Pro Forma of Annual Report
For the Academic Year (2014-2015)
Loyola College (Autonomous), Chennai -34

1. Name of the Department  
   \[ \text{STATISTICS} \]

2. Total Number of Staff  
   \[ \begin{array}{cc}
   \text{(i) Aided} & 8 \\
   \text{(ii) Management} & 4 \\
   \end{array} \]

3. Conferences/Seminars/Workshops/Symposia & Guest Lecturers/Endowment Lecturers organised by the Department

   i. Conferences and Symposia –nil–

   \[
   \begin{array}{|c|c|c|c|}
   \hline
   \text{Particulars} & \text{Total No. of prog.} & \text{Sponsoring Agent} & \text{Title/Theme} \\
   \hline
   \text{International}  &  &  &  \\
   \text{National} &  &  &  \\
   \text{State Level} &  &  &  \\
   \text{Institutional Level} &  &  &  \\
   \hline
   \end{array}
   \]

   ii. Workshop

   \[
   \begin{array}{|c|c|c|c|}
   \hline
   \text{Particulars} & \text{Total No. of prog.} & \text{Sponsoring Agent} & \text{Title/Theme} \\
   \hline
   \text{International}  & -  &  &  \\
   \text{National}  & -  &  &  \\
   \text{State Level}  & -  &  &  \\
   \text{Institutional Level}  & 2  &  & \text{ACADEMIC BRIDGE PROGRAMME IN SPSS} \\
   \hline
   \end{array}
   \]

*Details Attached

iii. Guest/Endowment Lecturers –nil

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Particulars} & \text{Total No. of prog.} & \text{Sponsoring Agent} & \text{Title/Theme} \\
\hline
\text{International}  & -  &  &  \\
\hline
\end{array}
\]
4. Achievements of the Department:

(i)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Details of Achievements</th>
<th>Name of the Achiever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Achievements</td>
<td></td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.</td>
</tr>
</tbody>
</table>

(ii) No. of collaborations

<table>
<thead>
<tr>
<th>International</th>
<th>National</th>
<th>Any other</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

at the department Level.

(iii) No. of linkages created with industries and institutions during this year

<table>
<thead>
<tr>
<th>for Internship</th>
<th>for Consultancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Kindly Provide supporting documents*

5. Faculty Participation in Conferences, Workshop and Symposia

<table>
<thead>
<tr>
<th>Particulars</th>
<th>International</th>
<th>National</th>
<th>State Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Faculties Attended</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Papers Presented</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Major/Minor Research Projects list attached

(i) Details regarding major projects
### 2. Details regarding minor projects

<table>
<thead>
<tr>
<th>Applied</th>
<th>Sanctioned</th>
<th>Ongoing</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Projects</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Outlay in Rs. Lakhs</td>
<td>6,10,000</td>
<td>6,10,000</td>
<td></td>
</tr>
</tbody>
</table>

Enclose supporting documents for major/minor projects*

### (iii) Research funds sanctioned and received during the year 2014-15 from various funding agencies, industry and other organisations - nil-

<table>
<thead>
<tr>
<th>Nature of the Project</th>
<th>Duration Year</th>
<th>Name of the funding Agency</th>
<th>Total grant sanctioned</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdisciplinary Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry sponsored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projects sponsored by the University/ College</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students research projects <em>(other than compulsory by the University)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any other(Specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 7. Details on Research Publications

#### (i)

<table>
<thead>
<tr>
<th>International</th>
<th>National</th>
<th>Others</th>
<th>Details of Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Range</td>
</tr>
<tr>
<td>Peer Review Journals</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Peer Review Journals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-Journals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference proceedings</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### (ii) No. of patents received this year - nil
(iii) No. of faculty from the department who are Ph. D. Guides 5

No. of faculty who obtained Ph.D guide ship during the year 1

Ph.D. Awarded during the Year 1

8. No. of books published -nil-

ii) Chapters in Edited Books  

Kindly Provide supporting documents on books published*

9. Number of faculty served as experts, chairpersons and resource persons: 9

Kindly Provide supporting documents*

10. No. of staff who attended orientation and refresher courses

Orientation  
Refresher 1

11. No. of research awards/ recognitions received by faculty and research fellows of the department in the year: -nil-

<table>
<thead>
<tr>
<th>Awards</th>
<th>Title of the award</th>
</tr>
</thead>
<tbody>
<tr>
<td>International</td>
<td></td>
</tr>
<tr>
<td>National</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>University</td>
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<td>----------------</td>
</tr>
<tr>
<td>District</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td></td>
</tr>
<tr>
<td>Any other</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

*kindly attach supporting documents.*

Signature of the HOD
INAUGURATION OF LOYOLA STATISTICS ASSOCIATION

The Inauguration of the Loyola Statistics Association for the academic year 2014 – 15 was held on August 4th 2014.

