## DEPARTMENT OF STATISTICS

| | | |
|---|---|---|
| 1. | Name of the department | STATISTICS |
| 2. | Year of Establishment | 1984 |
| 3. | Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) | B.Sc. : MES, SMCs |
| 4. | Names of Interdisciplinary courses and the departments/units involved | NIL |
| 5. | Annual/ semester/choice based credit system (programme wise) | Semester System : Prior to 2014 – 15 Choice Based Credit system: 2014 – 15 onwards |
| 6. | Participation of the department in the courses offered by other departments | NIL |
| 7. | Courses in collaboration with other universities, industries, foreign institutions, etc. | NIL |
| 8. | Details of courses/programmes discontinued (if any) with reasons | NIL |
| 9. | Number of teaching posts | |

| Designation | Sanctioned | Filled |
|---|---|---|
| Professors | NIL | NIL |
| Associate Professors | 3 | 3 |
| Asst. Professors | NIL | NIL |

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

| Name | Qualification | Designation | Specialization | No. of Years of Experience | No. of Ph.D. Students guided for the last 4 years |
|---|---|---|---|---|---|
| Dr. M.R.Ramesh | M.Sc; PhD | Associate Professor | Operations Research (OR) ; Econometrics | 34 | ----- |
| Dr.Nagaraja Rao Chillale | M.Sc; M.Phil; Ph.D | Associate Professor | O.R. ; Sampling | 28 | 3 ( guiding) |
| Sri.R.Prakash | M.Sc; M.Phil; | Associate Professor | O.R. ; Sampling | 25 | ----- |

| | | | |
|---|---|---|---|
| 11. | List of senior visiting faculty | NIL | |
| 12. | Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty | NIL | |
| 13. | Student -Teacher Ratio (programme wise) | 25 : 1 | |
| 14. | Number of academic support staff | **Sanctioned** | **Filled** |
| | | NIL | NIL |
| 15. | Qualifications of teaching faculty with D Sc/ D.Litt. / Ph.D. / MPhil / PG | Ph.D — 02 | |
| | | PG — 01 | |
| 16. | Number of faculty with ongoing projects from | NIL | |
| | National Funding Agency | NIL | |
| | International Funding Agency | NIL | |

| 17. | Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received. | NIL |
|---|---|---|
| 18. | Research Centre /facility recognized by the University | NIL |
| 19. | Publications | |
| | Publication per faculty | 1 |
| | Number of papers published in peer reviewed journals | 3 |
| | National Journals | 00 |
| | International Journals | 03 |
| | Books Edited | 05 |
| | List of Books Authored by **Dr. Nagaraja Rao Chillale** <br><br> 1. A textbook of statistics for PUC course of Karnataka , VOL 1., 2010 <br><br> 2. A textbook of statistics for PUC course of Karnataka , VOL 2., 2010 <br><br> 3. "Quantitative analysis for business decisions"—I, January 2013 : A text book of Business Statistics for II Sem B.com course of Bangalore university, titled. <br><br> 4. "Quantitative methods for business-II" , January 2013 : A text book of business Statistics for II Sem BBM course of Bangalore university, titled. <br><br> 5. "Quantitative analysis for business-II", July 2013 : A text book of business statistics for III Sem B.com course of Bangalore university titled. | |

| | Books Edited with ISBN Numbers | NIL |
|---|---|---|
| | Impact factor | |
| | h – index | |

