request letter and financial bills from various service holder , Volume-5, Page-38**
- c. **Annex C4_I57_57B: Consulting service for Mahendra Multiple Campus request letter from MHM and approve from PC , Volume-5, Page-79**

58. Does the institution have a designated person for **extension activities**?

Yes No If yes, indicate the nature of the post as –
Full-time Part-time Additional charge

Yes. Campus has designated Liaison officer from the teaching faculty to provide support for extension activities. Our institute has been appointing a liaison officer since B.S. 2042. Liaison officer also buildup and maintain mutual relationships with various agencies, facilitates communication and coordinates with them. This liaison officer acts as public relation officer, which frequently tackle social and academic issues. It also establishes the relationship with government institution and industries and facilitates students to recruit there. Currently, liason officer has been working under the committee of HRC of the campus. The liason officer is one of the committee members of the HRC.

Annexes

- a. **Annex C1_I6_6T: ToR of Liaison Officer , Volume-2, Page-161**
- b. **Annex C4_I58_58A: Appointment letter of Liaison officer , Volume-5, Page-37**
- c. **Annex C1_I6_6G: Human Resource Management Guideline , Volume-2, Page-112**

59. Indicate the **extension activities** of the institution and its details: (0.5)

Community development Training in Disaster Management Health and hygiene awareness
Medical camps Adult education and literacy Blood donation camps
AIDS awareness Environment awareness Any other

Apart from the student activities campus has initiated some social activities that includes blood donation program, Environmental awareness program like tree plantation, and harmonizing social cohesion. Campus will start various such activities from this academic year with full details- allocation of annual budget and annual plan of action.

Programs performed:

- a. Blood Donation Camps photos and list of participants
- b. Community development program such as using football ground to local clubs
- c. Environmental awareness to community in Langhali Samudhayek Ban

60. Are there any **outreach programs** carried out by the institutions?

Yes No If yes, justify.

Yes. As a engineering campus with 7 department and one of renowned campus in Eastern Nepal, different engineering expos and exhibition programs has been carried out as outreach programs. Annually, different student groups and unions carry out these programs to expose technical development in campus. Some of the recent expos and exhibition carried out in campus is listed below:

| Activity Name | Organized By | Date |
|-------------------------------------|-------------------------|------------|
| Agricultural Exhibition Program | Agriculture Department | 2076/10/05 |
| Purwanchal Architectural Exhibition | Architecture Department | 20760819 |
| National Level Technical Festival | United Student Groups | 2075/10/17 |
| National Level Technical Festival | United Student Groups | 2075/01/03 |
| National Level Technical Festival | United Student Groups | 2079 |

Annexes

- a. **Annex C2_I15_15A: Delta Minutes, Volume 10 (Additional), Page 20**
- b. **Annex C2_I15_15B: Delta Prastav Pustika, Volume 10 (Additional), Page 22**
- c. **Annex C2_I15_15C: Delta Proposal, Volume 10 (Additional), Page 33**

61. How are students and teachers encouraged to **participate in extension activities**? Any defined approaches?

The campus has managed to request permission and create an environment to work in communities like the architecture department does their community-based projects. In addition, the campus provides transportation facilities using its campus bus and cars for the students and teachers engaged in extension activities. Finally, after completing the work, lessons learned and experience shearing facilities will provide to the team.

The campus highly acknowledges any appreciation from the community with felicitation, which is iterated by the different programs. In addition, the campus prepares necessary documents and letters for students/teachers that help for campus leave as well as legal procedures to work in the activities.

62. Does the institution work and plan the extension activities along with NGO's and GO's? Give details of last 3 years.

We had done several community-based projects collaborating with local community like bio briquetting program mushroom farming training, plumbing and electrical maintenance. But recently institution has not done any such extension activities. We have mentioned such

activities, to be conducted with collaboration with local government, municipality and provincial government, in strategic plan of the campus.

Annexes

- 1. Annex S1_I27_27A: Copy of MOU with IIT , Volume-2, Page-77**
- 2. Annex S1_I_27_27B: Copy of MOU with KU/IHE , Volume-2, Page-82**
- 3. Annex C1_I1_1A: Strategic Report of Purwanchal Campus , Volume-2, Page- 8**

CRITERION 5: INFRASTRUCTURE AND LEARNING RESOURCES (20 MARKS)

A. General Physical Infrastructure

63. Does the institution have a comprehensive master plan indicating the existing buildings and the projected expansion in the future? (0.5)

Yes, the campus has a well-illustrated master plan that indicates the existing buildings. The projected expansion for different buildings in terms of physical space has also been attached herewith. For the detail projected expansion plan, PC have circulated the notice for each department to prepare 5 year department development plan.

Annex:

- a. Annex C5_I63_63A: The detail master plan , Volume-6, Page- 3**
- b. Annex C5_I63_63B: Notice to prepare departmental plan, Volume 10 (Additional), Page 188**
- c. Annex C5_I63_63C: Departmental plan, Volume 10 (Additional), Page 189**

64 (a). How does the institution plan to meet the need for augmenting the infrastructure to keep pace with academic growth? Produce plan, if any. (0.5)

Currently there are **two classroom buildings** (General and special classroom) for the regular academic activities, **thirty-two rooms** for the laboratory, **six room** for IT facility for the students and enough rooms for the faculties. With the growth in academia, the campus has planned to build a seminar hall to conduct the multifunctional activities. The campus has planned to complete the agriculture classroom block to shift the bachelor in agriculture students and master program students to this block. Furthermore, the campus have recently inaugurated a general class building to address the increasing number of students.

Annex:

New building photo

64 (b). What support facilities are available for conducting the education programmers in the institution? (0.5)

- Laboratory
- Library
- Others

Give details

- **Laboratory-** Each of the department has well equipped laboratory (based on the curriculum). The laboratory is provided with well trained personnel for maintenance and operation. The campus annually calls the proposal for upgrading the laboratories of each department. The campus carries out the tendering (if needed) for the addition and upgrading the laboratories for the department.

- **Library-** The campus has started the process to computerized e-library system and storey extension of the library work.
- **Studio Hall-** The campus has started the process to construct new studio hall for Architecture students.
- **Girls Hostel-** Storey extension construction of girls' hostel is just completed up to first floor and with the increment of students we have planned to add second floor in near future.
 - **Other facilities-** The campus has well-equipped computers, laboratories, and science and engineering practices workshops. The computer labs have enough computers for 48 students at a time, and there is a separate cell for education management information system (EMIS), which has already started a number of facilities for students and is further in progress. In library **LUNIVA** software is used for automated library system. Library is providing reference, circulation and reading services. It has adequate space for library users.
- **Transportation Facility-** Campus has its own 50 seated capacity bus which is used for educational tour and other purposes.

Annexes

- a. **Annex S1_I9_9A: Photocopy of Lal-Purja , Volume-1, Page- 2**
- b. **Annex C5_I64_64A: Land Details , Volume-6, Page-4**
- c. **Annex C5_I64_64C: List of Equipment's , Volume-6, Page-132**
- d. **Annex C5_I64_64D: Notice for Physical property investigation report , Volume-6, Page- 193**
- e. **Annex C1_I2_2B: Annual action plan. , Volume-2, Page- 79**
- f. **Annex C1_I1_1A: Strategic Report of Purwanchal Campus , Volume-2, Page-77**
- g. **Annex C5_I64_64F: New Library Building, Volume 10 (additional), Page 65**
- h. **AnnexC5_I64_64E: new academic building details, Volume 10 (additional), Page 60**

65. Does the institution have provision for regular maintenance of its infrastructure? Provide scheme. (0.5)

About 20 percent of total budget of PC goes to regular maintenance and departmental cost every year. The campus has permanent staff, contracts with private companies, and daily wages employers for all sanitation, gardening, security, and maintenance of the campus area. For laboratory equipment maintenance, each department has the authority to call the companies/persons as per the requirement with the permission of campus administration—computer maintenance of computer lab, department, administration, etc., is conducted by IT technician of college. The campus has trained computer operators who care in Wi-Fi internet systems as well as all software work in all departments and look over website updates and related jobs. Carpenter of the

campus in volumes maintaining, repairing, and constructing the furniture as per the requirement of the campus. The campus has an electrician who cares electrical system of the campus area. The campus has a utility service used to maintain all the significant clearing such as cutting trees, outer building surface cleaning, etc. There is a regular provision for keeping the record of the visitors entering the campus.

