

Report of the Academic Audit 2015



Internal Quality Assurance Cell (IQAC)
University of Kerala
2016

University of Kerala Academic Audit 2015

Foreword

I am extremely pleased to place before the University Community, the report of the first Academic Audit of the University of Kerala. It has been conducted in a very democratic manner as a faculty-driven self-reflection and peer-feedback. Each Department has been given only general guidelines. The Departments themselves have chosen peer reviewers and have resolved on taking steps based on peer review. The IQAC has merely been an enabler. Being this first time, there are certain inconsistencies and non-uniformities. I am sure that these will be solved in forthcoming years.

It is perhaps noteworthy that the Kerala University Act has provisions for a general audit of University's working, every 10 years, as per subsection (1) of section 71 of the Act. In 1984, Dr. Malcolm S. Adiseshiah and in 2000, Dr. Padma Ramachandran led the commissions appointed by the Government of Kerala. The commission of 1984 seems to have conducted something very similar to the present audit of teaching Departments. Some extracts of both these reports are given as an appendix to this report. It is interesting to note that while some of the lacunae observed by the two committees have been overcome, many remain after decades.

I place this report before the academic community for fruitful discussions leading to improvement of quality in teaching learning and research, ultimately enhancing the quality of higher education.

Vice-chancellor & Chairman, IQAC

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Department of Political Science

Extracts from Peer Reviews

Dr. I. Ramabrahmam, University of Hyderabad: The department had an active academic year with two international seminars and five national seminars being organized in addition to twelve expert lectures on various themes. The recognition of UGC under Special Assistance Programme Phase II bears ample testimony to the academic credential of the department. At the department level an induction programme and programme like debate competition, study tour and net Coaching programme were held. Also there is commendable success at individual level with several publications by faculty members. In terms of teaching research and extension activities, the department is considered as one of the best in the country. All the faculty members have contributed through research publications and seminars. Perhaps, the department can try out for international collaboration in research and teaching Scope for student teacher exchange programmes with global universities may be explored and hope the department works for upgradation to UGC Centre for Advanced Studies soon.

Dr. Harish Ramaswamy, Professor, Karnatak University: Department has done quite an impressive academic work in the various areas of Political Science. Special mention must be made about your community outreach programmes, Study tour, NET coaching. Each of your faculty members has in their own way contributed their bit to the growth of the discipline. One general observation is that most of the talks, presentations and seminars etc. are centered in and around Kerala and some publications seems to be in the popular fortnightly. As a humble suggestion, without singling any one of your colleagues, I request your colleagues to concentrate more on publications in professional journals and to look forward for impact factor journals to get more citations. I wholeheartedly appreciate the team effort of your department in bringing laurels to Political Science.

Dr. K.S. Pavithran, University of Calicut: The activities of the Department of Political Science, University of Kerala in 2015 deserves appreciation. Having a library of 21210 books. Eight journals and well qualified faculty, the activities of the Department spread into almost all areas of academic pursuit. Organizing seven seminars including two International seminars and publishing the Standard 'Journal of Polity and Society' are worth mentioning. The Department also have three running projects worth Rs.88,39,600. Comprehensive syllabus revision of M.A Political Science was completed. A few outreach activities were held during the year which exhibit community service. A number of dignitaries visited the Department and delivered lectures on various topics of current relevance. Faculty contributions in achieving academic excellence are very good and prove the inherent strength of the Department. All the Faculty participated in National and international seminars and published a number of articles in Standard Journals and books. The youngsters among the Faculty are expected to perform much better in future. The

report may have mentioned the areas of specialization offered for the students. Another important aspect to be focused is on intake of Post-Doctoral fellows in the Department. Alumni activities also may be included in the report. Overall the performance of the Department is very good.

Dept. Council's Response to Peer Review Suggestions

1. Faculty should publish more articles on professional journals and those with impact factor. 2. The Department should go for enrolling more Post-Doctoral fellows. 3. Alumni activities of the Department may be included in the report of the Department in future. 4. Scope for student – teacher exchange programmes and collaborations with foreign Universities may be explored. The Department Council which met on 31st March 2016, discussed the reports and decided to take appropriate steps in carrying out the above suggestions.

Academic Audit 2015
Department of Sociology
Extracts from Peer Reviews

1. **Prof. Ramathirtham, Pondicherry University:** The Department of Sociology has organized quite a number of seminars and workshops for the benefit of the faculty and Students. The Induction Programmes at the University level, at the Department level and at the School level show the involvement of the department in the community level involvement. The list of Research Projects carried out by the Faculty Members of the Department show the research activities of the department. The Special Invited Lecture Programmes arranged by the Department by inviting Eminent Scholars from abroad and all over India show their ambition to update their academic knowledge. The number of Training Programmes and Social auditing Programmes are the examples for the Social Exposure and dedication to Welfare of the local community. The Tribal Camp, Community Awareness Programmes and the Extension and Outreach programmes deserves special appreciation to the Department. The University may encourage the Department to conduct such programmes in more numbers in future.

2. **Prof. Dr. P.K.B. Nayar, University of Kerala (Retd.):** They contain an impressive record of activities for any department for one year. This is all the more important against the backdrop of only 4 full time faculty members in the Department, of whom one is an Associate Professor and the rest are Assistant Professors. The devotion and commitment of the faculty need to be specially commended. Judged from the point of teaching, research and other curricular, co-curricular and extra-curricular activities, the Department has an enviable record to its credit. Under this circumstance, I have great pleasure to accord to the Department of Sociology of the University of Kerala a very high rank in teaching, research and other academic and related activities.

3. **Prof. Dr. M. Ramakrishnan, M.S. University:** The profile of the department of Sociology indicates that the department had a very productive academic year (2015) in terms of academic and extension activities. The department has attracted students to its full capacity (sanctioned strength), including a couple of foreign students, for both the PG Programmes M.A (Sociology) and MSW. The students progression in terms of percentage of pass is quite appreciable. It is noted that a few students have cleared NET/JRF (UGC). The department has to be complimented for its extension and outreach programmes. The selected themes are academically thematic and socially useful. The block placement cum training, visits to hospitals, and tribal settlements besides motivating students their career planning, creates awareness among the target groups on identified social issues such as human rights, tribal and women empowerment, and promotion of mental health. The research activities of the department also deserve special appreciation. The topics of research projects focus on contemporary issues which require urgent policy level recommendations. The publications of the Faculty are of high quality and they by, and

large, lie on the axis of core disciplines. The topics of assignments, and the pattern and standard of question papers (both internal and end semester) have also been assessed. They all meet the standards set for the respective PG Programmes. The department has shown keen interest in organizing seminars and workshops on diverse but at the same time focusing on contemporary issues. On the whole the Department of Sociology and the Social Work are moving on the right academic track. Suggestions: The Department of Sociology and Social Work can identify certain thrust areas, and focus their activities on such thematic areas. Some more research projects funded by National/International funding agencies and collaborative research projects may be undertaken. I rate the Department of Sociology as a potential department to attain the status of UGC's Special Assistance Programme (UGC-SAP) in the near future.

Dept. Council's Response to Peer Review Suggestions

Department Council has reviewed the reports and decided to take necessary steps to improve the quality of academic and non-academic performance of the Department based on the suggestions.

Academic Audit 2015
Department of Geology
Extracts from Peer Reviews

Dr. Gurugnanam, Gandhigram Rural Institute: The Department has 6 permanent faculty members, 2 UGC Research Faculty members and one UGC Emeritus Faculty. Their specializations range from Petrology, Structural Geology, Hydrogeology, Sedimentology, Planetary Science, landslides to Micrometeorology, CO₂ sequestration and soil Chemistry. This is a good combination of strengths and ideal for Multi-disciplinary research and teaching. I hope that the UGC FRPs will bring in multidisciplinary projects and produce PH.Ds of such a nature.

The student diversity is almost nil. Most M.Sc., M. Phil. and Ph. D students are from the University of Kerala itself and this situation has to be rectified. Competition amongst students seems to be non-existent, as also cultural and linguistic diversity. The achievements of the students are fairly okay, with a some getting jobs in Geological Survey of India etc., in 2015 and a few qualifying GATE, UGC, SET. Nevertheless there is a need to improve student achievements and one way to do this is to increase the talent pool from which selections are made. Wider advertising of admissions is needed. Student summer internship[s and winter training programs should be made compulsory. Theme-based field work in all semesters is also recommended. The syllabus covers most of the traditional knowledge in geology, but innovative multidisciplinary courses can be introduced as electives. More hands-on practicals need to be incorporated especially in Remote Sensing and GIS, geophysical surveying and soil and rock chemical analyses. The dissertations cover a wide spectrum of topics and most are in tune with the current trends in Geology. I have seen that some M.Sc. dissertations have been published in a Scopus-indexed journals. This is a commendable achievement of the part of students and the faculty.

