REPORT OF THE EXPERT COMMITTEE CONSTITUTED BY THE UNIVERSITY GRANTS COMMISSION TO CONSIDER THE PROPOSAL OF ST. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH, AVADI, CHENNAI FOR GRANT OF DEEMED TO BE UNIVERSITY STATUS UNDER SECTION 3 OF THE UGC ACT.

The University Grants Commission received a proposal from Ministry of Human Resource Development for grant of Deemed to be University status to St. Peter's Institute of Higher Education and Research, Avadi, Chennai-600 054.

With a view to examine the proposal and to make an on the spot assessment and evaluation of the academic programmes, infrastructural facilities and other aspects of the institution, the Chairman, University Grants Commission constituted an Expert Committee comprising of the following members:

1. Prof. Ramamurthy Naidu
   Member, UGC  ... Convener

2. Prof. P.C. Upadhyaya
   Ex-Registrar & Prof. of Mechanical Engineering, BHU
   and presently CM, Chhattisgarh Private Universities
   Regulatory Commission, Raipur

3. Prof. K.N. Tripathi
   Prof. of Electronics, University of Delhi, Delhi

4. Prof. Sarvesh Chandra
   Prof. of Civil Engineering, IIT, Kanpur

5. Prof. P.K.J. Mohapatra
   Prof. of Industrial Engineering & Management
   IIT, Kharagpur

6. Prof. R.N.K. Bamezai
   Dean, School of Life Sciences
   JNU, New Delhi

7. Prof. E. Bharucha
   Department of Environmental Sciences
   Bharati Vidyapeeth, Pune
Dr. (Mrs.) Renu Batra, Joint Secretary was nominated as the coordinator of this Expert Committee visit.

The Committee visited the Institute on 29th and 30th March, 2006. Prof. E. Bharucha could not join the Committee. At the outset, Dr. (Mrs.) T. Bhanumathi, Chairperson and Dr. M. Thambidurai, Member of the Trust welcomed the members. A brief presentation was given by Dr. N.K. Baluchami, Director (R&D) highlighting the ongoing academic programmes and future plans of the Institute and the need of the Institute to get the Deemed to be University Status.

The Committee went around the campus of the Institute and visited class rooms, various laboratories, central as well as departmental libraries, infrastructural facilities, hostels and students' amenities.

The Committee also had an exclusive interaction session with faculty members, a group of students and administrative staff of the Institute.

After thorough inspection of the infrastructural facilities, study of the documents furnished by the Institute and the discussions with the Management, the Committee makes the following observations and recommendations:

The Institute

St. Peter's Engineering College has been established by St. Joseph Educational Trust in the year 1993 at the outskirts of Chennai City with the objective of promoting Engineering and Technology Education.

For the purpose of applying for the Deemed to be University Status for St. Peter's Engineering College, a new trust has been created in the name of "St. Peter's Institute of Higher Education and Research" which is the name of the proposed Deemed to be University.

The Institute is located in Paruthipattu revenue village of Poonamalle taluk in Thiruvallur district where Scheduled Castes and most backward classes predominantly populate. This place comes under Avadi Municipality, one of the
major suburbs of Chennai City. It is well connected by road and suburban train routes.

Aims and Objectives

i) To provide for instruction and training in such branches of learning as it may deem fit.

ii) To provide for research and for the advancement and dissemination of knowledge.

iii) To undertake extramural studies, extension programmes and field outreach activities to contribute to the development of society.

iv) To organize, implement and extend educational services in rural and backward areas and extend education for rural women.

v) To organize meetings, seminars, conferences, discussions in the field of education and rural development and to bring out booklets, documents, publications.

vi) To engage in teaching, research and extension activities in the field of engineering, management studies and in other related areas.

vii) To help the peasants and artisans to upgrade their skills and tools with technological support.

viii) To strengthen the Gandhian approach to rural development with technological support.

ix) To promote technical and technological skills among rural youth to maintain and repair a wide range of electrical and electronic items and mechanical tools used in the residences, the agricultural field and small industrial units in rural places.

x) To promote entrepreneurship among the educated rural youth.

xi) To promote modern scientific and technological approach to traditional tools, technology and practices in rural areas.
xii) To do all such other acts and things as may be necessary or desirable to further the objects of the Institute.