## Details of Papers Published in International Journals

| SL. NO. | Name of the Faculty | TITLE OF THE PAPER | JOURNAL | IMPACT FACTOR | CITATIONS |
|---|---|---|---|---|---|
| 1 | Nagaraja Rao Chillale | An extended cascade model for HIV spread in heterosexuality | Academic Journal of Sciences, USA, 2(2), CD Rom,ISSN,2165-6282,December,2013 | | |
| 2 | Nagaraja Rao Chillale | Uses of statistical methodology in HIV/AIDS projections | International Journal of Stasistika and Mathametika, E-ISSN: 2249-8605(2011). | | |
| 3 | Nagaraja Rao Chillale | E-database on sericulture pests and diseases | Journal of Indian silk, VOL (II), Page 24-26(2011). | | |

| 20. | Areas of consultancy and income generated |
|---|---|
| | **Dr. Nagaraja Rao Chillale** :<br>➢ Academic advisor for M.Sc. Nursing students of SGR college, Bangalore for several years.<br>➢ Visiting consultant for Bio-statistics subject of M.sc (Nursing) course for 2009-10 in Gautham College of nursing, Bangalore |
| | **Prof. R.Prakash** :<br>➢ Visiting Consultant for the Research Centre in Applied Mathematics , MES College for Arts, Science and Commerce ,Bangalore<br>➢ Visiting consultant for Bio-statistics subject of M.Sc (Nursing) course during 2010-12 at Gautham College of Nursing, Bangalore. |

| 21. | Faculty as members in | |
|-----|------------------------|---|
| | a. National Committees | NIL |
| | b. International Committees | NIL |
| | c. Editorial Boards | NIL |
| 22. | Student projects | |
| | a) Percentage of students who have done in-house projects including inter departmental/programme | NIL |
| | b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies | NIL |

**23. Awards and Recognitions received by faculty and students**

**Dr. Nagaraja Rao Chillale** has been awarded "**Bharath Shikshana Ratna**" for excellence in academics by the **Global Society for Health and Educational Development, New Delhi, in 2013.**

**Dr. Nagaraja Rao Chillale : Resource Person for the following events**

| Title of the Conference/ Workshop/ Seminar | Lecture delivered on | Organized by | Date |
|---|---|---|---|
| Research methodology and Statistical techniques for Ph.D students | Correlation Analysis | Department of Statistics, Bangalore University | 19th April 2013. |
| State level work-shop on applications of Bio-statistics in Nursing | * Use of statistical software<br>* Statistical tools | Dr.Shyamala Reddy college of nursing | 24th, 25th Feb 2011 |

| | | | |
|---|---|---|---|
| | for data analysis. | | |
| Workshop on Computer Applications to Nursing profession | Nursing research process & computer applications | Sarvodaya college of nursing, Bangalore | 22nd March 2010 |
| Regional workshop on data collection methods | Concepts of data management | Dr Shyamala Reddy college of Nursing, Bangalore | 26th, 28th Feb 2009 |

| | | |
|---|---|---|
| 24. | List of eminent academicians and scientists / visitors to the department | **NIL** |
| 25. | Seminars/ Conferences/Workshops organized & the source of funding<br><br>National<br>International | NIL |

## I.    International Conferences Attended

### Dr. Nagaraja Rao Chillale

| Title of the Conference | Organized by | Held at | Date | Title of the Paper Presented |
|---|---|---|---|---|
| International journal of Arts and Sciences conference on academic disciplines | The University of Harvard campus, Cambridge, | Greater Boston, USA | 26th - 30th May 2003 | An extended Cascade model for spread of HIV in heterosexuality. |
| International conference on Statistics and information analytics | Loyola College, Chennai | Chennai | 23rd - 25th August 2012 | Statistical modeling of HIV spread in Blood transfusion |
| Indo-German conference on modeling, simulation and optimization | Technological University, Darmstadt, Germany | Darmstadt, Germany | 5th - 7th, September, 2012 | Statistical modeling of HIV spread in blood transfusion |

| Title of the Conference | Organized by | Held at | Date | Title of the Paper Presented |
|---|---|---|---|---|
| ICMSS international conference on Mathematical Sciences and Statistics 2013 - Innovation through mathematical and statistical research | University Putra, Malaysia | Kuala-Lumpur, Malaysia | 5th - 7th February 2013 | A stochastic model for the distribution of time to AIDS onset |