The publications by the faculty are of high standard, with publications in the highest impact factor journal in Geology, viz., Gondwana Research as well as in several reputed geology journals. I have seen that h-index of the department (based on Google citations) is 12 and the i-10 index 22. Hirsch (2005) suggested that in major universities, for individuals, h-index=12 might be typical value for advancement to tenure. h-index = 18 might be a typical value for advancement to full professor [Hirsch, J.E. 2005. An index to quantify an individual's scientific research output. PNAS 102(46), 16569-16572]. Therefore the research output in the department is of quite good standing, but should improve so that it researches higher values in the next few years.

The department has conducted several seminars and also activities like quizzes for students. It is also seen that an international conference will be hosted in 2016 by the department. Also it is quite commendable to see that all department seminars have ISBN proceedings volumes published and made feely available over the internet. In this aspect the achievements of the department are good.

There should be more expert lectures in the department by external experts. This will help the students understand the diversity of knowledge in Geology and open their eyes to the immense possibilities. Also it seems that no student goes abroad for higher studies. Students should be made aware of the research opportunities in Europe, North America, China, Russia, Africa etc. Foreign students should also be attracted to the department. For this the website of the University and the department needs to be updated. I searched the web but could not get any information on the department from the University of Kerala's website. The department has an AAS, UVVIS, AMS and ICPMS. It also has a wet chemical lab and a chemist to oversee the activities. A petrography and thin section facility also exists and all these make the department fairly strong in hard rock and water analysis. Overall I rate the department as above average, on the basis of the observations made above and would give it a rating of 8 out of 10.

Dr. C.G. Nambiar, CUSAT: I just had a glance of the report on the Department prepared by you. Excellent work. Some overlap is there on the list of publications listed faculty-wise on page 12, as some works are joint among them. This can be rectified by putting fresh numbering under each person (instead of running numbers). On p29, instead of one representative full-paper by each faculty, it would be better to give the front page of all journal papers. Either in the introduction or as a summary it may be more attractive to give how better the department has performed in the last year compared to the average of previous 5 years in terms of publication (no. of papers, enhancement of citations and indices), students' performance (eg. NET qualification nos., etc)

Dr. C. Unnikrishnan Warriar, Centre for Water Resources Development and Management: Department of Geology, University of Kerala has six permanent faculty members (three Assistant Professors, one Reader, and two Associate Professors). Apart from them there are one UGC Assistant Professor, one Associate Professor, and a Professor-UGC Emeritus. They are having specialization in various fields like Petrology, Structural Geology, Hydrogeology, Sedimentology etc. Few of them obtained their Ph. D from leading National and International institutions like IIT Mumbai, IARI New Delhi and University of Toronto Canada. Thus, the faculties are having good academic background and form an ideal group for research and other academic activities. Facilities: The Faculties are supported by Technical staffs and Administrative staffs. The Technical Staffs include a Technical Officer, a Chemist, a Thin Section Cutter and a Librarian. The administrative staffs include an Administrative Officer, one Assistant and a Driver. Permanent staffs may replace the temporary staffs working at present for some of the above posts. The Library is reported to have about 4,500 books in its stock. However it has only two journals. More scientific journals pertaining to advance research in Earth Science may be subscribed in the Department. **Laboratory Facilities:** The Department has UVVIS, AMS, ICPMS and AAS. It also has a wet chemical laboratory, a good thin section facility and Petrography lab. All these make the Department suitable for advance research in Geochemistry and Hydrochemistry. This department is also equipped with GIS studies using Free and Open Source Software (FOSS). **Research projects and research**

collaborations: The members of the faculty are appreciated for having research collaborations with foreign researchers and also for having MOU with leading institutions like Indian Space Research Organization. However, the faculty members should initiate more individual external funded research projects from national level funding agencies like UGC, DST, etc. Efforts should also be made to attract consultancy projects. **Students:** The Department offers Masters, M. Phil and Ph. D programmes. However there are no Post-Doctoral Fellows working in the Department. One foreign student is also doing his/her Masters programme in this department. Effort should be made to attract more students in the doctoral and post-Doctoral Programmes. The graduates of this Department are getting jobs in Geological and Survey of India and other institutions. They are also qualifying national level examinations like GATE, NET, UGC etc. The department is regularly producing number of Ph. D degrees. **Syllabus:** The syllabus of the Masters programme covers almost all conventional branches in Geology. However, some exposures are needed for hands on training in field practical applications. The syllabus may be revised to include more topics on multidisciplinary aspects of earth science. Industrial training at leading national institutions may be made part for PG students. **Dissertations:** The dissertation work conducted by students covers various topics and are mostly in the conventional branches of Geology. However students may be encouraged to undertake dissertation work in multidisciplinary branches in collaboration with leading national institutions. It is noticed that scientific publications are born out of M. Sc. dissertation and are published in indexed journals. This is a commendable achievement for students as well as facilities. **Publications:** The faculties of the Department are exhibiting interest in research publications. They have published a number of research papers in high impact factor as well as reputed journals. They also edited two books with ISBN Number. They are also participating in number of Scientific Symposium/Conference held at various places. The Department has conducted a number of seminars and also activities like quizzes for the students. The Department is also planning for an international conference in 2016. Some of the Department seminars have been published with ISBN proceedings volume. Faculty members of the department also reviewed scientific papers submitted to leading journals. **Impression:** On the basis of observations given above. I rate the overall performance of the Department as 'Good'. I would give the Department of Geology, University of Kerala a rating of 8 out of 10.

Dept. Council's Response to Peer Review Suggestions

The Department Council which met on 13 April 2016 discussed the audit reports and decided to take into consideration the suggestions of the experts for further improvement in quality in the coming years.

Academic Audit 2015
Department of Archaeology

Extracts from Peer Reviews

Dr. Prabodh Shivalkar, Deccan College, Pune: **Strengths:** Female enrollment in both Masters and M.Phil programme is very encouraging for the development of subjects and women empowerment. Academic and research publications done by departmental staff is very much satisfactory and it shows the good habit of staff members to produce research articles in reputed journals. Use of library by students is considerably in good percentage. Funded projects and funds allotted are quite satisfactory and substantial for development of research. It is a good practice to involve local and central authorities. MoU with universities from Japan and USA holds a very important place in department. These collaborations can help students to understand global way of doing archaeology, both in terms of field and theory. Starting of a department journal dedicated to cause of subject is an important step taken by department. Invited lectures from various subject specialists are an important feature of the department. As it initiates process of interaction and discussion which helps students to get updated information regarding specific subject matter. Workshops and conferences are an added advantage for staff and students to interact with various people belonging to diverse field of studies. Extension activities such as Excavation activities such as Excavations, Exploration, Exhibitions, Ethnographic Studies encouraged by department are commendable. Examination paper pattern and course work is satisfactory. Course work offered covers all the important aspects of archaeology in general and Indian archaeology in particular. **Suggestions:** As the seats for Masters and M. Phil are limited there is a scope to increase the number of seats in both programmes. Along with the number of female candidates, number of male candidates should be mentioned separately. Even 'Third Gender' category should be incorporated. Enrollment for Ph.D should be increased and at the same time Post Doctoral fellows should be admitted in the department. Funds for research and departmental activities should be separate. Funds allotted for research should not be part of departmental expansion or updating. Consultancy services can be broadened to various NGO, conservation, preservation etc. to incorporate more public awareness and public archaeology. Ph.D., M.Phil. And Masters Student should be encouraged to publish research papers in departmental journal for which a separate section can be allotted. M.Phil by UGC rule is a degree by research, for which department should make it compulsory to work on research projects and dissertations. A separate paper on 'Archaeological Theory and Practices' can be introduced in the syllabus.

Dr. Veena Mushrif-Tripathy, Deccan College, Pune: The student enrollment at the PG level is satisfactory as the sanctioned strength of the department is filled. The department has received 84 applications for PG admissions. The enrollment of women candidates is very large and encouraging. The M.Phil programme is running satisfactory. The examination papers show teaching is done in detailed. It is observed that student evaluation is done regularly with assignments and the papers set by the examiners.

Academic activities of staff are commendable. It is good to see the MoUs with different International institutions. It is interesting that students and staff are engaged in carrying out projects by the department. It is worth mentioning that the research work of the department is really good. The department staff is regularly publishing their current research work in reputed journals. The paper shows that the staff is using latest technologies for archaeological interpretations. **Suggestions:** Number of M.A and Ph.D students should be increased. The number of staff is less so the efforts should be directed to create and fill more teaching posts for the department. There should be some more guest faculties involved in the department, from different National institutes. Academic collaboration with National institution should be encouraged. Students should be exposed to different scientific technologies and methods. Different laboratories for example Archaeozoology, Physical Anthropology, Palaeobotany, should be created to analyze material excavated from different sites. The training should be provided to staff and research students to work in the lab. They should be also encouraged in upgrading research trends in Archaeology.