**Infrastructure**

The institute campus is spread over 32.26 acres of land with a built-up area of 66,875 sq.m as detailed below:

**Built-Up Area available**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Building with RCC Roof (Sq. M.)</th>
<th>Building with Sheet Roof (if suitable for Ednl. Institution) (Sq. M.)</th>
<th>Total Area Available (Sq. M.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Area (Carpet Area)</td>
<td>12365</td>
<td>3754</td>
<td>16119</td>
</tr>
<tr>
<td>Administrative Area (Carpet Area)</td>
<td>2736</td>
<td>-</td>
<td>2736</td>
</tr>
<tr>
<td>Amenities Area (Carpet Area)</td>
<td>8608</td>
<td>1345</td>
<td>9953</td>
</tr>
<tr>
<td>Circulation &amp; Other Area</td>
<td>12988</td>
<td>-</td>
<td>12988</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>36697</strong></td>
<td><strong>5099</strong></td>
<td><strong>41796</strong></td>
</tr>
<tr>
<td>Hostel</td>
<td>11963</td>
<td></td>
<td>11963</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>48660</strong></td>
<td><strong>5099</strong></td>
<td><strong>53759</strong></td>
</tr>
</tbody>
</table>

The institute is provided with 72 lecture halls, five drawing halls, 8 well maintained computer labs, 2 chemistry labs, 2 physics labs and well equipped 27 departmental libraries.

The built up area has four blocks viz. Main Block, Mechanical Engineering Block, Bio-Technology Block & PG Block

a) **Main Block**: With a total built up area of about 13000 sq.m. it houses the departments of:
   - Computer Science & Engineering
   - Electronics and Communication Engineering
• Electronics and Instrumentation Engineering  
• Information Technology  
• It also houses laboratories of all the above departments besides the laboratories of Physics and Chemistry laboratories.  
• In addition, Administrative Office, Central Library, Bank, Students’ stores are also located in this block.

b) **Mechanical Engineering Block**: It’s total built up area is 5,200 sq.m. and houses the departments of  
• Mechanical Engineering  
• Production Engineering  
• Civil Engineering  
• Laboratories for welding, fitting, plumbing practicals and basic workshop buildings are annexed to this block.

c) **Bio-technology Block**: In a total built up area is 5,250 sq.m. it houses the departments of  
• Bio-technology  
• Chemical Engineering  
• Electrical and Electronics Engineering  
• Mechanical Engineering  
• Laboratories for all the above departments.  
• It also houses the Electrical machines lab, Electrical Engineering practices Lab, Physical Chemistry Lab, Technical Analysis Lab, Heat Transfer Lab and Mechanical Operations Lab.

d) **PG Block**: With a built up area of 5200 sq.m. it houses the  
• MBA  
• MCA  
• M.Sc. (IT)  
• M.Sc.(CT)
• It also houses Departmental Libraries, Computer Labs and a Group Discussion Hall.

The Institute gets power supply of 250 KVA HT and has 2 generators of 125 KVA. For water supply on the campus, there are 10 bore wells and 1 open well.

Departments are located in three different blocks each of which has well equipped conference hall with capacity of around 300.

The institute is provided with two (2) HOSTELS – one for boys with 164 rooms (422 capacity) and one for girls with 156 rooms (420 capacity), having well maintained dining halls. Further, the hostels are strengthened by having a Library facility, visitors rooms, sick room, doctor’s consulting rooms with phone facility. Facilities for indoor games are also provided.

A number of central amenities like Bank, Canteen, Health Centre, Language Lab, STD/PCO, Open Air Theatre, Stores, Women Rest Rooms, Reprographic Facilities exist in the institute premises. The management has also made arrangements for transportation facilities for Students as well as Faculties.

**Guest House / Staff Quarters**

Guest house with the capacity of 50 rooms are in the final stage of completion and would be ready by June, 2006. The management informed that the process of getting the staff quarters constructed has already been initiated where some 206 staff quarters are expected to come up. However, a stopgap arrangement has been made for the faculty members by providing leased accommodation(50 houses).