II.    **National Conferences**

a.  **Dr. Nagaraja Rao Chillale**

| Title of the Conference | Organized by | Held at | Date | Title of the Paper Presented |
|---|---|---|---|---|
| Uses of R software in Statistics | Maharani's Science College, Bangalore | Bangalore | 11th -12th September 2014 | Attended as Delegate |
| Statistical applications | Yuvaraja's College of Mysore University, Mysore | Mysore | 26th – 27th September 2014 | Attended as Delegate |
| Advances in statistical theory and applications | Department of Statistics, Bangalore University, | Bangalore | 16th -18th November 2011 | Attended as Delegate |
| Recent advances in the theory and applications of Statistics (National Statistics Day) | Department of Statistics, Bangalore University, | Bangalore | 29th June 2011. | Attended as Delegate |
| Knowledge Utsav | Jain University, Bangalore | Bangalore | 28th August 2010 | A simple HIV infection model |

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### b. Dr. M R Ramesh

| Title of the Conference | Organized by | Held at | Date | Title of the Paper Presented |
|---|---|---|---|---|
| Uses of R software in Statistics | Maharani's Science College, Bangalore | Bangalore | 11th -12th September 2014 | Attended as Delegate |
| Recent advances in the theory and applications of Statistics (National Statistics Day) | Department of Statistics, Bangalore University, | Bangalore | 29th June 2011. | Attended as Delegate |

### c. Prof. R Prakash

| Title of the Conference | Organized by | Held at | Date | Title of the Paper Presented |
|---|---|---|---|---|
| Uses of R software in Statistics | Maharani's Science College, Bangalore | Bangalore | 11th -12th September 2014 | Attended as Delegate |
| Recent advances in the theory and applications of Statistics (National Statistics Day) | Department of Statistics, Bangalore University, | Bangalore | 29th June 2011. | Attended as Delegate |

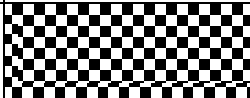### III. Regional Level Conference /Workshop

| Name of the Faculty | Title of the Workshop | Organized by | Held at | Date | Title of the Paper Presented |
|---|---|---|---|---|---|
| Dr. M.R.Ramesh Dr.Nagaraja Rao Chillale Prof. R. Prakash | Use and importance of Official Statistics | Department of Statistics, Bangalore University, Bangalore | Bangalore | 30th June 2011 | Attended as Delegate |

## 26. Student profile programme/course wise:

| Year | Name of the Course / Programme | Applications Received | Selected | Enrolled in I Year | | TOTAL All Years | Pass Percentage (outgoing students) |
|---|---|---|---|---|---|---|---|
| | | | | Male | Female | | |
| 2010 - 11 | | 53 | 53 | 26 | 27 | 144 | 85.71% |
| 2011 - 12 | | 24 | 24 | 11 | 13 | 94 | 91.49% |
| 2012 - 13 | B.Sc. | 24 | 24 | 11 | 13 | 65 | 100.00% |
| 2013 - 14 | | 17 | 17 | 10 | 7 | 57 | 88.24% |
| 2014 - 15 | | 25 | 25 | 10 | 15 | 64 | |
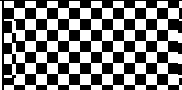
**Gender Profile of Students**

| Academic Year | Boys | Girls | Total |
|---|---|---|---|
| 2011 – 12 | 53 | 41 | 94 |
| 2012 – 13 | 31 | 34 | 65 |
| 2013 – 14 | 30 | 27 | 57 |
| 2014 – 15 | 32 | 32 | 64 |
| Average Percentage | 52.14% | 47.86% | |