Dr. Cyriac Jose, St. Thomas College, Pala: Excellent research initiatives and output by the faculty. Department with for ongoing projects and 26 publications. Multidisciplinary Journal in Archaeology. **Suggestions:** Increase the strength of the permanent faculty to improve the academic level of the department. Since it is the only one department which provides M.A programme in Archaeology in Kerala, students' strength can be increased from thirteen. The current syllabus needs to be revised. Add more invited talk by the expert from various field to improve the academic level of the students. Archaeology museum can be developed.

Dept. Council's Response to Peer Review Suggestions

On the basis of achievements made, the Department Council (on 19.04.2016) assessed this report and reached into a decision to give a rating "Good" in a scale ranging from "Excellent", "Good", "Average", "Below Average".

Academic Audit 2015
Department of Chemistry
Extracts from Peer Reviews

Dr. S, Ananthakumar, NIIST, CSIR: The performance indicators such as numbers of post graduate students/Ph.D scholars/post-doctoral fellows/ publications/patents etc. are out rightly giving impression that the department of chemistry, University of Kerala has extremely significant contributions in all fields of their relevance. A good track record is shown by the department to retain the credentials and stand as a top priority department amount the other various subjects of interest. Overall, the performance of the department is excellent and highly appreciated. **suggestion:** The department can have focused themes such as ‘chemistry of next generation energy; mainly H₂ energy/clean water green synthesis and affordable drugs’. Faculties are encouraged to write and secure more numbers of projects from national initiatives such as ‘Innovate India’ and ‘Make in India’ where funding opportunities are high. Very recent facilities for the chemical characterizations may please be added to strengthen the basic research. The department can expand its scope to have inter-university collaborative projects.

Dr. Nagaraja Naik, Professor, University of Mysore: The Department of Chemistry is actively involved in teaching and research activities, even though the department has limited research facility with less number of teaching faculties. In my view the progress of Department is satisfactory, I hope that in the course the Department of Chemistry would be one of the best Department in University, it will enhance the academic excellence of University. However I will suggest a few following suggestions: 1. To increase the infrastructure facility 2. To increase the student strength and also to enhance the faculty position by recruiting permanent teaching staffs. 3. To increase and enhance/extension of research activities by collaborative research with other active research groups. Hoping a good research and teaching activities, and kindly convey to my best wishes all the faculty members.

Dr. K.R. Haridas, Professor, Kannur University: The overall performance of the Department is Good and is in comparable with a standard India University. The faculty members are active in research. **Suggestions:** 1. The lack of ST students in the department is to be noted. The admission notification may be made wide publicity to overcome this. 2. The number of students qualifying for national level competitive examinations like JRF, etc., are very low. Steps may be taken to provide special coaching, etc. to the students. 3. Provision for e-reference for the students may also be considered.

Academic Audit 2015
Department of Computer Science
Extracts from Peer Reviews

Dr. Rajasree M.S, Professor and Director, IITMK: a. Quality of existing programmes: Content-wise existing programmes are good. Mathematics required for computer scientists is not well addressed in the programmes. There should be flexibility for faculty members to include new topics in existing courses or as new electives to stay in tune with the recent advances in technology and developments. The mode of selection of students to the PG programmes is also competitive and fair. b. Any steps to be taken to strengthen the existing programmes: The existing programmes can be strengthened in the following ways. (i) Internships to industry may be promoted through strong industry linkages. (ii) Student centric learning/knowledge exchange activities to be encouraged. c. Starting a new programme: While starting new programmes care should be taken to see that the programme is designed scientifically with objective/outcome based approach. Enough market study needs to be conducted to ensure that there are enough placement opportunities for the graduated. Balance should be there between research oriented and practice oriented subjects in the programme. d. Publication status: Satisfactory, Not uniform among faculty members. e. Any steps to improve the quality of Research work: (i) Research can be more application oriented and directed. (ii) research should be strengthened aiming at strong Intellectual Property Rights. f. Research Projects/Consultancy: Needs improvement. Consultancy assignments are practically nil. Can take up interdisciplinary projects in collaboration with other departments. g. Academic events/Activities: More technical programmes need to be conducted, the department has been in existence for several years. Hence it should own at least 2-3 International events and should conduct them every year. Student chapters of professional societies need to be functional and active in conducting the above programmes. h. General Comments on Strength and Weakness of the Department: Strengths: (i) Efficient leadership in the department. (ii) Meritorious students. Weaknesses: (i) Number of permanent faculty members in the department is grossly inadequate. (ii) The department needs better infrastructure. (iii) Publications number and quality to be improved.

Dr. G. Raju, HOD, Kannur University: a. Quality of existing programmes: The curriculum/syllabus of both M.Tech and M.Sc programmes are good. The quality of dissertation work carried out by M.Tech students is excellent. The question papers of M.Sc. programme are sub-standard. Assignment questions of M.Tech are of high quality. The curricular transaction (M.Tech. programme) is good as evidenced by the research contributions and publications. b. Any steps to be taken to strengthen the existing programmes: 1. The quality of M.Sc projects are to be improved. Many Universities insist that the final project should be carried out individually. Further paid projects are to be discouraged. There must be strict control over the selection of project topic as well as firm/organization. Research projects are to be encouraged. 2. The End-semester question papers of M.Sc course need improvement. There is no match between the marks allocated

and the question. It would be better if the weightage of Part-A questions reduced tri 2- in the present pattern a short answer type question is given 3 marks and essay type question 6 marks, which I find difficult to justify. c. Starting a new programme: The department shall start an M.Tech course with specialization in Big-data Analytics. d. Publication status: The publications by the faculty/M.Tech scholars in journals are excellent except couple of papers. Please note that in the present scenario publishing in paid (substandard) journals will affect the overall impression about the department. e. Any steps to improve the quality of Research work: Department lacks patents. Some of the works published are right candidates for patent. f. Research Projects/Consultancy: More externally funded projects are to be taken up by the faculty members. g. Academic events/ Activities: Well organized. h. General Comments on /strength and Weakness of the Department: The quality of both the programmes are good. The research output of the department is excellent. The publications and the quality of journals in which the papers appeared are commendable. More qualified faculty members are to be appointed. The tendency to publish research papers in substandard paid journals is to be checked.

Dr. R.S, Rajesh, Professor, M.S. University: a. Quality of existing programmes: Programmes are of very good and as per approved UGC/AICTE norms Adequate electives may be added for M.Tech programme b. Any steps to be taken to strengthen the existing programmes: More electives (industry people may taught) shall be added since the institute is very nearer to Technopark, Tvpm. c. Starting a new programme: May not be required as the department has already running sufficient programmes. e. Publication status: Good publications especially Journals are of very good quality and with impact factor. Faculty members at junior level shall also be participated in active research. Any steps to improve the quality of Research work: Conferences in thrust area shall be conducted every year. f. Research Projects/Consultancy: this is one area where the department must concentrate more. g. Academic events/Activities: Department has conducted six seminars last year. That is more encouraging. h. General comments on Strength and Weakness of the Department: Strength of the department is the faculty members, their qualifications and infrastructure. Syllabus is side of the art. Placement rate is good. Weakness of the department is collaborations with industries and lack of events scholars of conference.

Dept. Council's Response to Peer Review Suggestions

All the members have gone through the feedbacks of academic audit report obtained from all three evaluators. Members expressed their views on each parameter of the feedback and prepared an action plan for the year 2016-17.

Academic Audit 2015
Department of Economics
Extracts from Peer Reviews

Dr. B. Vanitha, Bharathiyar University: I have given my observations in terms of identifying the strengths of the Department and the opportunity for improvement as well. Following are the strengths of the department: a) Good placement for students (IAS/IES, College teachers, bank officers etc.) b) Good pass percentage for UGC NET. c) Adequate funding from different sources including UGC, Ministry of Agriculture etc. d) Good number of project works. e) Inviting students from foreign countries to do research. f) Inter University Centre for Alternative Economics. Following areas need improvement: a) Strengthening the faculty number against the sanctioned posts. b) Need for publishing a journal. c) Need for improvements in extension activities. d) Use the core strengths in research for providing consultancy services. e) Utilize the scope for intra and extra departmental collaboration in conducting programmes/ research. I wish the Department of Economics, University of Kerala the very best and looking forward to join in the pursuit of quality education in the future.

Dr. Jose Jacob, Public Policy Research Institute: I have examine the self study report of the Department of Economics, University of Kerala for the year 2014-15 and would like to offer the following comments/suggestions. **Strength of the Department:** 1. Commendable pass percent for UGC-NET exams, IES etc.2. Range of the question papers 3. M. Phil. synopsis with focus on issues of current relevance and policy implications. 4. Beneficial impact of the Cost of Cultivation Project, under Ministry of Agriculture for the articulation of policy inputs. 5. Good library. **Areas to be improved** 1. Consultancy services 2. Internships to students 3. Coaching classes and guidance facilities to students for better placements. 4. Promotion of enthusiasm among the teacher to take more research projects.