The Programmes offered by the Institute have been approved by All India Council for Technical Education (AICTE) and were earlier affiliated to the University of Madras. Presently, they are affiliated to Anna University as per the amendments of the Government of Tamilnadu in the Acts of the Universities in Tamilnadu from the year 2001. NBA has accredited 5 UG Engineering Programmes and one MBA programme offered by the Institute. Further, process of getting accreditation for 4 more courses had already been started and visit of the Expert Committee from NBA is scheduled in April, 2006. The proposal for accreditation of eligible PG Programmes has already been submitted to the AICTE.
ACADEMIC PROGRAMMES OFFERED

The Institute is offering the following UG and PG Programmes:

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of the Course</th>
<th>Year of Introduction</th>
<th>Sanctioned intake for the year 2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>B.E Computer Science and Engineering</td>
<td>1993-94</td>
<td>120</td>
</tr>
<tr>
<td>2.</td>
<td>B.E Electronics and Communication Engineering</td>
<td>1993-94</td>
<td>120</td>
</tr>
<tr>
<td>3.</td>
<td>B.E. Electronics and Instrumentation Engineering</td>
<td>1995-96</td>
<td>120</td>
</tr>
<tr>
<td>4.</td>
<td>B.E Electrical and Electronics Engineering</td>
<td>1993-94</td>
<td>60</td>
</tr>
<tr>
<td>5.</td>
<td>B.E Mechanical Engineering</td>
<td>1993-94</td>
<td>120</td>
</tr>
<tr>
<td>6.</td>
<td>B.E Production Engineering</td>
<td>1993-94</td>
<td>40</td>
</tr>
<tr>
<td>7.</td>
<td>B.E Civil Engineering</td>
<td>2002-03</td>
<td>60</td>
</tr>
<tr>
<td>8.</td>
<td>B.E Bio-Medical Engineering</td>
<td>2005-06</td>
<td>60</td>
</tr>
<tr>
<td>10.</td>
<td>B.Tech. Biotechnology</td>
<td>2001-02</td>
<td>60</td>
</tr>
<tr>
<td>12.</td>
<td>MBA</td>
<td>1994-95</td>
<td>90</td>
</tr>
<tr>
<td>13.</td>
<td>MCA</td>
<td>1995-96</td>
<td>60</td>
</tr>
<tr>
<td>14.</td>
<td>M.Sc C&amp;T</td>
<td>2001-02</td>
<td>25</td>
</tr>
<tr>
<td>15.</td>
<td>M.Sc IT</td>
<td>2001-02</td>
<td>25</td>
</tr>
<tr>
<td>17.</td>
<td>M.E CAD / CAM</td>
<td>2004-05</td>
<td>18</td>
</tr>
<tr>
<td>18.</td>
<td>M.E Applied Electronics</td>
<td>2005-06</td>
<td>18</td>
</tr>
<tr>
<td>20.</td>
<td>M.E Instrumentation Control</td>
<td>2005-06</td>
<td>18</td>
</tr>
</tbody>
</table>

All the above courses are affiliated to Anna University and are approved by AICTE.
The institute appeared to have its quality strength and commitment especially in the area of teaching which is reflected through consistent excellent results (above 90%) over the last five years. In the year 2005 it has been ranked as 4th amongst more than 200 Institutions that are affiliated to Anna University.

**Faculty**

- There are 235 faculty members (45-Professors; 52-Assistant Professors; and 138 Lecturers) in position besides 1 Physical Education Directors with 2 supporting staff. 1 Librarian with 6 supporting staff.
- All the faculty members have the required essential qualification for the posts they have been appointed for.
- Out of 235 faculty members 51 are having Ph.D. degrees, 90 M.E./M.Tech., 53 M.Sc./M.Phil, 15 MCA, 3 MBBS/MD, 9 MBA and 24 B.E./B.Tech.
- Some faculty members are enrolled for their Ph.D. degrees.
- Four faculty members have been recognized by the Anna University as research supervisors for guiding Ph.D. students.
- Presently, 24 faculty members are pursuing Ph.D. degrees and 26 are pursuing ME/M.Tech./MS/MBA programmes.
- For the faculty development institute encourages teachers to go for QIP, study leave, summer & winter schools and for attending for seminars and symposia, etc.

