

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME
(TEQIP)
PHASE-III

INSTITUTIONAL DEVELOPMENT PROPOSAL

For

Sub-Component 1.1

Institutional Development for Participating Institutions

Submitted to

National Project Implementation Unit (NPIU)

EdCIL House, Plot No. 18 A
Sector 16 A, Gautam Budh Nagar
NOIDA (UP)



By

Government Engineering College, Bikaner
Karni Industrail Area, Pugal Road,
Bikaner (334004), Rajasthan

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1. INSTITUTIONAL BASIC INFORMATION

1.1 Institutional Identity

- Name and address of the Institution : Government Engineering College Bikaner
Karni Industrial Area, Pugal Road, Bikaner
- Year of establishment : 1999
- Is the Institution AICTE approved? : Yes
- Furnish AICTE approval No. : F.NO. 765-66-212(E)/ET/99
- Type of Institution : Govt. funded/ Govt. aided/NIT
- Status of Institution : Autonomous Institute as declared by
State Government
- Name and Designation of Head of the Institution (Full time appointee) : Dr. Jaiprakash Bhamu (Principal)

1.2 Academic Information:

- Engineering UG and PG programmes offered in Academic year 2016-17:

S.No	Title of programmes	Level (UG, PG, Ph.D.)	Duration (Years)	Year of starting	AICTE sanctioned annual intake	Total student strength in all years of study
1	B.Tech. (ECE)	UG	4 YR	1999	95	342
2	B.Tech. (CSE)	UG	4 YR	1999	95	370
3	B.Tech. (Mech)	UG	4 YR	1999	63	253
4	B.Tech. (IT)	UG	4 YR	2002	63	213
5	B.Tech. (EE)	UG	4 YR	1999	63	245
6	B.Tech. (EI&C)	UG	4 YR	2003	63	196
7	B.Tech. (Mech - II shift)	UG	4 YR	2011	63	252
8	B.Tech. (EE - II Shift)	UG	4 YR	2013	63	251
9	B.Tech. (Civil)	UG	4 YR	2013	63	253
10	Software Engineering	PG	2 YR	2013	18	45
11	Thermal Engineering	PG	2 YR	2013	18	37

Dr.

12	Power System	PG	2 YR	2013	18	66
13	Computer Science & Engg.	PhD	3 YR	2016	--	02
14	Electrical Engg.	PhD	3 YR	2016	--	04
15	Mechanical Engg.	PhD	3 YR	2016	--	00

• **NBA Accreditation Status of UG and PG programmes as on 31st December 2016:**

Total no of programmes eligible for accreditation (at least one batch pass out):

No. of programmes accredited: NIL

No. of programmes applied for accreditation: 6

• **Status of Faculty Associated with Teaching Engineering Students (Regular & Contract) as on 31st December 2016:**

No. of Sanctioned Regular Posts	Present Status : Number in Position by Highest Qualification												Total Number of regular faculty in Position	Total Vacancies	Total Number of contract faculty in Position
	Doctoral Degree				Masters Degree				Bachelor Degree						
	Engineering Disciplines		Supporting Disciplines (Physics, Chemistry, Maths and English/ other languages)		Engineering Disciplines		Supporting Disciplines (Physics, Chemistry, Maths and English/ other languages)		Engineering Disciplines		Supporting Disciplines (Physics, Chemistry, Maths and English/ other languages)				
	R	C	R	C	R	C	R	C	R	C	R	C			
1	2	3	4	5	6	7	8	9	10	11	12	13	14= (2+4+6+8+ 10+12)	15=(1-14)	16= (3+5+7+9+ 11+13)
137	18	00	13	00	62	43	03	09	00	07	00	00	96	41	59

R=Regular, C=Contract

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2. INSTITUTIONAL DEVELOPMENT PROPOSAL (IDP)


(Implementation period: April 2017-March 2020)