Dr. K.C. Baiju, Central University of Kerala: I have evaluated the Academic Audit Report (SSR-2014-15) of the Department of Economics and my observations on the evaluation report are given below: 1. The placement and progression of students in various posts, departments and colleges reflect the noteworthy performance of the Department. 2. In the areas of teaching, research and extension, the Department undertook various activities and shown remarkable performance. 3. The Department has a consistent record of good initiatives in collaborating with different agencies and in availing project works, extension activities, seminars, conferences etc. 4. The question papers, Assignments and the synopsis of PG and M. Phil Dissertation show quality and reflect the standard of Department. 5. The Department could have published monographs and a journal of its own to scale further heights to excellence in scholarship and participation in international discussion forums.

Dept. Council's Response to Peer Review Suggestions

The Department Council discussed in detail the evaluation reports of Academic Audit for the year 2014-15 and finalized the following actions. In general, the department should strike for betterment of teaching, research and extension in particular (a) to write to the University to appoint more teachers in the department. (b) IUCAE decided to give more internships, associate ships, projects depending on the availability of funds. (c) decided to explore extension and consultancy activities. (d) decided to start UGC NET coaching classes.

Academic Audit 2015
Department of Environmental Sciences

Extracts from Peer Reviews

Dr. G. Byju, CTCRI: All the faculty members have got very high academic credentials and excellent track record in their areas of specialization which include biomonitoring and bioremediation, microbial biogeochemistry, phytoremediation, environmental pollution, abiotic stress management, soil pollution, environmental toxicology, remote sensing and GIS, EIA and hydrogeochemistry. The facilities available in the department for teaching as well as to carry out the research studies are very good which are well proved by the quality of publications and Ph.D theses that have come out during the period.

The Department also had collaborative programmes with many Institutes of which the one with Centre for Tropical Marine Ecology, Bremen University, Germany is worth mentioning. Five externally funded research projects were in operation during 2015 and all the studies are very important in the current era. A review of the question papers that were given for M.Sc. and M.Phil students show that the question papers are prepared in such a manner that they test the analytical ability of the students in all areas of the subject and are of international standard.

It is worth mentioning that during 2015, the Department organized a National Seminar on Soil Pollution and Paradigms for Sustainable Soil management as a part of the celebration of the International Year of Soils. The Department is very vibrant, active and sensitive to social and environmental issues. The overall performance of the Department during 2015 is rated very good.

Dr. E.V. Ramaswamy, M.G. University: The Department has a team of well qualified faculty members, good strength of students, Ph.D scholars and supporting staffs. The department is operating post-graduate (PG), post PG (M.Phil) and Research Programme (Ph.D). Besides the usual academic programmes the department is also catering the research needs of the society by offering Post-Doctoral (PDF) and Women Scientist programmes. Faculty team of the department is operating four research projects through which it has mobilized reasonably good funding as research grants from external funding agencies. A minor consultancy work has also been undertaken by the department. The research output of the department is evidenced through the research publications; other academic activities of the department including the conductance of Seminars and refresher course etc. deserve appreciation. The department has Instrumentation support for its research programmes, however this facility needs further improvement as it will enhance the research output of the department. The department has also established collaborative research with a German University which deserves special mentioning. The student community of the department has also proved their talent by attracting overseas research fellowship (DAAD) and qualifying NET examinations. In summary, the department has fulfilled the expectations of a University Department's performance in

academics even though there exists ample scope to excel further. **Weakness:** Inadequate laboratory infrastructure – strengthening of the labs with modern research equipment is required. Lack of organization of International Conferences. M.Sc. and M.Phil students are doing their project works in the parent department itself, some of them can opt to do outside the campus. Lack of extension activities in the department.

Dr. M. Michael Babu, Mnonmaniam Sundaranar University: A good number of applicants have applied for the M.Sc. programme (162). It shows the demand of the course among the students. Thirteen Ph. D have been awarded in the last three years. So, all the faculties are highly involving in research apart from their teaching. The master degree syllabus has been awarded in the last three years. So, all the faculties are highly involving in research apart from their teaching. The master degree syllabus has been revised and all updated based on the need of the subject. Students have received the prestigious DAAD fellowship to attend the abroad training programme. Collaborate studies have been done in collaboration with a German University. One student has passed NET. Symposium and refresher programmes have been conducted. By the extension and consulting services, the department has earned Rs.1,43,981/-. They purchased major equipment for more than 5 lakhs. An informative department brochure has been published by the Department. Dr. Anju has received a prestigious DST, women scientist award. Alumni association meeting has been conducted.

Suggestions: 1. Making Public awareness on environmental issues may be given much importance, because it can only be created by the Department of environmental Science. 2. Suggesting the department to have collaboration with any industry to tackle the pollution issues. 3. More number of awareness programme on climate change may be conducted. 4. Collaborative research with national and international unities can be considered in future. 5. Can make contact with world environmental protection agencies to work jointly.

Dept. Council's Response to Peer Review Suggestions

The reports were reviewed by the Department Staff Council members and suggested to include the action plan in the Department Level Quality Plan 2016.

Academic Audit 2015
Department of Islamic Studies

Extracts from Peer Reviews

Dr. P.K. Abdul Rahiman, University of Madras: The student enrollment at the PG level is satisfactory as the sanctioned strength at the department is filled. The enrollment of women candidates at the PG level is very encouraging. The current enrolment for Ph.D is only part-time. Having full-time Ph.D scholars in the department will enhance the research orientation of the department. The upward movement in the procurement of academic resources in the department. The journal subscription also seems to be good. The participation of the faculty members in academic activities such as seminar/conferences/media is commendable. The department has organized a National Seminar in the current year. The department has organized special/invited lectures. The participation of the faculty members in the corporate/administrative life of the University is good. Participation of students in the co-curricular activities has room for improvement. **Suggestions:** Efforts should be made to enhance the research output of the department. The faculty research publication output can be improved. Faculty members should be encouraged to apply for funded research projects to be administered in the department. Publication of Research Journal by the department shall be considered in order to enhance the research orientation of the department. The department should take efforts to enhance the student enrolment in the M.Phil course. Efforts may be taken to promote students' participation in the academic and campus life. Students' seminar and book/journal club may be organized. Research/academic collaboration with national and international agencies to be encouraged. To improve the academic profile and output of the department, it is suggested that more faculty members be recruited. The Department of Islamic Studies has got a lot of potential for growth given the global and local context of Islam. This potential can be maximized through institutional support.

Dr. B. Maria John, Professor, Manonmaniam Sundaranar University: The Department conducted the seminars and conferences, other such programmes in good way to lead the Department. It will strengthened the scholars ideology. Library contain good number of books. Journal subscription is good. Journal subscription is good. Publication of the Faculty is good. The involvement/Participation of the students/Faculty in the conferences is accountable. One year achievement leads the next steps of the Department. **Suggestions:** Department of Islamic Studies has only three permanent Faculties. The Faculty strength may be increased. Good responses in PG enrollment. Out of 29 applications 10 seats are filled. But less number in M.Phil. It may increase. No. post Doctoral fellows in the department. Less number in M.Phil. It may be increased, Ph.D Fellowship students are nil. If increase the Ph.D Fellowships the Department will grow. Appoint Post Doctoral fellows in the department. Faculty members are encouraged to apply new projects. No projects in the Faculty members, they must receive projects each at least one. MoU agreement may be developed the Department. Publication of the staff may

be increased. Issuing of books to the students in the library may be increased. Students activities, Journals, clubs should be encouraged. Department may be started one Journal to encourage the Scholars. However, it is the only one department to introduce Islamic Studies in South India. The growth and development is remarkable.

Prof. M. Abdul Samad, HoD, University College, Tvpm: The faculty members are qualified in multidiscipline with Ph.D. The guest faculty also possesses Ph.D. The participation of faculty members in academic and administrative matters of the University is fairly good. Thy presence of faculty members in print and electronic media as well as in academic and social endeavors outside the campus is also commendable. The number of Ph. D awarded (2 nos.) last year in a minor department like Islamic history where the programme is only part time is a great achievement. The student enrolment to PG programme to the sanctioned strength of 10 and hundred percent pass in the PG programme are meritorious achievement. **Weakness:** The lack of a departmental journal, even though the department offer M.Phil and part time Ph.D programme is a weakness. The total number of library books (5673) acquired over 25 years is not satisfactory. The issuance of library books to members is not promising. The department fails to attract students from abroad and outside state. Number of permanent faculty is not sufficient to handle the programmes offered. Though potential, no international seminar is organized especially when drastic changes are taking place in Muslim world. No separate seminar hall with public address system and LCD projector. No minor or major projects undertaken nu the faculty. Community outreach programmes are scanty. **Suggestions:** Publication of a departmental research journal. Improvement of the standard of PG and M.Phil dissertations. Undertaking funded projects by faculty members. Orientation programme for JRF/NET with career guidance. Syllabus of elective subject to be formulated to attract students from other departments. An alumni association may be founded which may be helpful for the development of the department. A computer lab with sufficient number of computers with internet connectivity and free access to students may be ensured. The number of stock and supply of library books may be increased. Digitalization of library may be resorted to. Encouragement may be given to complete the part-time Ph.D research work within the stipulated time. A separate seminar hall with all facilities itself will promote frequent seminar and extra activities. Social work and extra curricular activities of the students may be promoted. A system may be introduced to watch and ensure the placement of the pass outs from the department. Local seminar/debate and discussions may be arranged inviting faculty members of allied subjects from the campus. The number of permanent faculty members may be increased in accordance with the work load.