Gender Profile of Statistics Students

Girls, 47.86%

Boys, 52.14%
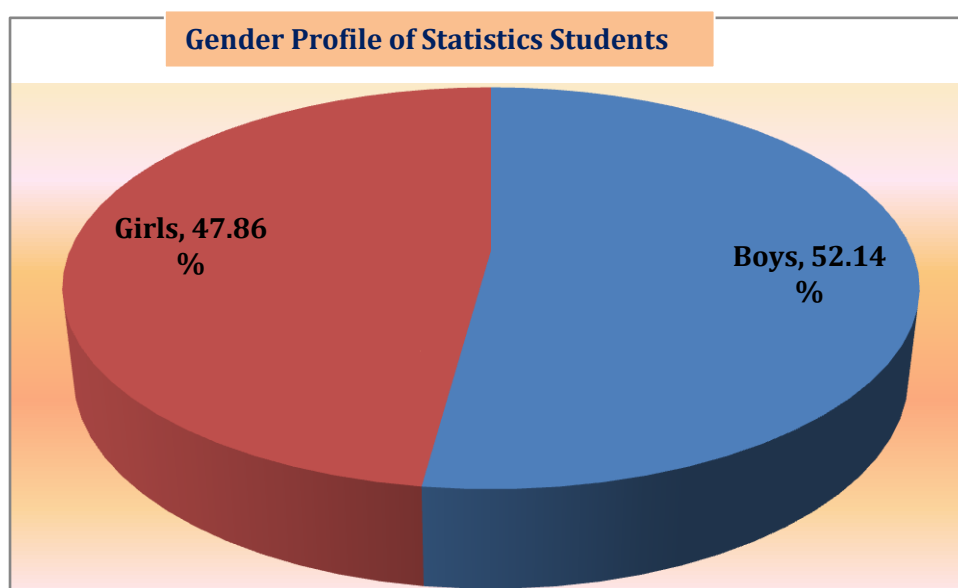
**Socio – economic profile of students**

| Academic Year | SC/ST | OBC | GM | Total |
|---|---|---|---|---|
| 2011 – 12 | 20 | 40 | 34 | 94 |
| 2012 – 13 | 13 | 27 | 25 | 65 |
| 2013 – 14 | 14 | 24 | 19 | 57 |
| 2014 – 15 | 18 | 22 | 24 | 64 |
| Average Percentage | 23.21% | 40.36% | 36.43% | |

**Socio – Economic Profile of Statistics Students**



GM, 36.43%

SC/ST, 23.21%

OBC, 40.36%
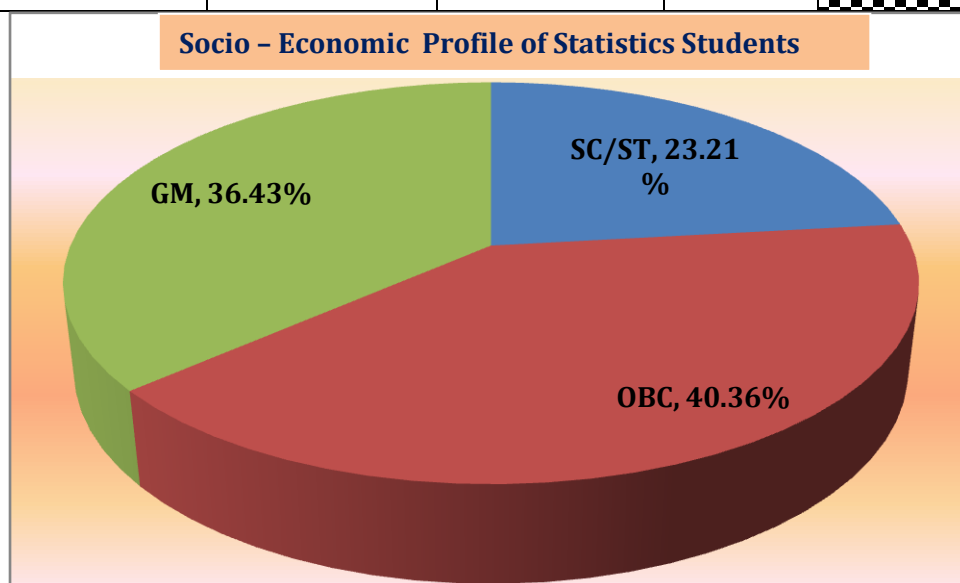
27.     Diversity of Students

| Name of the Course | % of students from the same state | % of students from other States | % of students from abroad |
|---|---|---|---|
| B.Sc | 98 | 02 | Nil |