2.1 Give the Executive Summary of the IDP (Max 2 pages)

Government Engineering College Bikaner established in the year 1999, is one of the premier institutions in the state, and has been given top ranking amongst engineering colleges in the state in the survey conducted by outlook magazine. The college is an autonomous institution of Government of Rajasthan & thus acquiring decision making authority to govern all aspects pertaining to administrative and financial matters of the Institution. Academic autonomy is being devised by state government in consultation with Rajasthan Technical University. As an autonomous institution, it has made rapid strides during the time to become the top ranking institution of the state. The institute is having well qualified faculty with excellent infrastructure with state of the art laboratories, instructional facilities, computational facilities, computer centre and library. The institute is also having its own consultancy cell, entrepreneurship development cell, examination cell, training and placement cell, incubation centre and centre for ethics for the all round development of institute, students and staff. The IDP of the college mainly focuses on imparting quality education to the students and make the students more employable

The institute has implemented TEQIP Phase II program successfully. The outcomes of the project have resulted in; i) an increase in pass percentage of UG/PG students, ii) starting of PhD research centre in institute in Electrical, Computer Science & Engineering and Mechanical Engineering, iii) increase in number of research publications by faculty, iv) initiate the process for institute - industry interaction, v) academic development of students by allowing them to visit institutes of national importance for participation in technical events, quiz etc., vi) strengthening of laboratories and infrastructure, vii) faculty upgradation through participation in academic and research activities throughout the country.

Our objective is to develop holistic approach for personality development of the students by all possible ways so that they can meet the new challenges of a dynamically-rapidly changing society. We will provide them the skills and attitudes for competitiveness in such an environment so that they can contribute effectively and efficiently in the respective professional career, besides offering sound technical knowledge through more industry linkages & involvement.



Our aim is to orient every activity towards infusing ethical values, team spirit, leadership quality, self-confidence, good environmental awareness and women empowerment to make the student capable to become a good citizen and contribute to the socioeconomic development of our motherland and the global society at large.

A detailed strategic plan has been proposed for meeting objectives:

- i) Creation of centers of excellence in the area of Mechanical, Electrical, Electronics and communication, and Electronics Instrumentation & Control Engineering by equipping it with the latest infrastructure facilities.
- ii) Scaling up PG program by introducing new, innovative and time-relevant courses keeping in view, the demand of industry.
- iii) Encourage innovative teaching practices; outcome based education, time relevant courses, and self propelled growth in research and development through participation and contribution in summer school, FDP, MCEP, International/National Conferences, Seminars, Symposiums, Workshops, and initiation of academic exchange programs among faculty and research scholars at post graduate and doctoral levels.
- iv) Expansion and modernization of existing infrastructure for UG, PG & Research Work (viz. laboratories, networking, smart classrooms etc.) and creation of a centralized computing and instrumentation facility with sophisticated equipments relevant to growth of different specializations.
- v) Development of centralized digital library facility for academic and research activities (e-books, journals etc.).
- vi) Planning for conducting remedial classes and finishing school for students.
- vii) To develop strategic plan for enhancing participatory management in academic, administrative and financial affairs.
- viii) To Implement Management Information System.
- ix) Implementing a well defined and time bound plan of cooperation with the networked institutions / industries and open up avenues for collaborative research with Institution of national importance.
- x) **A proactive effort for intensive interaction with industries through student training, faculty internships, collaborative consultations and contract research for mutual exchange of ideas and possible ways to find effective and economic solutions.**



- xi) To become a role-model in India in providing quality education keeping in tune with its long heritage.
- xii) To implement socially relevant projects for the benefit of SC/ST, OBC, minorities, BPL and physically handicapped.
- xiii) Increased revenue & consultancy

For implementation of the above action plan, a comprehensive budget is prepared. The total budget proposed is Rs. 10.00 Crore and more, for three years duration and details are as indicated below:

Financial Requirements

S.No.	Activities	Project Life Allocation (Lacs)
1. (Procurement) (6.0 Cr.)	Infrastructure improvements for teaching, training and learning through:	570.00
	(i) Modernization and strengthening of library (e-library) and increasing access to knowledge resources.	
	(ii) Modernization and strengthening of laboratories and establishment of new laboratories for existing UG, PG and Ph.D. program.	
	(iii) Establishment/Upgradation of Central and Departmental Computer Centers	
	(iv) Modernization of classrooms, Upgradation of Learning Resources (Smart board, Digital tutors, LCD projectors, audio-video conferencing facilities)	
	(v) Procurement of furniture to develop seminar and conference halls in each department, library, laboratories, class rooms	
	(vi) Purchasing of books and professional software's	
	(vii) Refurbishment (Minor Civil Works)	30.00
2. (Academic activities) (3.0 Cr.)	(i) Providing Teaching and Research Assistantships to increase enrolment in existing and new PG and Ph.D. programs in Engineering disciplines	80.00
	(ii) Enhancement of R&D and institutional consultancy activities	40.00

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	(iii) Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organizing/participation of faculty in workshops, seminars and conferences) for improved competence.	100.00
	(iv) Enhanced Interaction with Industry (Inviting experts from industries, visits)	40.00
	(v) Institutional management capacity enhancement	20.00
	(vi) Academic support for weak students under the aegis of Finishing School	20.00
3. (1.0 Cr.)	Incremental Operating Cost	100.00
Total		1000.00

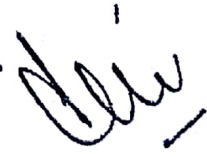
It is hoped that the TEQIP-III funding will enable in strengthening the institute & the desired outputs of improving teaching learning outcomes and employability of UG, PG and Ph.D.

2.2 Provide an action plan with timelines for: (not more than 1 page for each sub activity)

(a) Improving the learning outcomes of the students:

1. Faculty training (qualification upgradation, subject upgradation and research competence, pedagogical training, participation in conferences, seminars /workshops etc.)

The institute has organized a series of activities to train the faculty in their Subject knowledge under TEQIP –II plan at our institute and by allowing them to visit the IITs, IIMs, NITs, IIS'c, and other reputed organizations. We have conducted activities to identify present and future requirements in the context of Institutional Development. It is observed that there is a gap between the current and the desired individual and institutional performance. IDP is also focused on faculty development Initiatives which will enhance the quality of faculties thereby strengthening the academic structure of the institute on the basis of areas of specializations. Accordingly the faculties may be allowed to participate in various trainings in pedagogy, technical domain, management capacity development, research areas, upgradation of qualification. This leads to improved competency in teaching, learning and research. Also the faculty may be sponsored to attend conferences, seminars and workshops at India and abroad. Training needs are identified in following areas



- Subject / domain knowledge enhancement
- Basic and advanced pedagogy
- Attendance in activities such as workshops, seminars
- Improvement in faculty qualifications
- Improving research capabilities (patents and publications)

The table mentioned below indicates the number of expected faculty participation in various academic activities as mentioned above during each half year of the plan.

Period		Qualification upgradation	subject upgradation and research competence	pedagogical training	participation in conferences, seminars/ workshops
2017-18	I Half Year	2	15	20	20
	II Half Year	3	20	15	16
2018-19	III Half Year	3	16	13	18
	IV Half Year	4	14	16	15
2019-20	V Half Year	3	12	18	20
	VI Half Year	4	18	20	15

In this way the institution proposes to achieve their targets through a systematic and planned expenditure on various departments through the I.D.P. with participation and combined effort of major stakeholders like faculty, students, non teaching staff, and industry.

(Tentative expenditure, Rs. In Lacs)

S.No	Activities	2017-18	2018-19	2019-20
1.	Procurement			
	(i) Modernization and strengthening of library (e-liberary)	40.00	10.00	10.00
	(ii) Strengthening of new laboratories for new and existing PG program, and faculty research, etc.	70.00	70.00	60.00
	(iii) Upgradation of Central and Departmental Computer Centers	30.00	30.00	30.00
	(iv) Upgradation of learning resources	30.00	30.00	30.00
	(vi) Procurement of furniture	40.00	20.00	20.00
	(vi) Books and softwares	30.00	10.00	10.00
	(vii) Refurbishment (Minor Civil Works)	10.00	10.00	10.00