The Chief guest Dr. S. Venkatraman, Vice president, India Cements inaugurated the association activities by lighting the kuthu vilakku. Dr. T. Leo Alexander honored the chief guest with memento. Dr. S. Thobias honored the chief guest with bouquet. Dr. T. Edwin Prabakaran honored Prof. L. Joseph Arockiasamy, president, LCTSA with a bouquet. Prof. M. Sathiyanurthy, President, Statistics association honored Dr. T. Edwin Prabakaran with a memento. The inauguration session had some special speech by Dr. S. Venkatraman about the applications of Statistics worldwide. Dr.C.Santharam Head, Dept. of Statistics stressed more on discipline, punctuality, worship and attendance for the students. Prof. M.Sathiyanurthy, President proposed the vote of thanks after the chief guest address. The function came with an end by distribution of tea and coffee.

REPORT ON DEPARTMENT FESTIVAL

The department festival ‘Six - Sigma 2014 was conducted on 12/12/2014. This year too, the department festival was welcomed with a lot of enthusiasm just like the previous years. On the day of the fest, the inaugural session took place at 10 am. The fest was inaugurated by Dr.P.Venkatesan, Professor, Dept. of Community Medicine, Ramachandra medical College, Chennai, who has been the chief guest of the day. The inauguration session had Chief guest Dr.P.Venkatesan’s inspiring talk. The inaugural address was not only interesting but also informative to the students as a lot of information was shared with the students regarding the scope of statistics. Dr.C.Santharam, Head of the Department of Statistics, Prof.M.Sathiyanurthy, President of the Loyola Statistics Association 2014 – 15 gave introduction about department festival and emphasis on the festival importance respectively. After the inaugural session, a much required refreshing break was given.

The Department festival had four events throughout the day. The first event of the forenoon session was ‘Statistical Mining’. In this, statistical terms were given to the participants
and they were asked to express them in non-verbal form. The event happened to be a very interesting one. The next event was ‘Statdog’ which was more of subject oriented. The event was based on ‘KBC’ where cash award was given to the winners instantaneously. This event made not only the participants but also the audience to think. After these events which made everyone to think a lot, was followed by the lunch break.

After the lunch break, it was ‘Statistical image mining’. This happened to be a very interesting session as the participants were prompted to guess the statistical terminologies based on the connections between a few pictorial representations. It made everyone to participate in it, which was evident by the way audience were amazed during the course of the event. The last event of the festival was ‘Crosswords’. The session was a hectic one as it involved everyone to use their think-tanks. It required some immense knowledge in statistics to guess the answers. Simultaneously, the refreshments break was also provided. With all the events being successful satisfying the organizers, participants, as well as audience, the fest headed towards the unavoidable valedictory session. ‘Ethiraj College for women’ was adjudged as the overall winners, appreciating their active participation in all the events. The valedictory session concluded with an apt proposal of the vote of thanks. As said, ‘All that begins well, ends well’, the department fest ‘Six – Sigma 2014 – 2015’ came to an end with high hopes for the department fest that is due in the upcoming years.

**SPSS WORKSHOP I**

The Department of Statistics, Loyola College has conducted two days workshop (26, 27 September 2014) on SPSS for college Teachers, Research Scholars, PG Students from science, Arts Social Science stream. It aimed at providing on the applied aspects of Statistics in different areas of research.

Chairman: Dr.C.Santharam, Head, Department of Statistics.

Co – Ordinator: Prof. S.Xavier, Assistant Professor.

Resource Person:        Dr. Martin Luther William
20 participants from various colleges of Chennai have participated.

**SPSS WORKSHOP II**

The Department of Statistics, Loyola College has conducted two days workshop (29 November & 06 December 2014) on SPSS for the Research Students from the Commerce department. It aimed at providing on the applied aspects of Statistics in different areas of research.

Chairman: Dr.C.Santharam, Head, Department of Statistics.

Co-Ordinator: Prof. S.Xavier, Assistant Professor.

Resource Person: Prof.S.Xavier

Prof.M.Sathy Murthy

Prof.M.Sathy Murthy

Prof.M.Syluvai Anthony

Prof.B.Ruban Raja

**DEPARTMENT OF STATISTICS**

**ANNUAL REPORT 2014-2015**

The Department of Statistics has 12 faculty members of which 5 of them are Research Supervisors.
The following are the 5 Research supervisors.

2. DR. MARTIN LUTHER WILLIAM, M.Sc., M.PHIL., Ph.D.
3. DR. T. LEO ALEXANDER, M.SC., M.S. (CANADA), Ph.D.
4. DR. S. THOBIAS, M.Sc., M.PHIL., Ph.D.
5. DR. T. EDWIN PRABAKARAN, M.Sc., M.PHIL., Ph.D.

Dr. C. Santharam’s students Mr. Senthil Kumar and Mr. Ruban Raja have submitted their Ph.D thesis and the viva-voce will be held within this academic year.

The first Ph.D for this academic year was by DR. T. Leo Alexander (his student Mr. Paridayal has got his Ph.D.)

Mrs. S. Amala Revathy has submitted her synopsis and she will be submitting her thesis within this academic year.

The following staff members have applied and have got approved for the UGC Minor projects.