Academic Audit 2015
Department of Philosophy
Extracts from Peer Reviews

Dr. R. Lekshmi, Govt. College for Women: The Department of Philosophy, University of Kerala, Kariavattom is marching ahead with its academic excellence disseminating enthralling thought currents and enriching speculations of contemporary relevance. Though its spinning wheels are driven single handedly by the only regular faculty member heading the Department supported by two contract lectures, nothing negative is there to pinpoint as regards the teaching-learning or other research programmes and innovative practices are concerned. The department library is a store house of excellent collection of books and journals in Philosophy which is open to the easy access of teachers as well as student communities. The Department also keeps a good track record of differing academic programmes like international and national seminars, workshops, symposia, training programmes collaborative activities, inter Departmental events along with a few publications to its credit. But the Department is in dare and urgent needs of assistance and support from the authorities in filling up the vacancies of faculty members, purchase of more library books (to reach the target oof 5000) and also other infrastructure development.

Dr. Smitha T,M, Maharaja's College: Department of Philosophy is one of the best and significant department in University of Kerala. This Department has a long and glorious history. Department produced many academicians, teachers and society significant personalities. Now department is doing well under the Head ship of Dr. Beena Issac. Presently department confronts a lot of constrains like, lack of sufficient infrastructure, sophisticated Technological equipment, library resources. Among these the most processing problem is nothing but the lack of sufficient permanent teaching faculties. P.G and M.Phil courses having sufficient students. Due to the lack of sufficient teaching staffs effective teaching, learning is lacking. Within the minimum resources department conducted a lot of interactive programme and seminars for the well-being of academic community. If the above mentioned issues will solved by the authority the Department of Philosophy can make great academic achievements.

Academic Audit 2015
Department of Physics

Extracts from Peer Reviews

Dr. K.P. Surendran, Scientist, CSIR (NIIST): Even though the Department conducts all its programmes regularly the total faculty strength of the Department is only four. Hence it is necessary to appoint new faculty members with diverse research experience in cutting edge areas of Physics. All the faculty members should try to bring more research grants for improving research facilities in the department. The research work should be more focused towards developing new products/technologies. It would be better to conduct more number of workshops/seminars. Signing MOUs with industry and other research institutes is highly desirable.

Dr. R.V.S.S.N. Ravikumar, Acharya Nagarjuna University: **Observations:** The Department has both M.Sc. and M. Phil. programmes. I have observed that the course content is in agreement with the syllabus prescribed by UGC. The question paper pattern is given much importance to problem solving which will certainly benefit students for appearing for National level tests. The number of students qualified for UGC-CSIR, SET examinations could go up with more orientation classes. The Department is offering only one specialization. **Suggestions:** In the next syllabus revision, the possibility of including more specializations may be probed. More teachers especially in higher posts may be recruited so that the teaching will be more effective. Possibility of engaging more visiting professors and emeritus professors will also help to improve the teaching-learning process. The laboratory component may be improved so as the induction of students to experimental research will be more effective. **Observations:** The research output of the Department definitely is picking up but needs an exponential raise. I understand that the number of faculty members is only four and that certainly limits possible innovation in research. More research funding is to be tapped for achieving state of the art standards in research. One important point that I have noted is that all the faculty members are specialists in Materials Science while there are no experts in areas such as theoretical Physics, instrumentation, space Physics, etc. **Suggestions:** Faculty strength may be improved so that research in diverse areas could be pursued. More state of the art equipments and research facilities may be acquired. Should include students from other states and Nations may be inducted. Possibility of signing MoU's with reputed Universities and Institutes may be probed.

Dr. M. Jinaid Bushiri, Professor, CUSAT: Regarding M.Sc. course, one improvement possible is to emphasize strongly on the basic Physics papers and to add more number of special papers as optional/elective papers. I understand that this can be achieved only if more faculty members with expertise in diverse fields are inducted into the faculty. Further, instead of sticking onto a single pattern of question papers, more options may be provided for question papers. This may be tried out first internal examinations and then for external examinations as well. On the research front, the number of research papers is

to be increases substantially and is possible only by increasing the faculty strength. All the publications are in the field of materials science while fields such as Laser spectroscopy, Space Physics, Theoretical Physics, etc., which were strong areas of the Department is at a standstill. Further, department requires more sophisticated equipments like Raman spectrometer etc. for its research activities. As a well wisher of the Department, I feel that this issue must be addressed on a war footing so that the Department could regain and retain its position as a forerunner in diverse areas of Physics. In my opinion, the Department have young faculty members with expertise in materials characterization and should conduct workshops in selected areas so that students benefit more.

Dept. Council's Response to Peer Review Suggestions

Short term Plan for Action: In the next syllabus revision, emphasis on basic physics will be strengthened and more special papers will be included. Multiple choice questions in the pattern of UGC-CSIR, NET examination will be included in internal examinations/test papers. Efforts will be made to conduct at least one workshop every year. Will try to include more visiting faculty/Adjunct faculty with expertise in diverse fields. Request University or fill-up Professor and Asso. Professor posts so that faculty with expertise in diverse fields are available. Will try to bring in more research funding from various funding agencies. **Long term Plan for Action:** Request University to fill up all existing vacancies. Try to get more state of the art equipments such as VSM, Raman spectrometer, FTIR spectrometer, etc. Try to sign MoU's with reputed institutions. Try the possibility of getting grants for projects involving expertise of faculty in our Department and sister Departments.

Academic Audit 2015
Department of Zoology
Extracts from Peer Reviews

Dr. Jishy Varghese, Asst. Professor, CET: I have found that the all categories mentioned here are met with an excellent success.

Dr. R. Harikumaran Nair, Asst. Professor, M .G University: Teaching Learning and Research activities of the Department of Zoology for the period of 2015 are found to be excellent.

Department of Computational Biology and Bioinformatics

Extracts from Peer Reviews

M. Milner Kumar, Bioinformatics Scientist, SciGenom Labs Pvt. Ltd, Cochin:

General assessment: 1. Both internal and external questions for MSc & MPhil are good. 2. Assignment questions & topics for MPhil (Bioinformatics) students are basic. 3. Abstract of MPhil and MSc students are of very good quality. It covers many recent topics including molecular docking, next generation sequencing, data mining database etc. 4. One selected publication that you shared is exceptional. It is a result of pure team work collaborated from different geographies. Though it is a recent paper I already found three citations. I congratulate Dr. Umesh for his excellent efforts. 5. I observe a good blend of students from various reserved communities. 6. Major conferences/seminars organized by your department cover most of the recent topics. 7. Contribution to Malayalam in the form of scientific article is worth mentioning. 8. Public talks/discussions is predominated by Dr. Achuthsankar S. Nair followed by Umesh P. 9. Number of NET/GATE qualified students is less compared to the total strength. Suggestions for improvement: 1. Assignment questions & topics for MPhil students can be more advanced and the students should be encouraged to choose recent topics; popular in research community / industry. 2. Number of peer reviewed publications is less relative to the number of students & lecturers. 3. MoU with other institutions can be more. 4. Students can be encouraged to choose electives from outside school.

Dr. E.V. Soniya, Scientist, Rajiv Gandhi Centre for Biotechnology: The research accomplishments (6 papers in peer reviewed journals, one patent filing) is appreciable. "Ayurinformatic Research Bulletin" is also a very good initiative. Still more events including international conferences and workshops has to conducted as it will always be an encouragement and motivation for students that will ultimately lead to broad scientific exposure. The assigned work allotted to students seems to be completed on time with minimal errors. With regards to the quality of works; significant progress is noted. Article in PLOS biology regarding SBOL is indeed a good start. As the Department is highly saturated with various computational facilities, this can be utilized more in such a way so as to establish a thematic focus and a research agenda, which will be cumulative in building more external reputation. It is also advisable to get more publications in highly peer reviewed journals in the coming year. Overall, the Departmental activities during this academic year are excellent.

Dept. Council's Response to Peer Review Suggestions

The Department Council which met on 09.05.2016 resolved to ensure peer- review of question papers and also to revise M.Phil syllabus in 2016. Aspects noted as positive will be continued and bettered.