2.	Academic activities			
	(i) Providing Teaching and Research Assistantships to increase enrolment in existing and new PG and Ph.D. programs in Engineering disciplines	25.00	25.00	30.00
	(ii) Enhancement of R&D and institutional consultancy activities	15.00	15.00	10.00
	(iii) Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organizing/participation of faculty in workshops, seminars and conferences) for improved competence.	35.00	35.00	30.00
	(iv) Enhanced Interaction with Industry (Inviting experts from industries, visits)	15.00	15.00	10.00
	(v) Institutional management capacity enhancement	8.00	8.00	4.00
	(vi) Academic support for weak students under the aegis of Finishing School	8.00	8.00	4.00
3.	Incremental Operating Cost	---	----	100.00
	TOTAL	356.00	286.00	358.00

2. Staff training (technical and administrative staff).

The technical and administrative staff of an institution is considered as the backbone on which the burden of the performance of the institutes rests. Therefore, it is justified and mandatory that they have to be trained with the latest advancement in technology to improve their working efficiency.

The technical staff in laboratories will be trained by initiating sandwich /part time/full time training programs with various institutes and training agencies to train them in their functional areas of operation and routine maintenance. So, that they may perform all experiments with full confidence and impart knowledge to students and maintain the equipments for longer life. Also they may be allowed to upgrade their qualification.

The administrative and accounts staff also needs to be trained with modern office equipments, software, automation, maintaining the records etc.



3. Increasing capacity of UG, PG and Ph. D. education (increasing enrollment and starting new UG, PG and Ph. D. program).

Institute has UG program in 7 streams, PG program and research centre in 3 disciplines. The faculty is academically highly qualified and there is ample potential to expand research activities. We are encouraging faculty and UG- PG- Doctoral students to promote research in newly emerging frontier areas of science and engineering including multidisciplinary fields and also planning to start new/ latest UG courses, PG courses. We have strengthened the laboratories in departments and established a dedicated centralized well equipped computer centre to access the research materials worldwide, and proposed the e-library for research work (journals and books etc.). Hostel facility for post graduation and doctoral degrees will attract the girls to peruse higher studies in the college itself, thus giving impetus to research. The following objectives have been set to meet the target of increasing capacity of UG, PG and Ph. D. education.

- To offer Teaching Assistant-ships.
- To offer Research Assistant-ships.
- Motivate faculty to target at least one research project per faculty by the end of academic session.
- To encourage the researchers to take up challenging R & D activities in thrust areas of national importance.
- To assist the researchers in the commercialization of their innovation and research.
- Global Acceptance and recognition to faculties and research scholars.
- Technology transfer to Society and industry.
- To promote the utilization of innovations, inventions and research findings.
- To research and design experiments to provide new technologies or new uses for existing technologies that will lead to new products and product claims.
- To develop core research technologies that enables the development of new ideas in engineering and technology.
- Construction of girl's hostel in campus.

By meeting the above objectives, the expected outcome is to attract good quality students for post graduate education and research.



Expected results:

- Increased number of patents.
- Increased refereed Journal publications.
- Increased employability of UG, PG and Doctoral students.
- More number of entrepreneurs
- More technology transfer
- More R&D products
- More academic products
- Enhanced internal revenue generation through consultancy & testing.
- New technologies, innovative formulations, processes, products will be developed and will be commercialized to industries.
- Centre of Excellence
- Change of mindset
- Synergy between industry & institute
- Industry based R & D Projects

4. Investing in smart classrooms, campus Wi-Fi, and e-library etc.

For establishing the same we need to provide following items:-

S. No.	Particulars
1	Updation of Learning Resources: Smart board, Digital tutors fully automatic with computerized systems
2	LCD-projectors, Collar mic, slide changer, pointer with receivers and speakers
3	Procurement of furniture to upgrade seminar and conference halls in each department, central library, laboratories, smart class rooms.
4	Separate research lab with modern computing facilities for students
5	Conference and seminar halls with ultra modern facilities in each department
6	High speed Wi-Fi Campus and LAN facility in laboratories
7	Strengthening of e-library in Institute



5. Improving the academic performance of SC/ST/OBC/academically weak students:-

The college has a large proportion of SC, ST and OBC Candidates who come from an economically weaker section and have rural background. Moreover they are quite weak in terms of learning and confidence. To increase their intellectual capacity, we intend to give them english coaching to increase their proficiency in english. Personality development classes will also be started for the students to groom them and improve their personality for better placement prospects. Remedial classes for weak students will be carried out weekly. We also intend to start basic computer application operation course for students and start a computer lab to grant practical training to students in computers thus increasing their employability prospects in digital world.