Annexes

- a. Annex C1_I6_6B: ToR of Assistant Campus Chief (facility) , Volume-2, Page-83**
- b. Annex C5_I65_65A: Working staff list , Volume-6, Page-16**
- c. Annex C5_I65_65B: Decision/Circulation for Utility staff and monitoring committee , Volume-6, Page- 173**
- d. Annex C5_I65_65D: Visitors log book , Volume-6, Page-198**
- e. Annex C5_I65_65C: Maintenance Notice , Volume-6, Page-105**
- f. Annex S1_I20_20A: Budget book and audit copy, Volume-1, Page-52**
- g. Annex C5_I65_65E: Maintenance plan, Volume 10 (Additional), Page 165**

66. How does the institution ensure optimum utilization of its infrastructure facilities? Produce the plan. (0.5)

The campus has been utilizing its infrastructure in full fledge for morning, day and evening shift through teaching, learning and administration activities. Fourth year classes are conducted in morning shift in some departments and other are conducted in day shift with master's program conducted in evening shift.

Annex:

- a. Annex C1_I2_2B: Annual action plan. , Volume-2, Page-79**
- b. Annex C5_I65_65E: Maintenance plan, Volume 10 (Additional), Page 165**

67. Does the institution encourage use of the academic facilities by external agencies? (0.5)

Yes No If yes, give clearly defined regulations.

- Campus encourages its academic facilities (both human and physical) to external agencies without affecting its teaching and learning schedule. Campus provides its field for survey camping for undergraduate students of other institutes and local technical school level students.
- In vacation period CTEVT and other institute can utilize class room to conduct final examination.
- Local clubs utilize our sports facilities (especially football ground, basketball courts, cricket pitch, Volley ball court etc)
- We provide our laboratories to other institute.

- Our faculty members are providing their expertise to different local bodies.

Annexes

- Annex C5_I67_67A: Letters and minutes for providing/receiving the facilities, Volume-6, Page- 25**

68. What efforts are made to keep the institution clean, green and pollution free? Give details (0.5)

Contract for man-power for cleaning, gardening which ultimately led to clean the environment. The campus also performs the campaign for cleaning the plastics and waste papers around the building premise once a month to reduce environmental pollution. There are dustbins at each block and in the yards to collect the waste on a regular basis. The campus has well-managed gardens with flowers, grasses, and plants. Every year, a tree plantation program is regularly held on campus premises on special occasions. Students also conduct various activities related to cleanliness, including the construction of parks plantations. The campus provides some funds for that.

Annexes

- Annex C5_I68_68A: Garden Cleaning Notice , Volume-6, Page-37**
- Annex C5_I68_68B: Photographs of the premises , Volume-6, Page- 38**
- Annex C5_I68_68C: Placement of dustbin , Volume-6, Page- 58**
- Annex C5_I68_68D: Contact document for toilet cleaner and toilet photos , Volume-6, Page-65**
- Annex C5_I65_65E: Maintenance plan, Volume 10 (Additional), Page 165**
- Annex C5_I68_68C: Park and Garden photos, Volume 10 (Additional), Page226**

69. Are there computer facilities in the institution that is easily accessible to students and faculty? (0.5)

- Number of computer accessible to the students 48 Pcs
- Computer accessible to the faculty 14 Pcs
- Internet accessible to the faculty High speed internet
- Internet accessible to the faculty All Faculties facilities to all Department including hostels and quarter.

Annex:

- Annex C5_I69_69A: Photos of computer lab , Volume-6, Page-108**
- Annex C5_I69_69B: E- library Volume-10 (additional), Page-106**

70. Give the working hours of the computer centre and its access on holidays and off hours. (0.5)

Purwanchal Campus has a separate computer student and for teachers in each department with internet facility. All these are control under the Center for Information Technology (CIT) section during the following time: 10 AM- 5 PM CIT Every day.

71 (a). How many departments have computers of their own? Give details. (0.5)

All seven department have their own common Computer/Laptops which can be used by faculties for their general work. All the computers are accessible to internet as the PC has provided 22 Mbps bandwidth internet facilities. Moreover, the premises of PC are being continuously monitored by several CCTVs installed. About, 10 CCTVs are installed in Library and about 12 CCTVs are installed at different location of campus, especially at administration building and entry gate areas.

Annex:

- a. Annex C3_I32_32A: List of laptops/computers and multimedia projectors in each department , Volume-4, Page-250**
- b. Annex C5_I71_71A: CCTV, Volume-6, Page 163**

71 (b). Does the institution have provisions of internet/intercom/CC TV/other facilities Give details (0.5)

Yes, PC has all the above-mentioned facilities. Since last 3 years, our intercom facilities are not well-functioning but we have planned to re-establish these facilities.

Annexes

- a. Annex C5_I69_69A: Photos of computer lab , Volume-6, Page-108**
- b. Annex C5_I71_71A: CCTV purchased bill, etc , Volume-6, Page-163**
- c. Annex C5_I70_70B: CCTV Photos, Volume 10 (additional), Page 195**

72. Explain the output of the center in developing computer aided learning packages in various subjects during the last three years? (0.5)

Students are encouraged to learn through computer-aided packages. Electronic workbench, different simulation packages, animations, and three-dimensional models are used in learning. The computer center is used for information regarding class schedules; assignments, project works through e-media. Learning through Module provides class notes and teaching materials to students. Students from different departments frequently use such packages during the preparation of project work and another personal task.

Annex:

- a. Annex C5_I72_72A: Class documents and E-learning from Multimedia Projector , Volume-6, Page-186**

73. Is there any provision for maintaining/updating the computer facilities? Provide the details of the system. (0.5)

The computers and networking systems are regularly maintained and updated to newer software version as per the need of the students to incorporate latest software. The campus has appointed the following staffs to update computers and networking systems in the Campus. There is a separate department for the maintenance and IT services within the campus with the following persons.

- CIT Coordinator - 1

- Software programmer-1
- Software Developer -1
- IT Technicians -1

Annexes

- a. Annex C5_I73_73A: Appointment letter and TOR for Coordinator of CIT, IT, Technicians , Volume-6, Page-122**

74. Does the institution make use of the services of inter-university facilities? (0.5)

The campus often makes the use of inter-university facilities particularly in research activities. Also library collaborate with central library TU and provide the facility to the campus.

Annexes

- a. Annex S1_I27_27A: Copy of MOU with IIT , Volume-1, Page-77**
- b. Annex S1_I27_27B: Copy of MOU with KU/IHE , Volume-1, Page-82**
- c. Annex C5_I74_74A: Interuniversity Training , Volume-6, Page-78**

75. What are the various health services available to the students, teacher and other staff? Give details. (0.5)

The first aid facilities for primary treatment are available to all the students, teachers and the staffs in campus premises which are handled by health inspector Mr. Shyam Khadka.

Annexes

- a. Annex C5_I75_75A: List of beneficiaries , Volume-6, Page- 221**
- b. Annex C5_I75_75B: Photograph of health care center , Volume-6, Page-223**

76. What are the physical and infrastructural facilities available in the sports and physical education centre? Give details. (0.5)

We have following sports facilities in our campus premises

- 1) Cricket Ground
- 2) Football Ground,
- 3) Badminton Court,
- 4) Basketball Court.
- 5) Table Tennis

Annex:

- a. Annex C5_I76_76A: Photos of ground and sports , Volume-6, Page-117**

77. What are the incentives given to outstanding sports persons? (0.5)

For organizing different sport activities financial support is given by FSU and Campus for different activities. Certain budget is allocated for this. FSU Provide Diet, jersey and registration fee for Students who are in Volumeve sport activities.

Annexes

- a. **Annex S1_I20_20A: Budget book and audit copy (FSU Budget) , Volume-1, Page-52**
- b. **Annex C1_I11_11A: Free Student Union (FSU) Minutes , Volume-2, Page-213**
- c. **Annex C1_I11_11B:FSU Minute Updated, Volume-10 (additional), Page-5**

78. Give details of the student participation during the last year at the university, regional, national and international events. (0.5)

During last year our following students had taken participation in various sports activities:

| Area | Participation of Students | Outcomes |
|---------------------------------------|---------------------------|----------------------------|
| Robotics competition (China) | 4 students with a faculty | Participation |
| Robotics competition (Kathmandu) | 6 students | Winner |
| Central Campus of Technology (Dharan) | 3 students | Participation with stalls |
| CAN Sunsari (Itahari) | 4 students | Participations with stalls |
| CAN Morang (Biratnagar) | 4 students | Winner |

79. Give details of the hostel facilities available in the institution? (0.5)

The students use the hostel as per campus rules and regulations. We have following hostel capacity for students.