28.     How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc. :

        Information  not available

## 29.    Student progression

| Student progression | Against % enrolled |
|---|---|
| UG to PG | 50% |
| PG to M.Phil. | NA |
| PG to Ph.D. | NA |
| Ph.D. to Post-Doctoral | NA |
| **Employed**<br>• Campus selection | 20% |
| • Other than campus recruitment | No data |
| Entrepreneurship/Self-employment | NIL |

| | | |
|---|---|---|
| 30. | Details of Infrastructural facilities | |
| a. | LIBRARY | |
| | **Books**            Main Library | 1512  Books |
| | Departmental Library | 150 Books |
| b. | Internet facilities for Staff & Students | Available |
| c. | Class rooms with ICT facility | Available |
| d. | Laboratories | 01 |
| | Area of the Laboratories | 900        .ft. |
| 31. | Number of students receiving financial assistance from college, university, Government or other agencies | Data furnished  under student support services |
| 32. | Details of Student Enrichment Programmes | **NIL** |

33.     Teaching methods adopted to improve student learning

   a.   Chalk and Talk

   b.   Periodic Class Tests

   c.   Question Bank and Assignments

34.     Participation in Institutional Social Responsibility (ISR) and Extension activities:

   ➢   Participation in Environment awareness programmes, gender sensitization programmes and programmes on condemning atrocities on women and oppressed classes
   ➢   Participation in National festivals
   ➢   Participation in NSS and NCC programmes

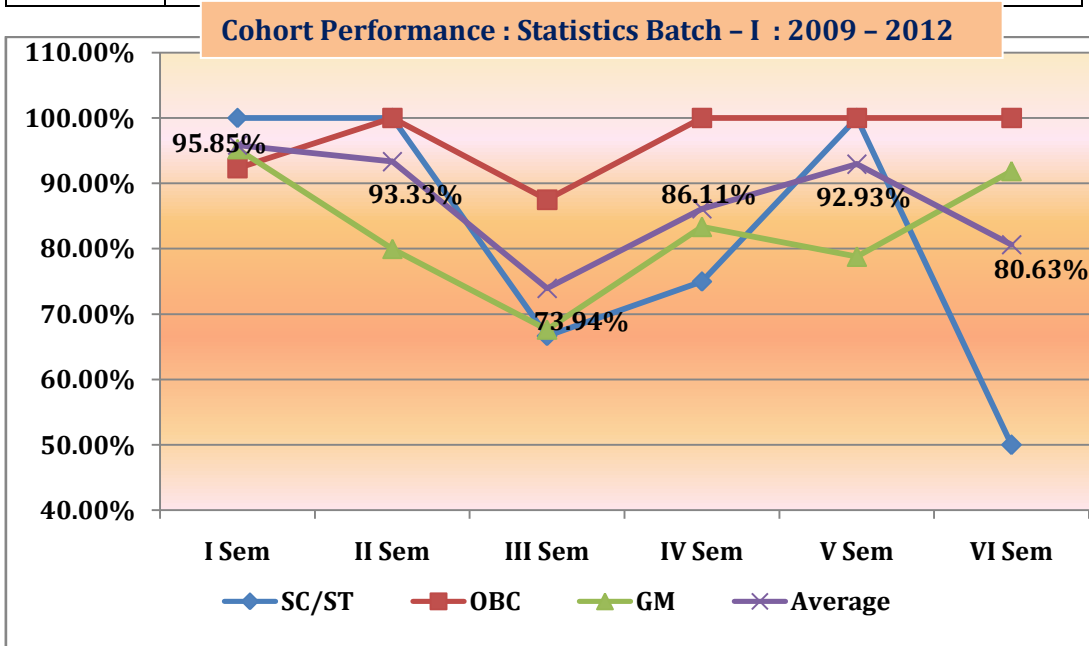**I.     Trend of Success Rate of Statistics Students : 2010 – 2014**