Psychological counseling for all the students is to be made by faculty mentors of each semester once in a month to observe student performance. Regular observation of students is made in classrooms by faculty on their interaction in class, mid-term test performances and their personal problem. After first mid-term test, weak students may be found. After sorting out the weak students, some extra classes may be arranged as per the requirement of the student in different subjects by the concern faculties, and also we may provide them some extra books, notes, expert lectures, video lectures for their references. To ensure the improvement of students, finishing schools may be organized periodically. Students may be promoted for entrepreneurship through Incubation centre.

6. Instituting academic and non-academic reforms:

Academic reforms

An institution requires implementing academic and non academic reforms for the development and betterment to achieve the targets of quality, in addition to resource mobilization and increase in the accountability of the institution. In a world of today, education has to be necessarily linked with the practical utility in order to make it useful for the students in terms of spoken english, language classes and basic accounting skills in addition to a polished personality. The graduates of the institution in order to be absorbed in the industrial sector need to be professionally qualified in terms of computer proficiency. Prize may be given to meritorious students and students scoring highest marks in the different subjects to motivate them for better academic performances. Regular feedback is taken from the students about the course completed, quality of lectures, level of interaction etc. to monitor the faculty. Granting incentive to the



faculty & staff to conduct continuing education scheme, sponsored research programs etc. are another set of reforms to be introduced with utmost priority. Qualification and skill up-gradation of faculty and staff will be undertaken as a continuous program.

Non-academic Reforms

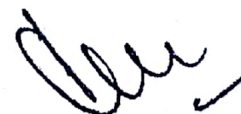
In this category following reforms are proposed to be introduced:-

Financial Autonomy through Block Grant funding of non-salary non-plan expenditures with authority to appropriate and re-appropriate; Retention of Tuition and other fees for ensuring sustainability of the reforms process; Authority to generate, retain and utilize Internally Generated Revenue (IRG) through different academic and non academic activities; Establishment of Four Funds i.e. corpus, staff development, maintenance and depreciation Funds to create financial strength of the institutes to sustain autonomy. Delegation of power in decision making by all senior institutional functionaries with accountability, and filling up of teaching and non teaching vacancies.

We also intend to use MIS based teaching learning process in the near future. Green audit and energy audit is also proposed for the future as parts of reforms planned to be implemented.

Implementation of institutional reforms

Academic & non-academic reforms	Activities to be undertaken in brief
Implementation of Curricular Reforms	Strengthening six months industry internship
	2 weeks social internship
	Implementation of PEER teaching
	Adopting an institute for mentoring
	Strengthening incubation activities
	Promoting digital learning using MOOCS, Flip teaching, etc
	Establishing center of excellence
	Teaching assistantships (TA)
	Research assistantships (RA)
	Academic support to Weaker students
	Online quality circles
	Open house for students



Generation, retention and utilization of revenue generated through variety of activities	Organizing national and international conferences
	Organizing STTP
	Organization of skill enhancement programs
Delegation of decision making powers to senior functionaries with accountability	Adopting good governance practices
	Adding stakeholders, students on BOG, academic council
	Staff student portal
Improved student performance evaluation	Open book exam for some courses
	Internal and external academic audit
	Best student award
	Gold medals and silver medals
	Adopting outcome based education
	Program exit survey
	Best innovation award competition
	R-idea competition
Incentives to faculty	Patent filing
	Deputing faculty members for training at IITs, IIMs
	Qualification enhancement of faculty members
	Management capacity development programs
	Refereed journal publications
Obtaining Accreditation	NBA accreditation

(b) Improving employability of the students

7. Increasing interaction with industry (What are the industries located in the vicinity,

Industries in vicinity of Bikaner

The following industries are located in the vicinity of Bikaner:

Software- Ranosys & SunArc Technologies

Automobile- Bikaner Motors

Power Plants- Barsinghsar Thermal Power Plant, Guda Thermal Power Plant

Food Processing- BIKAJI

The institute plans to have collaboration with industries through:

- Students visit to industries and educational tours.
- To organize workshop for students with industry participation.
- To make the students aware about future technology, through interaction of students - faculty- industry executives.
- To promote industry -institute tie-ups for training.