1. DR. T. LEO ALEXANDER -- Rs. 1,65,000
2. DR. MARTIN LUTHER WILLIAM -- Rs. 1,20,000
3. DR. T. EDWIN PRABAKARAN -- Rs. 1,80,000
4. PROF. B. RUBAN RAJA -- Rs. 1,45,000
RESEARCH PUBLICATIONS:

DR.C.SANTHARAM

PUBLICATIONS


Ph.D

- Mr.Senthil Kumar has submitted his Ph.D thesis and the Viva-voce will be held on 12th march 2015.
- Mr.B.Ruban Raja has submitted his Ph.D thesis and his Viva-voce will be held within this academic year.
- Mr.B.Ruban Raja has submitted research article entitled “Efficiencies of Nearest Neighbour Balanced Block Designs using First and Second order Correlated Models for Three Treatments” in the international Conference on New Horizons in Statistical Modeling and Applications organized by Department of Statistics, Presidency College Chennai.
- Ms.Jeevitha.M has submitted her research article in the international Conference on New Horizons in Statistical Modeling and Applications organized by Department of Statistics, Presidency College Chennai.
- Mr. David Joshua has submitted her research article in the international Conference on New Horizons in Statistical Modeling and Applications organized by Department of Statistics, Presidency College Chennai.

DR.MARTIN LUTHER WILLIAM

1. MINOR RESEARCH PROJECT SANCTIONED BY UGC :

"A STEPWISE DISCRIMINANT ALGORITHM FOR CLASSIFICATION TO TWO GROUP WITH A BIO-MEDICAL APPLICATION"

2. RESEARCH PAPER COMMUNICATED:
"SOME APPROACHES TO CONSTRUCT SUPER-EFFICIENT ESTIMATORS"

[Co-authored with K. Sivasakthi & T. M. Durairajan]
- Communicated to the International Journal "Mathematical Methods of Statistics"

3. LECTURES DELIVERED:
Delivered a lecture on "Factor Analysis" in the workshop on SPSS held at Dept. of Statistics, Loyola College, on 27th September, 2014.

4. EVENTS PARTICIPATED IN OTHER COLLEGES:
Gave a guest lecture in "ESTADISTICA 2014" a program of the Statistics Department Association of JBAS College for Women, Chennai, on 5th August 2014, and inaugurated the activities of the association for the academic year 2014-15.

DR. LEO ALEXANDER

PUBLICATIONS


Ph.D Awarded

🔹 L. Pari Dayal, has been awarded Ph.D in Statistics from University of Madras, Chennai, under my guidance. The title of the Thesis is “Bayesian Cox proportional Hazard models for Breast Cancer Survival

PROJECT

🔹 UGC Minor Project: Survival Model for time to event Breast Cancer Patients in Chennai City.
DR.S. THOBIAS

- Received the Ph.D Guide ship from the University of Madras, and Mr.S.A.Thiagarajan has registered for Ph.D.

DR.T. EDWIN PRABAKARAN

PUBLICATIONS


PROJECT

- UGC Minor Research project sanctioned for the proposal entitled “Statistical Predictive Data Analytics for Medical Diagnostic using Fuzzy Techniques – A Cost Reduction Approach.

PROF.L. JOSEPH AROKCIASAMY

- Attended Refresher course in Statistics from 6th November to 26th November, 2014 at Bharathiar University, Coimbatore.

PROF.S. XAVIER

PUBLICATIONS


RESOURCE PERSON


Resource Person on SPSS Training in Loyola College on November 29 and December 06, 2014.


M. SYLUVAI ANTHONY

PUBLICATION


RESOURCE PERSON

Resource person in “Academic Bridge program on SPSS” conducted by Department of statistics, Loyola College (Autonomous) during 26, 27 September, 2014.


PROF. M. SATHYA MURTHY

RESOURCE PERSON

Resource person in “Academic Bridge program on SPSS” conducted by Department of statistics, Loyola college (Autonomous) during 26, 27 September, 2014.


PROF.S. AMALA REVATHY

PUBLICATIONS


PROF. B. RUBAN RAJA

PUBLICATIONS

- Approved UGC Minor projects entitled “Optimality of Nearest Neighbour Balanced Block Designs using correlated Models in Biometrical Science”.
- Submitted research article entitled “Efficiencies of Nearest Neighbour Balanced Block Designs using First and Second order Correlated Models for Three Treatments” in the international Conference on New Horizons in Statistical Modeling and Applications organized by Department of Statistics, Presidency College Chennai.
- Resource person for Academic Bridge program on SPAA conducted by Department of Statistics, Loyola College on 26, 27 September 2014.
- Resource person for National Level Research Scholars Workshop on E-resources and Data Analysis conducted by Department of Advanced Zoology and Biotechnology, Loyola College, 9th to 14th February, 2015.
PROF. JEEVITHA.M

PRESENTATION

- Submitted the research article entitled “Efficiencies of Nearest Neighbour Balanced Block Designs using First and Second order Correlated Models for Three Treatments” in the international Conference on New Horizons in Statistical Modeling and Applications organized by Department of Statistics, Presidency College Chennai.