Academic Audit 2015
Department of Aquatic Biology & Fisheries
Extracts from Peer Reviews

Dr. Sreelatha Kumar, Environmental Scientist, Sr., Alabama, Department of Environmental Management, USA: By looking at the course work, research projects undertaken and looking forward to improve the quality of education in AQB & Fish. and equip the students to compete in the highly competitive world, please consider the following suggestions from our side. We can discuss them in detail if you are interested. If possible, include the following topics either in the form of research or teaching in order to receive more international acceptance: 1. Remote sensing and GIS application in freshwater ecosystems of Kerala. 2. Wetland biogeochemistry. 3. Environmental impacts of pollutants. 4. Applications of hydrodynamic modeling to water quality problem including transport of bacteria from tributary to swimming beaches and protective tracking of freshwater algal blooms. 5. Aquatic ecology: aquatic-terrestrial links; conservation and management of aquatic system; long-term monitoring. 6. Behavior of metal contamination sediments in Lakes and reservoirs. 7. Watershed management. 8. Socioeconomic studies of fishermen communities. **Then focus on the long term goals as follows:** 1. Try to develop an Aquatic and Wetlands Ecosystem Research and Development Centre on the light of the new Vizhinjam Port. The centre should support sampling, characterization and biocontrol of aquatic invasive plants/animals in lakes and reservoirs. The staff should be highly knowledgeable in botany, freshwater biology, fisheries biology, entomology, malacology, phycology, mycology, plant pathology, ecology, statistics and wildlife ecology. **The research activities of the centre should concentrate on:** Biological control of invasive species. Control and management of zebra mussels (it's a menace in the USA). Native species population and their biology. Invasive fish bioassessment. Characterization of native invertebrate communities. Habitat characterization and bioassessment of native fish population. Shoreline erosion studies. Lake and riverine restoration. 2. Establishing Environmental Security; i.e., strengthening National Security through **Environmental Protection:** Environmental protection and economic growth go hand in hand; both are essential to Kerala and in India as a whole. By preserving the global environment we promote the peace and prosperity of India and its world partners. 3. Scientific assessment of Freshwater Harmful Algal Blooms: Every Government should recognize the importance of Harmful Algal Blooms (HABs) as a high priority national issue by specifically calling for implementation of Harmful Algal Bloom and Hypoxia Amendments Ocean Action Plan. It should be acknowledged that HABs are one of the most scientifically complex and economically damaging issues challenging our abilities to safeguard the health of our Nations Freshwater and Marine ecosystems. 4. Initiate Environmental Journalism course at the dept. of AQB: The growing awareness about environmental issues have proved to be a boon for the field of Environmental Journalism which is still in its nascent stages in India. As awareness about the threat to the environment and ecology by the ever growing population, urbanization,

industrialization, and developments increased, the media felt the need to educate people about the threats they face. A new breed of environmental journalists should be cropped up to study and analyze the threats to the environment and ecology, and convey these fears and remedies to the public thus giving rise to environmental journalism. As pollution increases, forest cover disappears, and landscape changes, environmental journalism are becoming the need of the hour.

Dr. Rajeev Raghavan, Department of Fisheries Resource Management. (KUFOS):

One of the pioneer academic and research departments of Kerala established in the year 1938, the Department of Aquatic Biology and Fisheries, University of Kerala, has a long history in man power development in fisheries and aquatic biology sectors and excelled in both academic and research activities, thus enjoying the status of **Centre for Advanced Studies (CAS)** by the UGC. The excellent contributions of the Department, notwithstanding, the current faculty strength of two is a matter of concern and any department that wish to excel in research, especially in the context of brining interdisciplinary outcomes. Despite that the academic and research contributions in some areas, especially in taxonomy, is noteworthy. **General observations:** The main focus of the Department is on academic activities, research and extension. The academic process though systematic, there is a need to bring in more uniformity in the process of preparing questions for the exams and preparing the project works and dissertations. Further a few of the publications are in predatory journals that have to be curtailed to improve the quality. The research output should be reflected in good quality publications, as done in the case of publications in taxonomy. The Department takes keen interest in organising seminars and workshops of good quality and outreach, besides extension and public service activities. Despite poor faculty strength the Department also provides extension services even to government firms and this deserves special appreciation. However, specific career guidance programmes and attachment programems with industry/fish culture systems can be tried for expanding the knowledge horizon of the students. **Suggestions:** Maintain uniformity in setting questions for the mid semester examinations and class tests. Maintain uniformity in preparing the dissertations of MSc and MPhil programmes and guidelines in this direction, if not available, should be issued to the students well in advance. Arrange special career guidance and training programmes for the students. Group assignments/discussions should be promoted in addition to various club activities. Attachment programmes with hatcheries, fish processing plants etc. should be initiated besides practical sessions for each course. In case of limitation in faculty, the students may be given option in completing project works in associations with reputed research centers. Collaboration with other fisheries universities and research centers should be initiated. Publications in predatory journals should not be permitted and such journals should not be approved.

Dr. B. Santhosh, Principal Scientist, ICAR-CMFRI Vizhinjam Research Centre: It is alarming to see the diminishing number of permanent faculty in the Department. Presently they are so few that handling academic sessions spreading over vast areas of

specialisation becomes unfeasible. The academic topics now being covered is comparable to almost 6 to 7 M F.Sc. courses in different areas fisheries. This will definitely affect the quality of output from students and the same effect is seen reflected in the lack of diversity of project reports, papers, Ph. D. topics and overall performance. The department has a notable history, producing eminent personalities in specialised areas of Aquatic Biology and Fisheries. If this glittering era has to come back to the Department, it is noted that at least 10 permanent faculty members should be there to handle academic sessions. In spite of these bottlenecks, I am happy to see the publications which came out of the department. Though most of it were seen lingering around a few areas of specialisation, I should congratulate the contributions and efforts in the area of taxonomy and biodiversity documentation as seen in excellent international publications, collaborations developed and other activities thus giving a facelift to the Department even in the international front. Student and faculty interactions with other institutes, central government agencies like CMFRI, CIFT, NIO, NIIST and more collaborative programmes including MoUs, project works etc. could be thought of. The Department website also needs improvement and alumni activities should be strengthened. A series of lectures at least during weekends can be planned utilizing the eminent retired alumni of this department for widening the world view of students. Social awareness Campaigns, Swach Bharat Initiatives and Academic Club activities can also be strengthened. Pre preparative classes & model examinations for ARS, NET and even State PSC Exams in fisheries are essential. The syllabus and question papers also have scope for improvement. Questions and marks allotted can be in a uniform pattern across subjects. Biostatistics part needs improvement both in syllabus and topics covered. Statistical analyses specific to fishery assessment, population dynamics, breeding and genetics are essential and needs to be included. Practical classes for all topics including biostatistics also need improvement. Syllabus and questions of practical classes could have been given in the report submitted for this assessment. However, considering the overall performance of the present faculty members, working within all limitations, I should appreciate the Department and wish to give an “**Excellent**” as assessment for their overall academic contribution and efforts for improvement.

Dept. Council’s Response to Peer Review Suggestions

The Department Council analyzed the assessment reports submitted by the three peer group members and arrived at consensus to frame the following action plans so that there is improvement by the time of next academic auditing: 1. To revise the syllabus of both MSc and MPhil programmes incorporating the scope for practical in each session and multidisciplinary subjects such as remote sensing applications, hydrodynamic modeling to water quality problem, Shoreline erosion studies, Characterization of native invertebrate communities, and Invasive fish bioassessment. 2. To prepare a standard format for mid semester examination in all subjects. 3. Questions and marks allotted can be in a uniform pattern across subjects. 4. Arrange special career guidance and training programmes for the students. 5. To promote group assignments/discussions in addition to various club activities. 6. To include attachment programmes with hatcheries, fish processing plants etc. in the revised syllabus. 7. Initiation of collaboration with other fisheries universities

and research centers. 8. To create awareness among research scholars not to publish in predatory journals and to organise a workshop on research methodology. 9. To furnish all details in the Department website and to provide the details of alumni. 10. To arrange a series of lectures at least during weekends can be planned utilizing the eminent retired alumni of this department for widening the world view of students. 11. To arrange pre preparative classes & model examinations for ARS, NET and State PSC Exams related to fisheries.

Academic Audit 2015
Department of Futures Studies

Extracts from Peer Review

Prof. Subir Kumar Ghosh, Fellow, Professor of Computer Science, Tata Institute of Fundamental Research, Mumbai: The department has four faculty members and offers M.Tech. MPhil and Ph.D degrees. The faculty members are very active researchers as it can be seen from the long list of publications in reputed journals and conference proceedings. I had several interactions with faculty members and students of the department over a long period of time. I am very impressed with their motivation and commitment towards teaching and research. It is high time that more faculty members are recruited in the department for strengthening the current activities.