What role of industry is perceived for the institute?

- To bring the real challenges of industry into the notice of academicians
- To invite the suggestions on cost cutting, waste management and HR issues.
- To train the students in technical and soft skills for enhancing their employment.
- To get acquainted for the future technology from researchers.

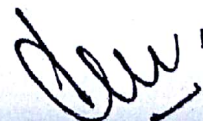
8. Student career counseling and placement

- Inviting prominent / successful person of different segments.
- Invited expert lectures of renowned experts from industry/ institutes.
- Reviving liaisons with previous recruiters.
- Personal visit and presentation to potential recruiters.
- Display of all kind of job platforms through digital/social media.
- To conduct mock test and interviews.
- Encourages youth in various fields for the purpose of self employment.
- Involving assessment agencies and alumni on a continual basis to support the students.

(c) Increasing faculty productivity and motivation

9. Sponsored research, consultancy and other revenue generating activities.

The institution strives towards the attainment of better performance through the mode of constant research. Institute is encouraging faculties to participate in externally funded sponsored research and development projects from agencies like AICTE, ISRO, DRDO, MNRE & DoITe., and consultancy projects from industries. Institute is already having Doctoral degree (Ph.D.) programs in three departments namely; Mechanical, Electrical and Computer Science & Engineering. In addition to this, the institute is encouraging master students to join Ph. D. program to promote research. The institute has targeted to get at least one sponsored research project in an academic year by each department. The consultancy services may be provided to small and medium scale industries in



the vicinity of Bikaner city involved in design, development and marketing of engineering products satisfying local consumer needs. The well established departments may also Organize Skill development Programs for industries.

Institute has a NABL accredited Ceramic Electrical Research and Development Centre (CERDC), an autonomous institution of Government of Rajasthan to generate revenue by accessing the quality of ceramic Raw Material, produce the ceramic wares as per specification, meet the technical requirement of the Products and control the cost of products and solve the problems arise during production. CERDC also provide the certification of the ceramics raw materials & products quality as per need of the ceramics industries and user respectively.

The skill development and incubation centre at the institute is working to support the successful development of entrepreneurial companies through an array of industry support resources and services. This is also an attempt to bring academia and industry closer to each other by providing students and faculty a platform to commercialize their research, and other technology based business ideas. The institute has also signed a MOU with TCS for conducting the National/State level examination.

All these activities at the institute will raise the fund for the sustainable development of the institute and to carry out the project activities in future.

2.3 Provide the action plan with timelines for

1. Obtaining autonomous institution status from UGC:

- The institution has initiated in this regards and discussed with the Technical Education Department, Government of Rajasthan to provide the academic autonomy.

2. Improving the NBA accreditation status

- Fees have been submitted for accreditation of six academic departments namely; ECE, ME, EE, CSE, IT, and EIC, and process has been initiated to prepare accordingly.
- SAR Tier- II form for NBA is under progress, soon is likely to be submitted for respective departments by institute to AICTE.

2.4 Describe the following in brief:

1. Is any enhanced assistance/mentoring that the institution is looking forward from its

ATU:

- The institution is following the curriculum and academic calendar decided by Rajasthan Technical University (RTU) Kota. But, there is a need to redesign the curriculum of various



engineering streams based on the needs and expectations of the stake holders - Industry, Society, Alumni.

- Inviting industry representatives/experts in the formation of syllabus to keep pace with the emerging trends in technology.
- There should be the participation from affiliating institutions in Board of Studies of Technical University to discuss the issues.