1. BE Boys Hostel Capacity:80
2. BE Girls Hostel Capacity: 38
3. MSC Boys Hostel Capacity:4
4. MSC Girls Hostel Capacity: 2

Annexes

- a. **Annex C5_I79_79B: Notice for Hostel , Volume-6, Page-127**
- b. **Annex C5_I79_79C: Hostel Entry Notice , Volume-6, Page-188**
- c. **Annex C5_I79_79A: Photograph of Hostel building and room , Volume-6, Page-112**
- d. **Annex C1_I2_2B: Annual action plan. , Volume-2, Page-79**
- e. **Annex C1_I1_1A: Strategic Report of Purwanchal Campus , Volume-2, Page-8**

80. Give details of the facilities for drinking water and toilets. (0.5)

There are different and well-equipped toilets for ladies and gents. There are separate bathrooms for the students and faculty members, maintained neat and clean with the flush facilities. The campus has drinking water treatment facilities (Euro Guard). In the non-function of such facilities, the campus has a good facility for drinking water/processed

water. There are facilities for drinking water purified by UV and micro filtering in all academic and administrative Blocks. In all mentioned blocks there are separate facilities for boys and girls toilet.

Annexes

- a. **Annex C5_I68_68D: Contact document for toilet cleaner and toilet photos , Volume-6, Page-65**
- b. **Annex C5_I80_80A: Drinking water facilities , Volume-6, Page-74**
- c. **Annex C5_I80_80B: Updated drinking water facilities, Volume-10(Additional), Page 229**

B. Library as a Learning Resource

81 (a). What are the working hours of the library? (0.25)

- On working days: 6 hours
- On holidays: Closed
- Prior to examinations: Closed if holidays, otherwise open as usual on working days

81 (b). Does the library provide open-access to students? (0.25)

Yes No

PC library provide these facilities both students and faculties and staff as well.

Annexes

- a. **Annex C5_I81_81B: Library Opening Time Notice , Volume-6, Page-85**

82. Mention the total collection of documents. (3.5)

- Books: 45338 (0.2)
- Current Journals
 - Nepalese: 20 (0.2)
 - Foreign: 10 (0.2)
- Magazines: 8 (0.2)
- Reference Books: 8223 (1.0)
- Text Books: 37115 (0.2)
- Refereed journals: 5 (0.4)
- Back Volumeumes of Journals: 5 (0.2)
(Agricultural Engineering, Journal of agricultural Engineering, ICID journal, Nepalese journal of agriculture and Indian journal of soil conservation.)
- E- Information Resources (0.4)
 - CD's/DVD's: 500
 - Databases: Thesis, Automatic Data-Base for Books
 - Online Journals: Can access from TU Portal
 - AV Resources: N/A
- Special collection: N/A (0.5)

83. Give the number of books/journals/periodicals that have been added to institution library during the last two years and their cost. (1)

| | The year before last | The year before |
|--|----------------------|-----------------|
|--|----------------------|-----------------|

| | Number | Total cost | Number | Total cost |
|---------------------------|--------|------------|--------|------------|
| i. Text books | 1570 | | 1395 | |
| ii. Other books | | | | |
| iii. Journals/periodicals | | | | |
| Any others:- Manuals | 161 | | 73 | |
| iv. Thesis | 43 | | 89 | |

84. Mention (1)

- (i) Total carpet area of the institution library (in sq.mts.) [100 sq.m] (0.25)
(ii) Total number of departmental libraries [4] (0.25)
(iii) Seating capacity of the Library [50] (0.25)
(iv) Open student access to library [all] (0.25)

85. Give the organizational structure of the library. (0.5)

- i. Total number of staff [6 persons]
ii. Professionals (List with qualifications)
b. Amber Bahadur Thapa (B.LIB.SC)
c. Semi-professionals [1]
d. Others 4 person. [Bachelors, SLC, 8 Pass]
iii. Library advisory committee
Chairman: - Asst. Campus chief
Members: - All HOD
Member secretary: - Library Officers

Annexes

- a. Annex C5_I85_85A: Decision and formation of Library committee with job description , Volume-6, Page-90**

86. Staff development programs for library (0.5)

- (i) Refresher/orientation courses attended
(ii) Workshops/Seminars/Conferences attended
(iii) Other special training programs attended

The campus is committed to enhancing the individual capacity of its staff. For this, the department provides training to empower human resources, which is the case with the library staff. The team is provided with refresher courses and orientation training. They have also participated in various national and international academic workshops, conferences, seminars, and meetings. The librarian, Mr. Amber Bahadur Thapa, is leading library management currently.

87. Are the library functions automated? (0.5)

Yes No

If yes: Fully automated (0.5) Partially automated (0.25)

Name the application software used: LUNIVA

Annexes

- a. Annex C5_I87_87A: Software details with contract letter to vendor (LUNIVA) , Volume-6, Page-96**

88. What is the percentage of library budget in relation to the total budget of the Institution? (0.5)

The total library budget is Rs.10,74,000.00 (3.2% of Total Budget)

Annex:

a. Annex C5_I88_88A: Budget page with high light , Volume-6, Page-104

89. Does the library provide the following services/facilities? (10 x 0.1 = 1)

- Circulation Services
- Maintenance services
- Reference/referral service
- Information display and notification services
- Photocopying and printing services
- User Orientation/Information Literacy
- Internet/ Computer Access
- Inter-Library Loan services
- Networking services
- Power Backup facility

90. Furnish details on the following (1; to be equally distributed)

- | | |
|---|----------|
| (i) Average number of books issued/returned per day. | [200] |
| (ii) Average no. of users visited / Documents consulted per month | [2600] |
| (iii) Please furnish the information on no. of Log- ins in to the | [N/A] |
| (iv) Ratio of Library books to number of students enrolled | [1/5] |

CRITERION 6: STUDENT SUPPORT AND GUIDANCE (10 MARKS)

91. Furnish the following details: (0.25 x 4 = 1)

- Percentage of regular students appearing for the exam = 95.65
- Drop-out rate (drop out from the course) = 4.35
- Prominent positions held by alumni
 - a. Dr. Surendra Adhikari- Scientists, NASA Jet Propulsion Lab, USA
 - b. Dr. Niroj Aryal, Asst. Prof. Michigan State University, USA
 - c. Dr. Arbinda Kr Jha, Asst. Prof. IIT Patna
 - d. Dr. Prajal Pradhan- Researcher at Potsdam Institute for Climate Impact Research
 - e. Dr. Rajan Parajuli, Research Associate at University of Arkansas

Campus HRC had decided and included in the annual plan of this academic year for the formation of alumnae of Purwanchal campus and formed the team for teasers study. From the study a database of almunai have been prepared.

Annexes

- a. Annex C6_I91_91A: Analysis of exam data , Volume-7, Page-42
- b. Annex C8_I113_113D: Decision and minute for Alumnae formation , Volume-9, Page-52
- c. Annex C6_I91_91B: List of Graduates with employment affiliation , Volume-7, Page-44
- d. Annex C6_I91_91C: Tracer Study Report, Volume 10 (additional), Page 167

92. How many students have passed the following examinations in the last five years? (0.25 x 4 = 1)

- Nepal Civil Services Examinations
- Other employment related examinations
- International level entrance examination
- Others (please specify)

The detail and accurate data for the question is not available for now. This because of the formation of HRC has not been so long in the campus. The committee is now planning for the alumni team formation and data collection. However, the data for a bit older years has been attached in the annex.

Annex:

- a. **Annex C6_I91_91B: List of Graduates with employment affiliation , Volume-7, Page-44**

93. Does the institution publish its updated prospectus annually? (1)

Yes No

If yes, what are the contents of the prospectus? (attach a copy)

During the admission time campus publishes digital prospectus online in campus website. The prospectus contains the information on the goals and vision of the campus including the fee structure for the semester system and detail of intake capacity. It also includes the information on the academic achievements of the students and faculties.

Annex:

- a. **Annex C6_I93_92A: Campus admission page website , Volume-7, Page- 3**
- b. **Annex C6_I93_92B: Campus Prospectus , Volume-7, Page-6**
- c. **Annex C6_I93_93A: Update Brochure, Volume-10 (additional) , Page 164**

94. What kind of financial aids are available to students from the government, the institution and others? Give details. (0.5)

As per the IOE established Rule, every 25% of students get a stipend after publishing the semester result. The remaining 25% of students get semester fees off equivalent to regular students' fees. Similarly, a certain specific % of the fund is allocated from the full fee system for a scholarship. There is a 100% fee waive for batch topper among full-fee students, and a 50% fee waive among full-paying students to each faculty topper. The annual fund provided by the Government to run the campus is also used for the scholarship to deserving students based on their preformation.