Prof. Daya Gaur, Department of Math & Computer Science, University of Lethbridge, Canada: The Department runs M.Phil, M.Tech. Ph.D and Post Graduate Diploma in Knowledge Programme. There are four faculty members and one system analyst in the Department. The teaching load is three courses a year in addition to any lab duties and load for administrative duties. The department would benefit from additional faculty. The research productivity of the members is good. It appears the Dr. Manoj Changat, Professor is providing good leadership in the Department. The Department needs more partnership with Industry and Entrepreneurship cell is a step in the right direction.

Ajit Kumar K V, Executive Vice President & Managing Director, ENVESTNET: I have been interacting with the Department for the last couple of years. The interdisciplinary courses of the Department are unique in nature. The M.Tech in Technology Management course contains subjects that are required by the industry. It seems that there is a stress on theoretical inputs, but the application part through lab sessions can be enhanced so that the students get a feel of industry perspective. There should be meaningful interaction with professionals from industry, discuss trends in the industry and this should form a compulsory part of curriculum. There should be linkages with the industry and some of the problems of the industry can become part of the research. In fact offering solutions for their problems through research would entail wide acceptance by the industry and beneficial for the student community. An industry-academic cell could be thought of in this regard.

Dept. Council's Response to Peer Review Suggestions

The external experts mainly suggested to improve the interaction of the Department with industries. The Department Council met on 21/03/2016, went through the report of the experts and decided to search for more tie up with the industries. The Department will initiate steps for collaborations with the industry through the Entrepreneurship Development Cell of the Department.

Academic Audit 2015
Department of History
Extracts from Peer Review

Dr. S. Ramachandran Nair, Professor and Head, Dept. of History, Sree Sankaracharya University: Being the Research Department, it concentrates on the research activities, leading to Ph.D, in addition to the undertaking of the regular courses of Post graduate and M. Phil. The Department has only four permanent faculty members but the devotion and commitment of the faculty need to the sphere of teaching, research and curricular, co-curricular and extra-curricular activities. Considering these facts, I have great pleasure to accord to the Department of History, University of Kerala, Kariavattom, Thiruvananthapuram a very high rank in teaching, research and other academic activities.

Prof. P.K. Raveendran, Professor & Head, University College, Tvpm: The profile of the Department of History highlights a very good academic year of 2015 in terms of academic and activities even though the Department possess only four permanent faculty members. The Department has attracted students to its full strength for the Postgraduate and M.Phil courses in addition to the emphasis on research activities, leading to Ph.D. The progress of the students in terms of percentage and grade of pass is quite appreciable. It is also to be noted that a few students have obtained JRF/NET and SET, conducted by UGC, New Delhi and State Government. The indication of placement reveals the fruitful achievement of the students, in the development of the society, at larger level. The research activities of the Department also deserve special mention. Topics of research/dissertations give importance to historical aspects, including contemporary issues which require even policy level decisions and recommendations. All these justify high quality on the axis of core disciplines. The syllabus, assignment of dissertations/theses, pattern of evaluation, question papers including international and so on meet the standard of the institution. The organization of National Seminars, publication of reputed Journals of Indian History and Journal of Kerala Studies deserve special appreciation. As suggestions, the Department may undertake research projects, funded by national and international funding agencies and collaborative research projects even though it faces scarcity of faculty members and hectic schedules of postgraduate, M.Phil courses, research activities and publication of internationally reputed journals. Furthermore, importance may be given to attain knowledge at global level by considering the need of the society. On the whole, the Department of History is on right academic track by preserving the proud, in the past. Under these circumstances, I rate the Department with teaching activities, supplemented by an enviable record to its credit.

Dept. Council's Response to Peer Review Suggestions

It was resolved to take steps during the year to address the suggestions of the Audit.

Academic Audit 2015
Department of Commerce

Extracts from Peer Reviews

Dr. E. Raja Justus, Professor, Manonmaniam Sundaranar University: Keeping in view the objective for which this exercise has been performed, I bring to your kind notice the following, under two different heads, viz., 1. Individual analysis and report, and 2. Overall performance report. **Individual criteria analysis and report:** 1. Average no. of Ph.D Scholars per guide = $61/7=7$ (approx.): Well within the limits of the UGC guidelines. 2. Average no. of M.Phil Scholars per guide + $7/5= 2$ (approx.): Far below the standards of the UGC = Thus, in future the policy may be changed to have more. 3. Average no. of M.Com students per faculty = $40/7=6$ (approx.): In future policy may be changed to have more students. 4. Average no. of books issued per member per month = $7795/119/12=5$ (approx.): Very good collection of books + the regularity of the issue of books should be ensured correctly+ additions to the existing stock is a welcoming sign. 5. Average Journal per member per year is far below: Steps should be taken to increase it to at least 25, on the count that if on a particular day one M.Com class is sent to the library, each one should have at least one journal to read. 6. Average publications in journals by: a, Faculty per year + $22/5=5$ (approx.) Very good sign of improvement b, Research scholars = $21/68=$ Far below. Steps should be taken to improve this situation. 7. Average paper presentations by: a. Faculty per year = $6/5=1$ (approx.) can be improved. b. Research scholars per year = $9/68=$ far below: Should take necessary steps to improve this situation. 8. No. of Ph.D awarded during the year =7: This is a very good performance improvement indicator of the Department. Shows clearly the quantum of research work put in by the research guides, apart from their regular academic work. 9. Computer lab facility needs elaboration, with details as to : the no. of terminals available, the configurations of the server, Net connectivity, etc. 10. The Consultancy service provided by the Department is excellent. 11. The Placement record is also excellent. The placement cell and its activities can be elaborated. 12. The research projects, entrepreneurship Development cell activities, and the regularity of the in house Journal publication, are to be strengthened in future.

Overall performance report: The Department of Commerce, University of Kerala had been doing yeoman service to the society and industry, at large, through academic, research, and consultancy. The year 2015 is also no exception, where the Department put its Stamp of authority in academic activities, research activities, and consultancy activities, Some of which needs specific mention here are: 1. Sixty one Ph.D Scholars pursuing their research. 2. Forty three publication in Journals. 3. Fifteen paper presentation in Seminars. 4. About one lakh Rupees worth consultancy outlay. 5. Quarterly Journal (with ISSN) Publication. 6. Strong placement record to students. 7. Strong library with about eight thousand books and a further yearly addition of about five hundred books every year. 8. Having strong Community concern with social responsibility, have 'Community Outreach Programmes'. 9. Above all a strong team of research oriented but at the same

time multifaceted faculty having excellent track record in different areas of research and consultancy, giving expertise and guidance at all times. I place on record my sincere appreciation to each one belonging to the Department of Commerce, University of Kerala, for making it a vibrant and self-motivating model department.

Dept. Council's Response to Peer Review Suggestions

Based on the recommendations of the Auditors, we intend to initiate the following measures as part of our action plan. 1. Research Scholars would be encouraged to participate in national and international seminars and to present Research Papers in the same. 2. M.Com and M.Phil projects would focus more on case studies and live issues that would have institutional linkages. 3. Continuous efforts to be made to achieve the Best Academic Practices identified. 4. Department to ensure institute- industry as well as institute- society linkages as part of better learning, quality research and possible consultancy and extension services. 5. Steps would be initiated to ensure greater involvement of students in the learning process as well as in the research initiatives of Department. 6. Measure would be taken for IT usage in the classroom and to create a student friendly environment that supports learning. The teachers, researchers, students and staff of the Department resolve to work as a team in the pursuit of quality education that promotes excellence and triggers true learning.

Academic Audit 2015
Department of Statistics
Extracts from Peer Review

Dr. Muralidharan, Professor & Head, The Maharaja Sayajirao University of Baroda: I have noticed that for both M.Sc. and M.Phil courses the full sanctioned strength of students are admitted and most of the admitted students continue with the course. For the Ph.D programme I observe that with four supervising teachers there are 18 research scholars working in the department. The above students/teachers ratio is quite good when compared with several other Universities in India. The number of research papers seen published in refereed national and International journals is observed to be 27. This is also considerably large in a mathematical science that too with faculty strength of only four. It seems that this department is a DST-FIST supported department which is a rare distinction conferred on this department, that too with a very small faculty strength. I feel that the department achieved that, only due to the high quantum of academic output generated by the faculties and research scholars of this department. It is observed that this department is officiating as this editorial office of the Journal of the Kerala statistical Association and one of the faculty members is officiating as its Editor. This makes the department academically very vibrant by their participation in the review and publishing work of the articles in the Journal. It seems that the department is revising the curriculum of M.Sc and M.Phil programmes in appropriate times and thereby maintaining the academic programmes as per the latest requirement of the society. It seems that with the DST support there are two statistical labs set out in the department with installation of updated versions of statistical package such as SPSS, Matlab, Mathematica etc. There are facilities in the lab to utilized free software such as R, LaTeX etc. as well. All M.Sc, M.Phil and Ph.D project/ dissertation works are reviewed by periodic seminars conducted in this department. It seems that quite good number of students get qualified in competitive exams like NET/SET. I have also observed that the department has shouldered the academic burden of conducting several conferences, seminars, workshops, symposium etc. (both national and International). It seems that several awards and recognitions have been received by the students of the department. It is observed that world renowned Statistician Prof. A.M. Mathai, Emeritus Professor of McGill University, Canada visited the department and gave two lectures to the students and faculty members of the department. **Points for Improvement:** 1. The students are to be encouraged to utilize Library more seriously as the books per number issued score reported 182/40 is too low. 2. The faculty members are advice to take more funded projects. 3. Collaboration with industry has to be encouraged. I observed that this department of statistics is the second oldest instituted department in India with very high reputed statisticians namely Prof. U.S. Nair, Prof. A. George, Prof. R.N. Pillai, Prof. T.S.K. Moothathu, Prof. P. Yageen Thomas and so on have headed this department and the quantum of statistical discoveries made through this department at international level is disproportionally large. With this much academic output and possession of old heritage, I wonder why sufficient

administrative support is not provided to this department to make it flourish academically? Maintaining a mere strength of four faculty members to run it is only an academic action from the administration side of the University to recruit at least four more faculty members.