2. Does your BoG need strengthening, if yes, then how?

Yes, there is a need of strengthening BoG. Our mentor of TEQIP-II should be one of the BoG members. So, his expertise and experience can be utilized for better execution of the next phase of TEQIP.

3. Is there an ERP/MIS system existing, if yes, then any improvement, modification suggested.

The institute is sincerely working in the direction to implement the effective ERP/MIS system.

4. Is there any mechanism i.e. special classes being conducted in the institution for improving the GATE score?

Yes, we do have a mechanism for improving the GATE score:

- More insights to the subject to prepare the students for GATE exams and other competitive exams may be provided by conducting the expert lectures from professionals and faculties from institutions of national importance.
- Emphasis is given on fundamental and concept base learning and students are advised to solve more and more problems for practice and better understanding of the subject.
- Previous year questions are discussed and solved by the faculty classes.
- Time bound test/ quizzes are conducted in their activity classes to evaluate their performance.
- Some standard study material (like reference & competitive examination books, IES/GATE notes of professional institutes) is made available to the aspirants in library.
- Mentoring is also carried out by faculty to motivate the students for competitive exams.



2.5 Provide a Twining Plan with a high performing institute with the objective of capacity building knowledge transfer and developing long term strategic partnerships.

The institute is planning to initiate following plans:

- A tie up with IIT Jodhpur looking into the aspect of solar energy and various engineering streams. The experts may be called from IIT's/ NIT's/Central Universities and institutes of national importance the areas for knowledge transfer where the institute may initiate for collaborative research work, staff and student activities.
- The institution envisages improving interaction with industry for effective training of staff and students, to undertake testing and consulting works for internal revenue generation, organizing finishing school for improving the overall personality. Faculty may trained in industries on emerging areas of engineering & technology
- To tie-up with industries for effective training of students for reduction in the gap between academic and skill and to undertake testing and consultancy works for internal revenue generation. Identify student project work in industries and encourage the Industry to organize in-house training programs
- The institution proposes to update the knowledge in the emerging areas of the Staff & students. Need based training will be given to staff & students with the help of experts from the respective field / industry. Finishing School concept will be implemented. This will improve the transition rate & employability of socially and academically weak students. This will also improve the knowledge of Staff.

2.6 Is there any difficulty in recruitment and selection of high quality faculty:-

There is no difficulty in recruitment of high quality faculty as the recruitment procedure is devised under the guidelines of Technical Education department, Government of Rajasthan. The selection procedure includes written test followed by interview by a panel of experts as per AICTE norms.

2.7 Give an action plan for ensuring that the project activities would be sustained after the end of the project.

The Institutional development plan will provide a base on which the sustained and continuous development of the institution will thrive. As the basic infrastructure is developed,



faculty is trained and qualified, labs and classrooms are established and furnished, and the institute will automatically attract a larger no of students and with job oriented the students become more employable. Increasing the intake of students will leads to revenue generation and ensuring the continued development of the institution. The project activity would be sustained after the end of project from the funds generated by the consultancies, research and development activities and testing carried out by the institute, as well as 8% of the fund initially allocated for maintenance and smooth functioning of equipments. Institute is planning to install solar panels in the premises to utilize the solar energy and to cut off the electricity expenses. The saving may be utilized for the sustainable fund management.

Moreover, the bond between industry, entrepreneurs, alumni, society and institute will be strengthened during the project period and once the inter dependability is increased the activities will keep on going.

2.8 Describe briefly the participation of departments/faculty/students in the IDP preparation.

The Institutional developing plan (IDP) is step through which the institutions can achieve the targets of access, equity and quality education. It is a vision for the future in which all the stakeholders- the different departments, students, parents are actively involved in making the plan. In our institution, the proposals and plans of development and funding requirements were invited from different departments. In this regards, the head of the institution has rigorously conducted several meetings with the head of departments and academic coordinators to get suggestions. The heads were also advised to discuss the various issues among their faculty members and students for better implementation of the plan. The suggestions are compiled together and then discussed to arrive at a consensus regarding the funding needs of the institution. In this way a complied plan for the institution was chalked out reflecting the vision of the college for the future.