| Sem | 2010 - 11 | 2011 - 12 | 2012 - 13 | 2013 - 14 |
|-----|-----------|-----------|-----------|-----------|
| I   | 93        | 90        | 83        | 41        |
| II  | 86        | 46        | 71        | 35        |
| III | 74        | 89        | 94        | 64        |
| IV  | 86        | 62        | 86        | 70        |
| V   | 61        | 87        | 91        | 100       |
| VI  | 100       | 92        | 100       | 88        |

**Trends of Success Rate in Statistics : 2010 – 2014**



Legend: ■ 2010 - 11  ■ 2011 - 12  ■ 2012 - 13  ■ 2013 - 14

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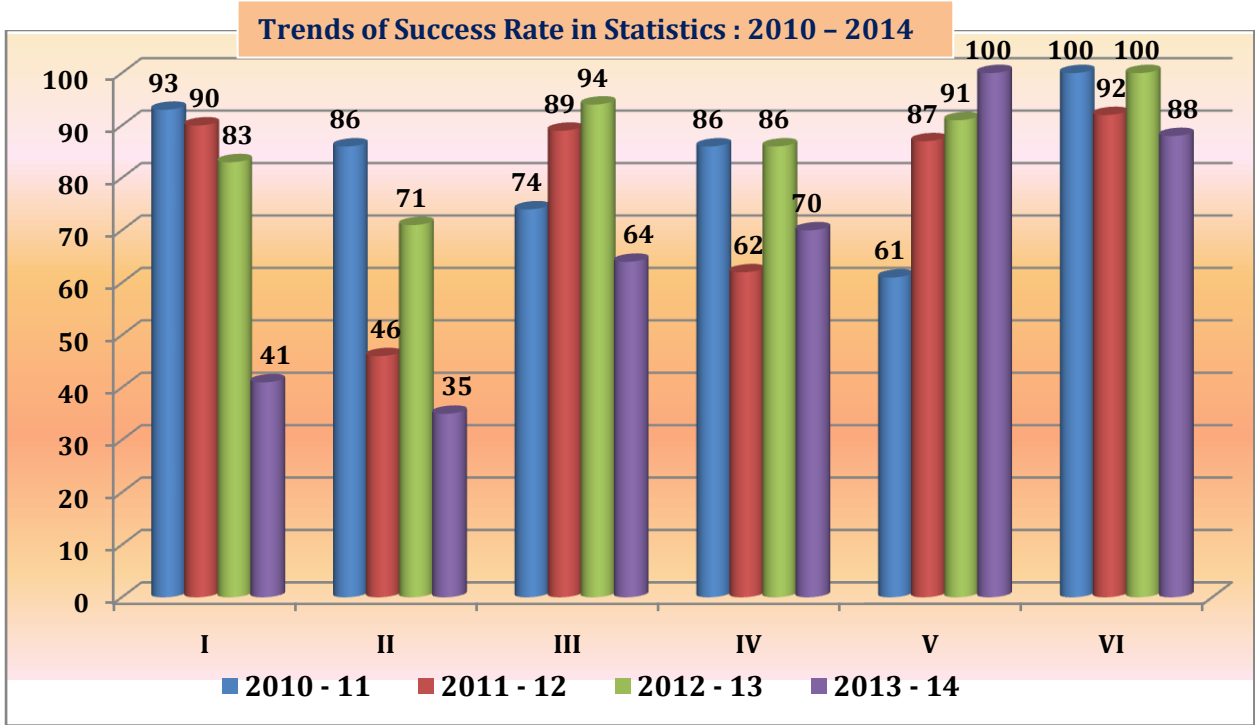
## II. Cohort Performance of Statistics Students : 2009 – 2014