Annex:

1. **Annex C6_I93_93A: Student scholarship regulation , Volume-7, Page-8**
2. **Annex C6_I93_93B: Notice of stipend and fee waive and Name list of students , Volume-7, Page-10**

95. Mention the number of students who have received financial aid during the last two years. (0.5)

| Financial aid | Year before last (76/77) | Year before (77/78) |
|------------------------------------|--------------------------|---------------------|
| i. Merit scholarship | 510 | 566 |
| ii. Full -Fee scholarship | 110 | 128 |
| iii. Full-Fee topper | 30 | 34 |
| iii. Poor and Jehendar scholarship | 11 | 11 |
| iv. Staff Children Scholarship | 11 | 11 |

Annex:

a. **Annex C6_I94_94A: List of scholarship , Volume-7, Page-13**

96. Does the institution have an employment cell and a placement officer who offers career counseling to students? If yes, give details of the cell and its office. (0.25 x 2 = 0.5)

- i. Employment cell:
 ii. Placement officer:

Yes, Purwanchal Campus has established four student counseling and employment cell members. Until before, these activities were jointly performed by HRC cell and Student Welfare Fund, responsible for the placements, MoU with industries and companies for employment, knowledge transfer, etc. However, the Student counseling and Employment cell (SCEC) has become a specialized cell to provide career counseling. Similarly, with cooperation with HRC, SCEC would build a framework for placement services for the recent graduates.

Annex:

a. **Annex C1_I6_6G: Human Resource Management Guideline , Volume-2, Page-112**

b. **Annex C6_I96_96A: Formation of SCEC , Volume-7, Page-44**

c. **Annex C6_I96_96B: MoU Placement Minute, Volume 10 (Additional), Page 225**

97. Do teachers participate in academic and personal counseling? (0.5)

Yes No If yes, give details as to how they are in Volunteer.

Yes, every teacher and department is responsible for this role. Though there is no separate permanent counseling unit, the weak and needy students may visit the concerned faculties personally and ask for the solution. The department provides an opportunity to interact with the senior fellow graduate doing their study abroad in scholarship. Department Head and individual teacher will counsel and recommend the possible option. Likewise, the campus will facilitate those students facing some personal problems through direct contact with the campus chief. He explores the option available. From time to time, the campus itself, or in collaboration with student wings, conducts a particular program including stress management, yoga, and spiritual lecture. These types of programs have been informally conducted on the campus till now. However, the campus is planning for these kinds of activities.

98. How many students were employed through placement service during the last year? (1)

As the HRC has been established recently in the Campus. The HRC is responsible for all the data collection for the question. However, till now there no specific data obtained from the committee.

| Particulars | UG students | PG students | Research scholars |
|-------------------------------------|-------------|-------------|-------------------|
| i. Local firms/companies | 36 % | N/A | N/A |
| ii. International firms/companies | N/A | N/A | N/A |
| iii. Government | 23 % | N/A | N/A |
| iv. Public (semi-government) sector | N/A | N/A | N/A |
| v. Private sector | 38% | N/A | N/A |
| vi. Other | | | |

Note: From the survey of Tracer Study

99. Does the employment cell motivate the students to seek self-employment? (1)

Yes No

If yes, how many are self-employed (data may be limited to last 5 years)?

The formation of guidelines for the employment cell is on process and planning is being carrying out by the members of HRC of the campus.

100. Does the institution have an Alumni Association? (0.5)

Yes No

If yes, indicate the activities of the Alumni Association.

The institute has an alumnae Association representing a batch of the BE class. The campus has started planning to form an Alumni Association representing students from starting the campus at the end of this year, which has also been mentioned in the annual plan of the campus. And PC now posses a formal alumni association. Moreover, there are departmental alumni; the Alumni Association of Agricultural Engineering Department is active. It provides Scholarships to topper students ever year. They have handover the books they have studied to the department. They conduct a interactive sessions in campus as they visit the campus.

Annex:

- a. **Annex C6_I91_91B: List of Graduates with employment affiliation , Volume-7, Page-44**
- b. **Annex C8_I113_113D: Decision of Alumni formation, Volume-9, Page-52**
- c. **Annex C6_I93_93B: Notice of stipend and fee waive and Name list of students, Volume-7, Page-10**
- d. **Annex C6_I100_100A: Alumni committee, Volume-7, Page- 54**
- e. **Annex C6_I91_91C: Tracer Study Report, Volume 10 (additional), Page 167**

101. How the policies and criteria of admission are made clear to prospective students? (0.5)

Being a public institute, Campus has a provision to provide all the information to general people and concern students through newspapers, web site, and brochures.

Annexes

- a. **Annex C6_I101_101A: Notice and information in media , Volume-7, Page-4**
- b. **Annex C6_I92_92A: Campus admission page website , Volume-7, Page-3**

102. State the admission policy of the institution with regard to international students. (0.5)

As per Rules of Admission decided by IOE Dean Office, there is a separate provision to get admission through Foreign Quota. Moreover, being a constituent campus of Tribhuvan University, Purwanchal campus can unanimously take the help and guidance of Tribhuvan University Centre of International Relations. This center helps promote mutual understanding and friendship between Tribhuvan University and other international educational institutions across the globe.

Annex:

- a. **Annex C3_I26_26A: Admission Rules and Regulation for BE programs , Volume-4, Page- 4**
- b. **Annex C3_I26_26B: Admission policy/ process for MSc Programs , Volume-4, Page- 32**

103. What are the support services given to international students? (0.5)

TU-IOE will take the whole responsibility to visa support, diplomatic procedure, policy clearance and other administrative procedure. Campus will provide physical facilities. This campus has no international students. Information is provided through Website & Admission information brochures.

104. What are the recreational / leisure time facilities available to students? (1)

- Indoor games
- Outdoor games
- Nature Clubs
- Debate Clubs
- Student Magazines
- Cultural Programs
- Audio Video facilities

Annexes

- a. **Annex C1_I11_11A: Free Student Union (FSU) Minutes , Volume-2, Page- 213**
- b. **Annex S1_I25_25A: Academic calendar clearly mentioned sports week , Volume-1, Page-75**

CRITERION 7: INFORMATION SYSTEM (10 MARKS)

105. Is there any cell in the institution to analyze and record various academic data? (2)

Yes No

If yes, mention how does the cell work along with its compositions?

An EMIS cell had been established appointing an EMIS focal person (Annex), which is now expanded to form a larger EMIS Cell with additional expert members (Annex.). The current state of EMIS system in the campus is software based in selected departments

(Administration, Examination, Finance Section and Library) and conventional paper-based in rest of the departments. Existing EMIS consists of following notable components:

Academic Administration Section Online EMIS Unit

- Online Admission Application portal is being used to automate the admission enrollment procedure with appropriate pre-post validation of the data. (ioiepc.edu.np)
- IOE Purwanchal Portal is operational for generating/ updating record of students enrolled in graduate and undergraduate (Online, portal.ioeipc.edu.np, Login Access for students and faculty only)
- Software for generation and distribution of character certificate (Online, Local access only)
- A fully functional online feedback portal was developed and is now operational. (ioeipc.edu.np)
- Institutional email powered by Gmail is available for students, faculty, teachers and staff at domain @ioeipc.edu.np. A strict e-mail culture is being promoted within campus for data sharing and correspondence.
- Automated ID card Generation software is being utilized by the campus for distributing ID cards to faculty, staff and students of the institution.

Examination Section EMIS

- Manual data entry of student results in Excel worksheets; Sorting and analysis of student results; Publication of student rankings as per the result for the distribution stipend /scholarship (Local)
- Online exam form fill up and the distribution of admit cards for final exam.(exam.ioe.edu.np)
- Internal evaluation marks from all departments is collected, archived in Exam Section and submitted to Exam Control Division, IOE. All activities are exhaustively manual. However, an online Internal evaluation marks collection submission portal has recently been developed is being promoted among teachers. (Online at portal.ioeipc.edu.np)

Finance Section EMIS Software

- An open invitation call for bids for procurement of EMIS software was published and EMIS software was procured through standard bidding process
- EMIS Software is expected to be fully functional by fiscal year 2077/78.

Library Software

- LUNIVA Library Management System is available for keeping book records, book loan records and generating book transactions reports.