**Computational Facilities**

They have sufficient number of computers with advanced software packages. All the computers are connected through LAN and are backed by powerful servers. For internet connectivity 2 MBPS line has recently been procured.
Brief Profiles of the Departments

A. Computer Science & Engineering
   Established in 1993. The present intake of students is 90. It has following laboratories:
   i) Computer Practice Lab
   ii) Data Structures Lab
   iii) Object Oriented Programming Lab
   iv) Database Management and Systems Lab
   v) System Software Lab
   vi) Operating Systems Lab
   vii) Compiler Lab
   viii) Networking Lab
   ix) Internet Programming Lab
   x) Software Development Lab

B. Electronics & Communication Engineering
   Established in 1993 with the present intake of 120 students. It has following laboratories:
   i) Communication Engineering Lab
   ii) RF Lab
   iii) Microwave & Optical Communication Lab
   iv) Digital Signal Processing Lab
   v) Electron Devices and Circuits Lab

C. Electrical & Electronics Engineering
   Established in 1993 with the present intake of 60 students. It has following laboratories:
   i) Electrical Machines Lab
   ii) Power Electronics Lab
   iii) Control Systems Lab
   iv) Electrical Circuits Lab
v) Measurements and Instrumentation Lab
vi) Microprocessor Lab
vii) Electrical Simulation Lab

D. Electronics & Instrumentation Engineering
Established in 1995 with the present intake of 120 students. It has following laboratories:
i) Analog and Digital Lab
ii) Transducer Lab
iii) Electrical and Electronics Measurement Lab
iv) Industrial Instrumentation Lab
v) Process Control Lab
vi) Computer Control Lab
vii) Design Project Lab

E. Mechanical Engineering
Established in 1993 with the present intake of 120 students. It has following laboratories:
i) Basic Workshop
ii) Dynamics Laboratory
iii) Thermal Engineering Laboratory
iv) CAD Lab
v) Machine shop
vi) Metrology lab

F. Production Engineering
Established in 1993 with the present intake of 40 students. It has following laboratories:
i) Special Machine Shop
ii) Metallurgy Lab
iii) Metrology Lab
iv) CAD Lab
v) CAM Lab
G. Information Technology
Established in 1998 with the present intake of 60 students. It has following laboratories:
i) Programming Lab
ii) RDBSM Lab
iii) CASE tools Lab
iv) Multimedia Lab
v) Internet Lab
vi) Linux Lab
vii) Networking Lab
viii) Microprocessor Emulation Lab

H. Chemical Engineering
Established in 1998 with the present intake of 60 students. It has following laboratories:
i) Mechanical Operation Lab
ii) Mass Transfer Lab
iii) Technical Analysis Lab
iv) Physical Chemistry Lab
v) Heat Transfer Lab
vi) Chemical Reaction Engg. Lab
vii) Process Dynamics Instrumentation and Control Lab
viii) Organic Chemistry Lab

I. Bio-technology
Established in 2001 with the present intake of 60 students. It has following laboratories:
i) Biochemistry Lab
ii) Molecular Biology
iii) Genetic Engineering
iv) Bioprocess Lab
v) Microbiology Lab
vi) Instrumental Methods Lab

The department of Bio-technology has some very sophisticated equipments sufficient not only for the teaching of the students but also for research activities in some of the areas of modern Bio-technology.

J. Civil Engineering

Established in 2002 with the present intake of 60 students. It has following laboratories:

i) Surveying Lab
ii) Fluid Mechanics & Machinery Lab
iii) Concrete Lab
iv) Engineering materials Lab
v) Strength of Materials Lab
vi) Soil Mechanics Lab
vii) CAD Lab

K. Management Studies

With an intake of 120 students. It has the state-of-art computer lab with a specialized software set up which includes the latest versions of MS-Office, ORACLE, MS-Project, Tally, TORA, SPSS packages, etc.

Apart from above departments, Institute also has supplementary departments like Department of Physics, Chemistry and Humanities.

Research & Development (R&D) Activities

Senior faculty members of the departments having long research experience and publications have motivated the younger faculty for research. It is reflected through more than 200 publications of their faculty members. Some faculty members have already submitted their research proposals to various funding agencies like DST, AICTE, DBT and TIFAC, etc., which are under consideration.
The management of the Institute has also been providing seed money for some of the researches undertaken by the faculty members.

The institute has developed some linkages with nearby industries and undertaken projects sponsored by them.

**Library**

The College has a network of Libraries in the campus. It has a Central Library, Postgraduate Library and Department Libraries of Mechanical, Production, CSE, IT, E.E.E, E.C.E, E.I.E, Chemical, Civil, Management Studies & also Book Bank section for SC/ST students and Hostel Libraries.

The College Library contains 17028 titles and 49536 volumes of books. The Library subscribes to 163 Journals (National Journals 99 & International Journals 64), and 2407 Books in Book Bank section.

The library services are automated with the use of "AutoLib".