**Batch - I : 2009 - 12**

| Category | I Sem | II Sem | III Sem | IV Sem | V Sem | VI Sem |
|----------|-------|--------|---------|--------|-------|--------|
| SC/ST | 100.00% | 100.00% | 66.67% | 75.00% | 100.00% | 50.00% |
| OBC | 92.31% | 100.00% | 87.50% | 100.00% | 100.00% | 100.00% |
| GM | 95.24% | 80.00% | 67.65% | 83.33% | 78.79% | 91.89% |
| Average | 95.85% | 93.33% | 73.94% | 86.11% | 92.93% | 80.63% |

**Cohort Performance : Statistics Batch – I : 2009 – 2012**



Legend: ◆ SC/ST  ■ OBC  ▲ GM  ✕ Average

**Batch - II : 2010 - 13**

| Category | I Sem | II Sem | III Sem | IV Sem | V Sem | VI Sem |
|----------|-------|--------|---------|--------|-------|--------|
| SC/ST | 90.00% | 66.67% | 90.91% | 50.00% | 83.33% | 100.00% |
| OBC | 93.33% | 53.33% | 88.24% | 83.33% | 85.71% | 100.00% |
| GM | 93.10% | 72.41% | 89.47% | 56.25% | 100.00% | 100.00% |
| Average | 92.15% | 64.14% | 89.54% | 63.19% | 89.68% | 100.00% |



**Cohort Performance : Statistics Batch – II : 2010 – 2013**
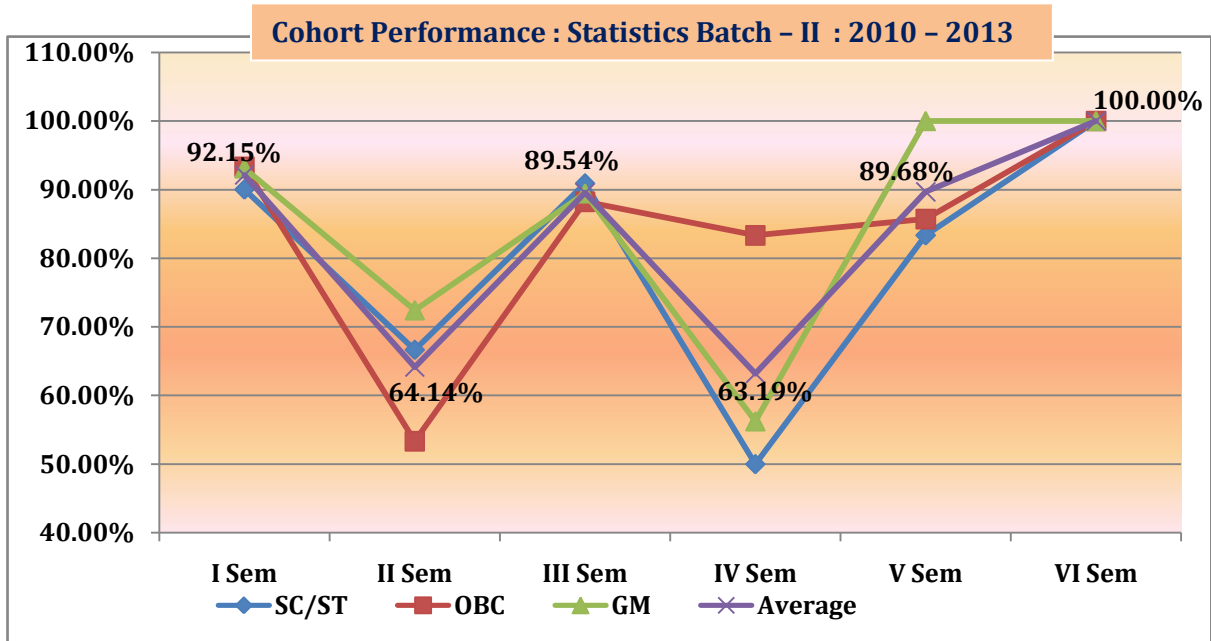
**Batch - III : 2011 - 14**