Department EMIS

- Departments maintain paper based records or use local personal computers for record keeping, documentation and other activities

Public

- Campus website : <https://www.ioepc.edu.np>
- Online feedback system
- Individual department websites are operational or under construction:
 - Department of Electronics and Computer Engineering <https://ece.ioepc.edu.np>
 - Department of Electrical Engineering <https://el.ioepc.edu.np>
 - Department of Mechanical Engineering <https://mech.ioepc.edu.np>
 - Department of Civil Engineering <https://civil.ioepc.edu.np>
 - Department of Architecture Engineering <https://arch.ioepc.edu.np>
 - Department of Agricultural Engineering <https://agri.ioepc.edu.np>
 - Department of Applied Sciences <https://asc.ioepc.edu.np>

Annexes

- Annex C1_I6_6L: EMIS/IT Guidelines , Volume-2, Page-120**
- Annex C7_I105_105C: Decision and appointment letter of formation of EMIS team , Volume-8, Page-10**
- Annex C1_I6_6L: EMIS/ IT Guidelines , Volume-2, Page-120**
- Annex C7_I105_105A: Admission system website , Volume-8, Page-3**
- Annex C7_I105_105E: Admission support and steps , Volume-8, Page-18**
- Annex C7_I105_105D: Online classes , Volume-8, Page-11**
- Annex C7_I105_105F: Automatic certificate generation (staff only) , Page-Volume-8, 34**
- Annex C7_I105_105H: Online ID cards (staff only) , Volume-8, Page- 40**
- Annex C7_I105_105G: Online feedback form (for public) , Volume-8, Page-39**
- Annex C7_I105_105I: Online student portal , Volume-8, Page-42**
- Annex C7_I105_105L: Institutional email (gsuite) , Volume-8, Page-51**
- Annex C7_I105_105M: VPS servers , Volume-8, Page-55**
- Annex C7_I105_105K: E-Bidding , Volume-8, Page-50**
- Annex C7_I105_105N: Online Graduate Conference , Volume-8, Page-60**

- o. Annex C5_I87_87A: Software details with contract letter to vendor (LUNIVA) , Volume-6, Page-96**
- p. Annex C7_I105_105B: EMIS for Account section , Volume-8, Page-15**
- q. Annex C3_I42_42C: Updated Webpage, Volume 10 (Additional), Page 187**

106. What are the areas on which such analysis is carried out? (1.5)

The following sorts of analysis are carried out on a variety of areas.

- Graduate Result Trend Analysis on student result data provided by IOE, Exam Section is performed and included in Annual Report and used in strategic planning.
- Enrolment Trend Analysis on enrolment data is performed and included in Annual report.
- Financial Analysis of Resources, Income and Expenditure is performed and included in annual report.
- Library book transaction analysis and reports is regularly performed using library software.

Apart from these above mentioned analysis, there are some areas in which statistical analysis could be performed that impacts on regular activities of campus such as:

- Feedback Analysis: Analysis on feedback provided by general public or graduated alumni or currently enrolled students could be used to measure effectiveness of campus, programs, faculty and methodologies.
- Strength Weakness Opportunities Threat (SWOT) analysis is a valuable tool for self-appraisal of the campus and devise strategic plan accordingly.
- Tracer Study is a study of campus alumni, their whereabouts, achievements and social corporate linkage. Similarly, Impact Analysis can be study of the campus, its faculty and alumni contribution to socio-economic cause.

Annex:

- a. Annex C1_I1_1A: Strategic Report of Purwanchal Campus , Volume-2, Page-8**
- b. Annex C1_I2_2B: Annual action plan. , Volume-2, Page-79**
- c. Annex C8_I116_116A: Annual report , Volume-9, Page-13**
- d. Annex C6_I91_91A: Analysis of exam data , Volume-7, Page-42**
- e. Annex C7_I105_105A: Admission system website , Volume-8, Page- 3**
- f. Annex C7_I105_105E: Admission support and steps , Volume-8, Page-18**

107. How these analyzed data are kept in the institution records? (1)

Previously all records (Academic, administration, Examination Section and Finance Section EMIS) were kept mostly with conventional paper-based system. Now these paper-based hard-copy records are also available online/offline digital soft records in local computers at this campus.

Custom EMIS Software is installed in examination section, finance, and library and is used for record keeping purpose.

PC has decided to establish/acquisition of separate server. After the installation of this facility PC will be state-of-the-art and will be significant in fulfilling its strategic plan of a **paperless, IT based EMIS** system.

Annexes:

- a. **Annex C7_I107_107A: Tender Documents for server , Volume-8, Page-6**
- b. **Annex C7_I107_107B: Decision for proposing annual plan of EMIS committee , Volume-8, Page-47**

108. Are this information open to the stakeholders? (1)

Yes No

If yes, explain how they are disclosed?

Perhaps open to stockholders depends on the cases; the scope and accessibility of various data has been listed in EMIS guidelines, will be update, a continuous process. A brief -

- Administration data in our local computers are secure and accessible only to administrative users.
- IOE-Purwanchal Campus portal operates which is open for all stake holders (Students, Teachers and Staffs) with their individual login.
- Online Admission Application portal open to all prospective students. Admission process is fully automated, securing sensitive data such as bank information.
- Library Access is provided for students/ faculty and staffs while library records are kept privately with only access to the library staffs.
- TU E-Library is accessible from Campus IP address and the data is open to all stakeholders within the campus premises.

Annexes:

- a. **Annex C1_I6_6L: EMIS/IT Guidelines , Volume-2, Page-120**
- b. **Annex C7_I108_108A: Decision/Minute to access the information and internet facility. , Volume-8, Page-48**

109. Are the methods of study and analysis also open to the stakeholders? (1)

Yes No

Methods of study and analysis are mostly open to all stakeholders if IOE, Dean Office permits and if forbidden by any binding agreement with the data producers/ generators or Grant provider. And the data is being provided to each stakeholder with their respective credentials.

110. Is there any mechanism to receive comments or feedbacks on the published data? (1)

Yes No

If yes, explain how does it happen?

Yes, there is a mechanism to collect regular feedback from students, faculty as well through web portal.

- Individual departments collect feedback from class representatives and are required to rate teaching learning methods of individual faculty. Similarly, individual teachers are required to submit self-appraisal forms each academic year.
- A fully functional online feedback portal for the public was developed and is now operational at <https://ioepc.edu.np/feedback>.
- There is also another feedback portal for final year students-awaiting for results- are supposed to express their experiences in various areas during their stay at the campus and post any suggestions for long term betterment of the campus. They are requested to submit the online form to request an application for degree/ transcript/ character certificate.
- During campus events such as workshops, seminars, round-table discussions and conferences, campus welcomes comments, feedbacks and suggestions from the experts, stakeholders and scholars.

111. What are the impacts of such information system on decision making process? (1.5)
Produce in brief the impact analysis.

We are using such an information system to positively impact problem definition in the decision support process, i.e., decision-making analysis, decision time, decision maker's satisfaction, and content quality in the decision support process. E.g., in our case, the impact on online application versus manual application for students shows that there was a drastically increasing number of applicants in an earlier case (online). The application can be filled out from any place within the scheduled date. Our system checks pre and post-validation of students' entrance records and fees, which guarantee the contents quality as well as the satisfaction of stakeholders.

112. Give examples of quality improvements initiated due to the use of information system. (1)

Information related to Examination (Internal Assessments, Final Regular Exam, and back paper exam) has been uploaded that doesn't mislead the student about routine, timing, and any information. Students' major project works and thesis works are also uploaded to the campus library and campus website. The different academic and administrative works are having a smooth operation with the help of EMIS Cell, and overall performance is being improved.

Based on the availability of information, if anyone requested more information about the student, such as foreign universities (for the recommendation), large entities (for data verification), and funding/scholarship agencies, it will be sent without delay via the internet.

CRITERION 8: PUBLIC INFORMATION (10 MARKS)

113. Is there public information cell within the institution? (2)

Yes No

If yes, give details.

There is a provision to maintain information cells within the campus. Currently, an information cell has been founded on campus with four members. Information on the campus is publicized through the campus notice board, website, campus brochure, and prospectus. Additionally, the campus library also acts as a part of the information cell provides access to research (case reports, thesis reports, and other academic research reports) of the campus to the public. The store gives access to published documents, and CIT provides web information. The following parts of the campus are for public information.

- Notice Board
- Reception
- Web Sites (www.ioepc.edu.np)

Moreover, the Campus Human Resource Committee (HRC) has decided to form an Alumni committee in the fiscal year 2078/2079, which will help collaborate with alumni to share information.