The College Library is an institutional member of the following external Libraries DELNET, IIT Chennai, and Anna University. We have also placed order to subscribe Online E-Journals of IEEE/IEE, & ASME through INDEST-AICTE Consortium.
Innovative Activities

A variety of incentives and awards have been introduced to encourage innovation in teaching, and teachers are rewarded in the annual day function. Lectures are supplemented with multi-media demonstration classes, hand-on-experience, field visits and special coaching for the needy. The institute encourages training of its teachers on a regular basis and extends its educational programs to raise the awareness in the neighbouring areas.

Training & Placement

The institute has two training and placement officers. On-campus placement of students is nearly 30 per cent. However, a good percentage of students get placed through off-campus interviews.

Extra-curricular and Extension Activities:

The institute provides good facilities for sports, outdoor and indoor games and encourages students to participate in various inter-collegiate competitions and they have brought laurels to the institution.

To encourage participation to sports and games competition is conducted in various events and cups and medals are awarded during the students Sports day.

NSS and Youth Red Cross Units.

The institution is very active in the extension activities such as Blood donation, Eye camp, Health camp and Consumer awareness, etc. It also conducts some programmes on entrepreneurship courses especially for women.
Finances:

The Institute is self-financing and has a sound financial basis with an annual budget of Rs.10,78,62,759/- and a surplus balance of Rs.5,28,71,915/- over the income & expenditure statement for the year ended 2005-06.

Compliance of other conditions laid down under UGC guidelines

1. The Institution is registered as a Public Charitable Trust and is registered vide No.1512/05 dated 01/12/2005.

2. The Institution has submitted a document issued by Shri V. Raghupathi, Government Pleader, High Court, Madras, to the effect that “the Deed of Amendment dated 01.12.2005 has been lawfully executed and registered on 28.03.2006 as document no.615 of 2006 on the file of Sub-Registrar, Anna Nagar, Chennai” and also to the effect that “the Trust in the new name viz. St. Peter’s Institute of Higher Education and Research has full ownership over the lands acquired and buildings constructed by the Trust when its name was St.Joseph Education Trust”.

3. The institution has also submitted Fixed Deposit Receipts (14 Nos.) issued in the name of St. Peter’s Institute of Higher Education and Research for a sum of Rs.5,00,00,000/- towards Corpus Fund.

4. The Institute has submitted a copy of the revised MoA as per the UGC model MoA.

Suggestions

1. Research activities need more attention and the faculty members should obtain independent projects from different funding agencies.

2. Optimal utilization of sophisticated equipments in the department of Biotechnology should be insured.

3. MBA computer laboratories should be equipped with Simulation, Optimization and Gaming software packages.
4. For the optimal utilization of 2 MBPS connectivity, it is suggested that faculty members should be provided with PCs with connectivity in their office.

5. Engineering graduates should routinely visit neighbouring villages to provide helping hand in solving their problems such as rectification of defective hand pumps, providing guidance in minimizing expenditure in building houses, promoting technical skills and environmental education of rural youth.

**Recommendations**

The Management of St. Peter's Institute of Higher Education and Research has established an adequate infrastructure for a variety of disciplines in Engineering, IT, Management, Bio-technology and related areas of Science and Technology and has been able to lay a clear-cut emphasise on the extension activities in these disciplines for the benefit of the community in the neighbouring areas. Such an existence in a rural setting within an under privileged area with an aim to disseminate knowledge and carry out extension programmes and outfield research qualifies this institution as a unique in this part of the country and needs to be encouraged.

The vision of the Management, which is socially relevant, its concern for quality and dedicated efforts to provide the much required physical infrastructure and caring atmosphere are commendable. In view of the details given above the Committee is satisfied that the initiative taken by St. Peter's Institute of Higher Education and Research should be encouraged and the Committee is also convinced that the Institute is poised for real development. It has the atmosphere, potential, infrastructure and the ambience for an excellent centre of higher technical professional education. **The Committee, therefore, recommends to the UGC that the St. Peter's Institute of Higher Education and Research Institute may be conferred the Deemed to be University Status.**
The Committee places on record its appreciation for the cooperation and assistance extended by the Chairperson, Principal and other Faculty Members of the Institute during the visit of the Committee.

(Prof. Ramamurthy Naidu)

(Prof. Sarvesh Chandra)

(Prof. P.K.J. Mohapatra)

(Prof. P.C. Upadhyaya)

(Prof. R.N.K. Bamezai)

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