| Category | I Sem | II Sem | III Sem | IV Sem | V Sem | VI Sem |
|----------|-------|--------|---------|--------|-------|--------|
| SC/ST | 80.00% | 33.33% | 80.00% | 88.50% | 100.00% | 75.00% |
| OBC | 100.00% | 58.33% | 100.00% | 79.67% | 100.00% | 100.00% |
| GM | 80.00% | 33.33% | 100.00% | 89.00% | 100.00% | 66.67% |
| Average | 86.67% | 41.67% | 93.33% | 85.72% | 100.00% | 80.56% |

**Cohort Performance : Statistics Batch – III : 2011 – 2014**
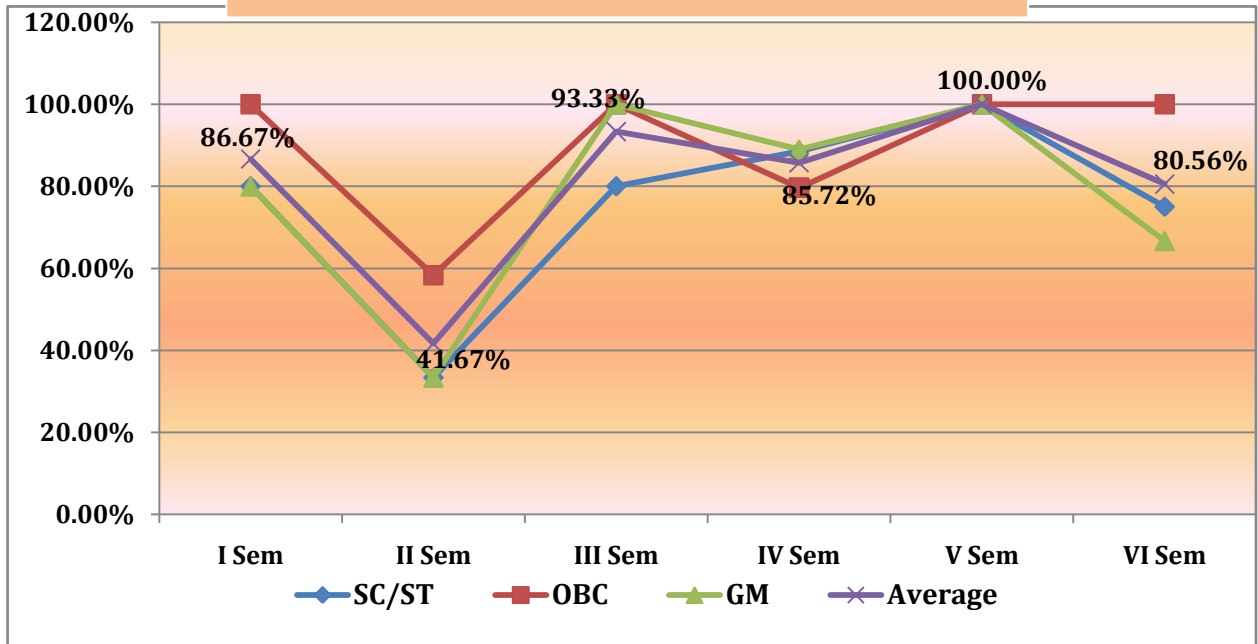
35.     **SWOC Analysis**

**Strengths**

- Good, qualified and competent teaching staff
- Good research work which is recognized well
- Well experienced staff

**Weaknesses**

- Student enrolment is poor
- Poor student enrolment is a demotivating factor for innovative projects

**Opportunities**

- Create student health database and generate statistical information for use by doctors and health workers in association with Ranga Dore Memorial Hospital
- Explore major research project

* * * * * *