Annexes

- a. **Annex C8_I113_113B: Photograph of Noticeboard , Volume-9, Page- 10**
- b. **Annex C8_I113_113A: Snapshot of campus webpage , Volume-9, Page-3**
- c. **Annex C8_I113_113C: Photograph of reception , Volume-9, Page-11**
- d. **Annex C8_I113_113D: Decision of Alumni formation , Volume-9, Page-52**
- e. **Annex C8_I_113_113E: Public Information cell letter , Volume-9, Page- 53**
- f. **Annex C8_I_113_113F: Public Information cell ToR , Volume-8, Page-54**
- g. **Annex C8_I113_113G: Updated Webpage, Volume 10 (Additional), Page-187**

114. What are the areas of information published by the cell? (1)

- Academic (0.25)
- Administration (0.25)
- Financial (0.5)
- All (1.0)

The cell keeps all the records on students' enrollments and profiles, administrative decisions, and financial notices of the campus. Moreover, the campus has planned to perform an online tracer study of its graduates. The following are the areas of information that are published by the cell with annex.

Annexes:

- a. **Annex C6_I92_92B: Academic Programs , Volume-7, Page-6**
- b. **Annex C3_I26_26E: Admission notices , Volume-4, Page-176**
- c. **Annex C3_I26_26C and D: Merit list Result notices , Volume-4, Page-59 and Page-173**
- d. **Annex C8_I114_114A: Administration Notice such as vacation, local holiday and so on, Volume-9, page-65**
- e. **Annex C8_I114_114B: Tender Notices, Volume-9, page-83**
- f. **Annex C8_I114_114A: Training Notices, seminar, conferences and programs Volume-9, page-65**

- g. Annex C6_I94_94A: Examination and scholarship , Volume-7, Page-13**
- h. Annex C3_I37_37B: Internal appointment Notice for staff and faculties. , Volume-4, Page-319**
- i. Annex C2_I18_18H: Sports and activities , Volume-3, Page-91**
- j. Annex C3_I36_36B: Vacancy Announcement and results , Volume-4, Page-307**

115. Where are this information published? (1.5)

- Newspapers (0.5)
- Magazines (0.5)
- Institutional special magazine dedicated for this (0.5)

Campus publishes information for stakeholders and public on following medias: Newspapers, Magazines, prospectus, campus notice board and campus website(ioepc.edu.np).

Annexes:

- a. Annex C3_I36_36B: Notice of vacancy announcement, examination and results , Volume-4, Page-307**
- b. Annex C6_I92_92B: Campus Prospectus , Volume-7, Page- 6**
- c. Annex C4_I55_55A: Cover page and authorization for publication. , Volume-5, Page-33**
- d. Annex C6_I93_93A: Update Brochure, Volume-10 (additional) , Page 164**

116. How often are these information published? (1)

- Yearly (1)
- In 4 years (0)

Campus publishes its prospectus generally, two times in a year. One for master enrollment time and another during bachelor level enrollment time. The detail of campus as annual report of the Campus is published annually.

Annex:

- a. Annex C6_I92_92B: Campus Prospectus , Volume-7, Page-6**
- b. Annex C8_I116_116A: Annual report , Volume-9, Page-13**
- c. Annex C6_I93_93A: Update Brochure, Volume-10 (additional) , Page 164**

117. Mention all such publications of last two years (1)

The annual report of the campus of last two years has been attached and the prospectus of campus is also included.

Annexes

- a. Annex C8_I116_116A: Annual report , Volume-9, Page-13**
- b. Annex C6_I92_92B: Campus Prospectus , Volume-7, Page-6**
- c. Annex C6_I93_93A: Update Brochure, Volume-10 (additional) , Page 164**

118. Does the cell also collect responses, if any, on the published information? (1)

Yes No

If yes, give details

Campus organizes collaborative seminars and meetings with public, when feedback is collected. Campus seek of its improvement in the areas of public relationship, infrastructure developments and academic boosting. Campus has also provided feedback box in administrative hall where public can place their feedback.

Annex:

- a. **Annex C8_I118_118A: Photos of Feedback box (Sujhav Petika)) , Volume-9, Page- 9**
- b. **Annex C2_I21_21D: Feedback from students, Volume 10 (Additional), Page 52**

119. Is there any system to evaluate the impact of public information on quality improvements? (1)

Yes No

If yes, how these impacts are measured?

We have the systems that have been used to evaluate the impact of public information on the quality improvements of PC. In general, we conduct periodic meetings with stakeholders/community/advisory committee for the betterment of campus. However, we collect advice, suggestions, and feedback through our feedback box (online feedback portal). The feedback box and online database are checked twice a year, and necessary action is taken through management meetings. From the current fiscal year, PC has started a provision to provide feedback by the visitors to the campus. Moreover, some of the public information and their impacts are listed below:

Annex:

- a. **Annex C8_I118_118A: Photos of Feedback box (Sujhav Petika) , Volume-9, Page-9**
- b. **Annex C8_I119_119A: Photos of online portal for feedback , Volume-9, Page-55**
- c. **Annex C8_I119_119B: Example of feedback posts from sujav petika with its mitigation , Volume-9, Page-56**

120. Mention some positive impacts made by the public information practice. (1.5)

1. Establishment of master's program in the campus. The campus is running three master programs: Land and Water Engineering, Sanitation Engineering, and Information System Engineering. MSc Sanitation is funded program by melinda and bill gates foundation.
2. Campus Administration has initiated litterfall and bushes cleaning program around the campus to minimize risk of snakes during summer.
3. Based on feedbacks obtained from public some of the infrastructures has been built. Some of them are listed below:
 - i. Construction of Pratikchyalaya
 - ii. Reinforcement of Canteen area
 - iii Development of online portal
4. Public information practice helped to upgrade the campus website to updated in regular basis that helped make an up-to-date database of campus.

5. The PC have decided to publish annual report and brochure in annual basis that helps to enlarge the information of campus.
6. The PC have approached to higher authority at Tribhuvan University to utilize unused land areas for lease. This action has been under taken on the basis of number of requests for lease. The financial gain of the campus that is expected to grow through this activity will help to improve the quality of campus.

Annex:

- a. **Annex C8_I120_120A: Minute for Letter for lease to dean office , Volume-9, Page-63**
- b. **Annex C8_I119_119B: Example of feedback posts from sujav petika with its mitigation , Volume-9, Page-56**

CRITERIA WISE SUMMARY

CRITERION 1: POLICY AND PROCEDURE

The campus has several working committees for maintaining the quality environment in the campus. Campus has prepared the strategic plan and action plan and has met all the achievement in past few years and also preparing for further years. Being constituent campus of Tribhuvan University, PC has its own organizational structure, teaching learning, monitoring and evaluation system. The job description of each individual, departments and committees has been defined properly. The campus staffs, faculties and students are committed to maintain the quality academic environment in the campus. The academic environment of the campus is even supported by the feedback system in the system. The regular monitoring

and evaluation system of the campus ensures the control of existing quality environment of the campus.

CRITERION 2: CURRICULAR ASPECTS

In curricular aspects Purwanchal campus has fulfilling the goal and objectives as per the Institute of Engineering goals and objectives. The campus publishes the strategic plan, prospectus and annual reports. The campus has done MoU's with national and international academic institution which creates a opportunity for national and international meetings. As per the guidelines of Institute of Engineering, the curriculum of the campus has included the elective courses. The campus has also provided the horizontal mobilities. Moreover, multiple programs have given student an opportunity to choose any program they are interested on. Additionally, the campus administration organizes orientation program in the beginning of the entry of the students. Campus has established the student counselling cell to counsel the students for career choice and appropriate selection of the program.

CRITERION 3: TEACING-LEARNING AND EVAULATION SYSTEM

The admission process of the campus is regulated by the central admission system of Institute of Engineering. The admission process includes the entrance test and admission is done on the basis of merit list prepared by the campus. Apart from the lectures in the class, the senior and junior of the campus collaborate each other to improve their knowledge on the subjects. Purwanchal campus has multiple students' committees who collaborate with students in academic works, project works and group works. Purwanchal campus provides periodical guest lectures in different departments. The staffs of the campus prepared teaching plan and take class appropriately and timely. The campus posses enough laboratories that is included in the curriculum. Computer laboratory is equipped and internet facilities has been provided. Online based teaching learning system has been also facilitated. The recruitment process of the staffs and faculties is regulated by the Dean office in major for contract purpose, however, the permanent faculties are regulated by university service commission. Being constituent campus of institute of engineering, the quality of students and faculties is relatively good in the scenario of pass rates and with low dropout and failure rates. The faculties are provided with the study leave opportunities and can collaborate with International higher education institution.

CRITERION 4: RESEARCH, CONSULTANCY AND EXTENSION

The Purwanchal Campus has established Research Management Cell (RMC) which is responsible of research, publication, conference and seminars in the campus. The faculties of the campus publish their research work in good rank journals. Students should conduct their thesis works and project works on regular basis. PC is planning to provide financial relief to staffs and even students to conduct their research activities. As per University rule and regulation the faculties are provided study leave of MSc. And Ph.D. Programs. PC provides consultancy service in different sectors and collaborates with governmental and non-governmental organizations.

CRITERION 5: INFRASTRUCTURE AND LEARNING RESOURCES

Purwanchal campus possess adequate infrastructure for lecture, laboratories administration rooms and extracurricular activities. However, the major infrastructures have been constructed long before. The available resources have been utilizing effectively in the campus. The campus possesses residential facilities for students, staffs and faculties. There is provision for regular maintained of the existing infrastructure of the campus and campus infrastructure is still growing and developing.

CRITERION 6: STUDENT SUPPORT AND GUIDANCE

Purwanchal campus organizes orientation program on regular basis to provide information regarding the admission, career counseling, scholarship and other information. The student committees under the campus are provided regular guidance by the faculties. The students are encouraging to participate in different national and international level events. The campus posse's health clinic for providing health facilities to students, staffs and faculties. PC have established student counseling and employment cell in campus to provide career counselling and employment opportunities after graduation. On the behalf of student counselling and employment cell, the campus posses human resource management cell to provide necessary guideline for even student too.

CRITERION 7: INFORMATION SYSTEM

The Purwanchal Campus has managed to maintain the good pass rates of students and this is improving further. The campus has established Human Resource Management Cell and Student counselling and employment cell which in generally responsible for career counselling and providing a framework for employability of the fresh graduates. However, the campus has

not yet formally done the tracer study of its graduates. There is a balance teaching learning system in each department of the campus. The campus has EMIS system to disseminate the information of the campus in different ways through online and offline methods.

CRITERION 8: PUBLIC INFORMATION

Purwanchal campus generally provides the information through campus brochure, website, notice board and annual reports. EMIS has been established in the campus to maintain all the information system of the campus. Moreover, the campus has established the public information cell to exchange the information from stakeholder and campus through different media. The campus has well organized feedback mechanism to regulate the academic quality environment of the campus.

SWOC ANALYSIS OF IOEPC

Strengths

The key areas of success in the last two decades of the Institute of Engineering are recapitulated below. These show proven strengths of IOE:

Admission process

IOE can, with pride, claim to have set up and implemented the most credible admission process within the various Academic staffs and institutes of TU. It has proved that the existing system to be capable of controlling quality of admission and staying clear of political and external pressures that have bulldozed such efforts elsewhere. Although senior management appointment appear affected by changing national politics., the success and strength of the admission process indicates that at the middle and policy implementation level, IOE has ingredients making up academic confidence and integrity.

Examination process

IOE has been able to successfully undertake and implement the examination function decentralized to it from TU since the late eighties, as it was the first of such steps ever taken by TU. Although operating in the traditional fashion, it none the less shows that IOE has been able manage and control quality of graduates to its satisfaction. Despite the complicity inVolumeved in administering examinations and with a wide range of programs, IOE has set up a system of timely examination and results declaration worth noting.

Physical Facilities

In the area of physical facilities, IOE as strong edge over all emerging institutions as well as over regional level colleges of engineering in India, largely because of significant investment in the past two decades. Facilities of Purwanchal Campus are particularly amenable to research and development in engineering.

Quality of Graduates

Institute of Engineering has played its role as a national institution for engineering manpower training and education quite successfully in its more than half a century of existence. The middle level technical manpower comprising of overseers in the country are all solely produced in the country and IOE products enjoy comparative advantage in employment, a clear reflection of the qualitative achievement in course delivery. It is today the single largest institute of education of engineering manpower in Nepal and its Civil engineering graduates form a decisive Volumeume of engineers in the country already. The performance of students completing the Bachelor program and undertaking further studies in foreign students have been

singularly excellent. At AIT, Bangkok, where IOE graduate are pitted competitively with graduates from other countries, their performance has been exemplary and meriting report in their annual publications.

International Contacts

With the institution of the graduate and undergraduate programs at IOE, the international contacts of the Institute of Engineering has gone beyond those formed purely for receiving 'technical assistance' or for faculty development. Of late Institute has truly gone international in many other ways such as organizing international conferences, hosting international professors for course delivery and meaningfully providing local based to visiting international students. With several Memorandums of Understanding signed with local, regional and international institutions, the Institute of Engineering has been able to marshal international expertise into joint academic exercises.

Finance

Faced with challenges to meet growing demand of funds, which could not be met with the falling level of direct financial support from the Government, IOE started on the path towards partial cost recovery and internal resources generation. The institution of 'full-fee-paying' classes in Bachelor degree studies on electronics, architecture, civil, computer, Agriculture, Mechanical and Electrical engineering and imposition of fee structure based on 'full-operational-cost recovery basis' are two actions which have brought significant level in of internal resource mobilization. Current estimates of such resources total over 25% of the total recurrent budget allocated from regular sources. Indeed with several other viable areas of resource mobilization under consideration, it is possible to foresee a future within significant portion of the costs (at an estimated 60% of current recurrent costs) will be recovered and IOE can be largely financially self-sustaining. However, given that fact the quality improvement moves will greatly increase demand and recurrent cost financing, IOE still has to a long way to be able to achieve a real financial sustainability.

Weaknesses or Gaps

- IOE's futures moves must in parallel reduce or nullify several weaknesses in the system if plans are to be effective in implementation. The following are some of the weaknesses identified in the preceding sectorial reviews.
- ***Image***: IOE continues to carry the social image of an institution plagued by strikes, nonoccurrence of classes, poor facilities, politicized atmosphere etc. this owes to general TU situation and to some extent to the pre-democracy period in IOE. This negative image is singular in hampering the internal resource drive and attracting brilliant and 'able-to-afford' students. IOE has no public image improvement campaign to speak of and this weakness is bound to have serious implication for the future as it moves towards sustainability and competitive environment.
- ***Motivation and commitment***: The major weakness within IOE is staff motivation and commitment and continuing staff attrition. Lack of staff application to institutional committee and community works is primarily a result of poor salaries and lack of prospects of research and professional works from within the institute, which has prompted many members of faculty to take up professional practice outside IOE. Most faculty members are found giving only minimum input as against their duty in the institute. They are present in the campus only for their assigned classes. This situation highly delimits innovation and development within IOE. Likewise IOE has been suffering from staff attrition in important areas of its program focus. Earlier staff attrition has been attributed to such reasons as low salary, unfocussed recruitment and staff development program, lack of research opportunities, limit promotional prospects, lack of 'higher academic programs', etc. Lately, however, 'low salaries' and lack of research opportunities appear to dominate staff opinion on reasons of attrition.
- ***Linkage with Industry***: Along with research, IOE's other weakness is a virtual lack of linkage with industry, government and engineering community at large. Without such linkages, IOE is not in a dynamic position to tune up its programs and activities to the demands of this has been the lack of practice infusion into its academic programs, which could have been possible through IOE staff placement in Industry and seconding professionals with industrial experience into its teaching faculty. Because of the weak linkage with government, unlike in many developing countries, many of IOE's highly educated faculty members have not been

commissioned to advise the government on major engineering projects largely executed by foreign firms.

- **Resources and endowments:** IOE has only recently been able to bring about some changes in the funding pattern dominated by government grants and government backed loans, through objective prioritization of activities to raise internal resource mobilization. Still such resources are dominated by student fees, not an attractive area for a costly education as that of engineering and a country where education reach of the poorer sector of the country is a priority. Cases of well-run and self-sustaining institutions show that creating stable income through *endowments* is the most desirable and successful resource for sustainability, predictability of the income and autonomy. Unless such stable sources of the funds are created. IOE will have continued problems of sustainability.

Efficiency of Internal Resources Utilization: Although internal resource mobilization has increased to significant proportions, its locative efficiency remains low. The increasing internal resources were expected to increase staff remuneration well enough to increase faculty presence for community and institutional activities but this has yet to happen. It is generally felt that the benefits accruing are to a very limited number of faculties and also is not able to reach the targeted group. Likewise, the impact of fund on facility development, maintenance and upkeep has not been visible at all.

- **Capital Replacement Costs:** Over the past two decades IOE has been continuously developing and adding to its physical facilities and equipment. Some maintenance action to keep up the facilities has been undertaken. But there has been no planning for financing capital replacement and depreciation so far and very shortly IOE will have to face up to this. Current levels and nature of financing is not going to meet the large demand of capital replacement, which has already taken significant proportion due to obsolescence and use with limited maintenance. Unless regular updates of laboratories and equipment are done, IOE stands to lose its edge other private institutes quite quickly.
- **Administrative Regulations:** IOE is administered under TU regulation, primarily developed on civil service pattern of the government. Such regulations, particularly those pertaining to faculty hire, promotions, dismissals and salaries, restrict its capacity to turn entrepreneurial, a

direct demand of the competitive environment and internal resource mobilization. These regulations and IOE's lack of authority to draft and implement appropriate policies and regulations make IOE institutionally weak. Autonomy must extend to and include ability to develop and see through its own policy.

- **Students' performances:** The performance of students in out-laying campuses has recently gone down raising questions on its capacity to handle the wide spectrum of courses. The recent low pass rate in its Diploma programs reflect more on different levels and quality of academic delivery pertaining in its outlying campuses and are a weakness of academic coordination and failure of the Instruction committee function. To a lesser degree, this dysfunction extends to the subject Committee function also. Another causative factor is the administrative organizational set-up that is not particularly effective for academic coordination and quality control. As a matter of fact, it would not be wrong to note that it is a common but serious weakness pertaining in the TU system.
- **Use of physical facilities:** Inefficient and less than satisfactory use of physical facilities, particularly laboratories, plagues IOE and it has not been able to enrich its academic programs to the level possible through available physical facilities. Its laboratory technician cadre does not match the facilities.

Opportunities

The field of engineering education is one of the fastest growing areas in Nepal. The state of national development and globalization of science and technology create demands for study and research in both the conventional and the contemporary areas of engineering and opportunities of expansion and extension are very wide.

- **National Scene:** *Conventional areas of engineering:* Nepal's developing economy continues to demand high level engineering manpower in such conventional areas as construction and physical infrastructure engineering. Unique geography and geology of the country demand innovation even in these conventional areas and provide great opportunities for institutions of engineering education. The fast growing number and variety of private institutions offering engineering education are a testimony to this demand and IOE has operational advantages that enable it to capitalize on 'higher level' demands better than other private or public institutions

of higher learning. There is scope and need of horizontal expansion with offers of more focused discipline areas.

National Scene: *New areas of engineering:* Nepal's developing economy, globalization in information and flow of international funds have coupled up to create situations of 'quantum jump' into frontier technologies. These have in turn created demands for education in these areas. The demand for Renewable energy engineering, Computer engineering and Information technology are already gaining significant momentum in the country. Bio-chemical and biotechnology areas are likely to offer still newer set of opportunity areas for IOE.

- **National Scene:** *Newly established private institutions of engineering education:* The rapidly growing number and nature of private engineering education institutions offer opportunities of IOE in providing expert services to these institutions for their quality development. At present several of the faculty members provide part-time lectures to these institutions in varied areas of expertise on a personal basis and these could be institutionalized. The expertise of faculty and extent of facilities at IOE offer positive prospects for offering faculty quality improvement programs to the newly coming up institutions.
- **National Scene:** *National projects and Research:* Nepal's Nature and Natural landforms, Himalayas and geology and development and culture are unique combinations creating particular problems demanding specific research and problem solutions. Despite the

fact the IOE's weakest aspect is research, mountain road engineering, building materials engineering, glacial flow and energy studies, hill irrigation, rural development, engineering and planning, communication engineering come such areas that present opportunities for research in national developmental context.

- **Widening Program Scope:** Both in terms of long-during educational programs and short-term training and refresher courses, there is great potential in Nepal that can be capitalized by IOE. IOE's continuing education offers have been quite attractive to trainees and can be transformed into a financially and academically rewarding venture. There is equally wide scope for setting up research based post-graduate and doctoral programs targeted to both national and international students.

- **International Scene and Unique position of Nepal:** Nepal's unique politico-geographical location offers great opportunities for international workshops, training and short-term courses particularly for fellows from South Asian and Trans-Himalayan countries. Significant prospect in supporting engineering education and training needs of such agencies as SAARC and ICIMOD exist. Given low costs, the enrolment of international students in its regular courses as well as for research is another area, which IOE could fruitfully explore. A fair number of research students are already enrolled at TU's Central Departments in areas of architecture, planning, urbanism and culture and such enrollments could easily be switched to IOE.
- **International Visiting Students:** Several students from India, British, Japanese and American Universities annually visit and consult with IOE faculty in connection with their field studies in Nepal on an informal basis. Regularizing and formalizing these contacts can open new financial and academic opportunities for IOE.

Threats/Challenges

Although as an Institution IOE does not face severe challenges from other similar institutions in the country, detailed observation of private colleges / Kathmandu University / Pokhara University does indicate minor challenges that may take serious dimensions in future and need to be noted.

- Nepal is one of the poorest countries in the world and national challenges are rooted in poverty. Engineering and engineering education in the country has been elitist and there is little that IOE can rightfully claim to have done for the uplift of the poor people. Although this aspect has been recognized in the past²⁴, little has been done to change the situation. In the context of the spelled development and poverty alleviation, it comes as a great challenge to IOE that is focus on the poor man of the nation and his needs. It is also observed that as the absorptive capacity of the Tarai is fast coming to saturation, Nepal will see great developmental, environmental and ecological pressures doubling up in the hills and the mountains. In this context, various engineering questions need to be addressed, such as;

What sort of ecological planning approaches are needed for the mountains, hills and Terai, in Nepal?

- What engineering could do raise the productivity of the common people there? Taking under consideration; Alternate energy? Hill irrigation? Hill roads? Material development? Hill ecology? Rural Settlement development? Glacial engineering? There are myriad of possibilities.
- Are there ways of reaching them more directly than through just research and teaching?
- Such questions will have to be answered and challenge to IOE will lie on how well it can focus to the common people and their needs.
- As last foreign assistance and loans projects ceased at IOE by 2000 AD, it threw a strong challenge to IOE to sustain both its physical facilities and academic program. As IOE no longer commands government attention to it as in the eighties, IOE could not be expecting foreign money as easily as in the past. Increasing competition will mean that IOE will have to prove itself as an effective institution of national and international relevance to attract international funds. International grants will have to be brought-in until internal improvements and resource generation reach sufficient levels in the process of attaining financial sustainability.
- How to get the best of students opting for engineering education into IOE is another challenge to IOE for the immediate future. Government as well as non-government

resources are both going to remain important for substance of IOE for the near future and statistics show that on both counts private university and its Engineering related programs in Nepal are better funded than those of IOE. Higher salary offered at private universities and institutions has started affecting faculty recruitment as more qualified younger entrants prefer higher salary institutions other than IOE employment. It is important for IOE to ensure that raising resources through full-fee students does not lead to run down in quality of admitted students or product quality.

- Challenges to IOE as an institution of engineering education extend to flow of students abroad, largely to neighboring countries. The educated elite of the country still preferred to send their children to universities of neighboring countries. In large part, this challenge is also a factor of IOE's weak image in the society.
- IOE has not been able to attract international students, whose presence is not only prestigious but also likely to raise more resources. At the same time, their presence helps improve its image to be able to attract Nepalese students going out the country for engineering education. A very few SAARC students have come to IOE in the past with scholarship support. Mobilizing international resources through foreign student enrolment remains a challenge to IOE and its magnitude would increase over time.
- To attract international students, IOE has to demonstrate its capacity and publicize itself through developing, offering and maintaining quality programs of relevance to international students. This calls for positioning itself through such programs and achievements as a specialty institution. Its experience in running national programs as well as operationalizing its various MOUs can help in taking up this new and desirable challenge.
- Efforts at organizational restructuring, delegation of authority and building up of collegial leadership have not been successful in the past and it will be a great internal challenge for IOE to break this inertia. Institution of a dynamic and decentralized administration capable of delivering academic excellence and conducive to academic leadership may demand full administrative autonomy from TU. Otherwise IOE will find it difficult to prove to the country that although it is within TU, maladies of TU do not affect it. Although such moves were under serious discussion in the late eighties, IOE has been able to get only limited

autonomy through decentralization rules 1998, in terms of mobilization of internal resources so far.

- There is also a discussion undergoing on the role of IOE in producing competent engineering graduates. The voices are echoing; government should pay special attention to engineering education. As center of excellence of engineering education of the country, IOE and its constituent campuses should emerge as national engineering institution coming out from university limitations.
- The various instruments of exchange signed with regional and international institutions are not operational as serious two-way exchange and IOE has been playing a receiving role only. IOE has to build confidence and strength to transform its actions into an exchange role.