Dr. K. Jayakumar, Professor & Head, University of Calicut: On going through the records it surprised to me that both M.Sc and M.Phil courses of this department are run with full strength, which is contrary to the fact that many departments all over India failed to attract enough students for running the courses. The Statistical heritage of the department is another achievement of the department. Many world renowned Statisticians such as late Prof. K.C.S. Pillai and presently known Statisticians Prof. A.M. Mathai of McGill University and Prof. Thomas Mathew of University and Prof. Thomas Mathew of University of Maryland who had acquired their Statistical research ability from this department remain as witness to the achievements of this department. From records I have noticed that 18 research scholars are working with 4 research supervisors in this department. This student teacher proportion is admittedly and significantly large when compared with the same ratio observed with Statistics departments of other Universities in Kerala and elsewhere. The ratio on the number of research papers published to the number of teachers in the department is also the highest to this department when compared with the same ratio with other Universities (that is 27 publications in 2015). With a very small number of teachers, the hard work rendered by the teachers made them to bag the DST-FIST support from Govt. of India. I have observed that the department had always taken effort to update the curriculum of M.Sc and M.Phil programmes. The department is successful to install much important Statistical software as well. The students are compelled to use the Statistical lab and the software to carry out their project works and for preparation of papers for both publication and presentations in seminars/conferences. The caliber of the department in organizing seminars, conferences, workshops, symposium (both national and international level) and refresher courses etc. is again a point of merit of the department. The department always invited many National and international Statisticians to visit the department and to deliver talks. With the above stated meritorious outputs it pained me much while observing about the poor strength of teachers. Immediate administrative support has to be given to the department by recruiting immediately at least four more teachers. Immediate action from the administration of this University in inducting new teachers will boost the morale of teachers of the department which will empower them to work with high academic vigour in their endeavors.

Navas Jalaludeen, Director, Dept. of Statistics and Information Management, Reserve Bank of India: The department handles post graduate and M.Phil courses in Statistics and it is a great achievement that all the faculty members are supervising guides for research students. The infrastructure is up to the mark and course curriculum is updated periodically. The students are well tutored in theoretical as well as practical

aspects of the subject including statistical packages and software like SPSS, R, MATHCAD and MATHEMATICA etc. through regular classes as well as through seminars and workshops conducted annually. This is evident from the fact that the academic performance of M.Sc and M.Phil students are much above the state average and the department boasts of many alumni who secured positions in Indian Statistical Service (ISS), statistical officer posts in banks like RBI, SBT etc. as well as in government departments like Planning Boards, Department of Economics and Statistics and some others who cleared UGC-NET/JRF. The department is turning out two or three Ph.Ds every year, whose quality is at par with international standards. Most of the papers published from the department are in peer reviewed international journals and it has to be pointed out that the conferences, seminars, workshops and symposiums hosted by the department at both national and international levels provide a platform for researchers and statisticians around the globe to communicate, share and update ideas and present their innovations in the fields. The only drawback that came to my notice is that the department is deficient in ample staff strength. The student faculty ratio is much higher than that seen in various other universities. As a result the department is not able to extend consultancy services to industries and Government organisations. Hence it is suggested to enrich the capabilities of the department by providing it with adequate number of faculties for enhancing its reputation and efficiency.

Dept. Council's Response to Peer Review Suggestions

On the Basis of the reports received from the external experts, the Department council resolved to take the following decisions for the betterment of the department. a) In order to maximize the use of library by students, it is decided to allot a compulsory library hour every day to all the students of this department. Department library council is reconstituted with one of the faculty as convener and representation from M.Sc, M.Phil and Ph.D students. b) Department council also resolved to request the University to take necessary steps for filling the vacant faculty positions immediately for the smooth functioning of the department. c) Department council decided to encourage faculties to develop necessary steps for industrial collaboration. e) Council resolved to request all the faculty members to take up funded projects.

Academic Audit 2015
Department of Mathematics

Extracts from Peer Review

Prof. Dr. M. Lellis Thivagar, Madurai Kamaraj University: SWOC Analysis: 1. Strength of the Department: a) Faculty strength and diversity in their specialization. b) Available good number of books. c) SAP facilities. 2. Weakness of the Department: a) Minimum faculty with Ph.D. b) Minimum number of research publications. 3. Opportunities of the Department: a) Efficient faculty available in the Department to improve the research consultancy. 4. Challenges of the School: a) Efforts may be taken to publish more research papers with good IF.

Prof. Dr. N. Anbazhakan, Professor and Head, Alagappa University: After scrutinizing all the documents given by the HOD of Mathematics, University of Kerala, all the faculty members of department of Mathematics, have done a good work in academic and also research point of view. Four research articles are published in the peer reviewed journals by the faculty members in the year 2015. The remarkable achievements of the department are as follows: The department has organized one conference, one workshop and one seminar in 2015. Five students passed in the National Eligibility Test (NET) and one seminar in 2015. Eligibility Test (SET) and one student passed in the GATE. Seventeen students have received their Ph.D from the Mathematics department in the last three years. Finally, I conclude that, the department has done noteworthy achievements in academically and in research aspects except the funded research projects. I suggest that, faculty members must give some importance for getting research projects and more publications with good impact factor and some consultancy work. Further I feel that the insufficient faculty member with Ph.D is a weakness of the department, so do the needful course of action for increasing the faculty strength.

Dr. M. Xavier James Raj, Scientist/Engineer-SF, Vikram Sarabhai Space Centre: This is to state that I have examined the details of the work done by the department of Mathematics, University of Kerala for the calendar year from January 2015 to December 2015 and I hereby certify that the work carried out by the Department of Mathematics is more than sufficient for the year 2015.

Dept. Council's Response to Peer Review Suggestions

The Department Council went through all the three reports of the academic audit and decided the following: 1. To keep the position in the areas or factors in which the department got good remarks. 2. To take measure to increase the number of research publications by the faculty and the scholars with good IF. 3. To take steps to implement more projects. 4. To request the University to take necessary steps to solve one of the main weaknesses of the department; minimum faculty with Ph.D, identified by the experts.

Academic Audit 2015
Department of Biochemistry

Extracts from Peer Review

Dr. C. Jayabaskaran, Professor & Chairman, Indian Institute of Science, Bangalore: Indeed I was pleased to see the progress of the work done in teaching, training and research and contributions to development of Biochemistry by your Department in 2015. The present work carries forward this tradition of finding natural products that possess antioxidant and anti-inflammatory activities as seen from the publications. It would be welcome to see more work done in depth on these findings using modern approaches and would be beneficial to your efforts to collaborate with other laboratories in India and abroad, where needed. I note you are improving on the syllabus in your M.Sc teaching. Indeed the subject is expanding so fast it is necessary to add on new areas, and it is often difficult to identify those to be omitted. The choice will depend on what you can ignore and what you want to bring in. I note most of the activity is student-centric and rightly so. It would be desirable to have some extra-curricular study groups of students to prepare and comment on the new findings in literature for their mutual benefit. This will help them to be aware of global happenings in Biochemistry.

Dr. Sankar Natesan, Professor, Madurai Kamaraj University: The Department of Biochemistry under School of Life Sciences & Faculty of Science has performed well in the academic year 2015. The department had full strength of students in Master's and M.Phil programme and they performed well in their academics. Among these six students were cleared the NET examinations to pursue their Ph.D programme. The Ph.D candidates after completing their programme six were secured jobs in India and abroad. The faculty members were mobilized 57.08 lakhs of research grants from various funding agencies. Moreover they published good papers in peer reviewed journals with impact factors. However securing more grants would benefit the student community to do their Ph.D programme. The Department is moderately equipped to conduct practical courses and to do research by mobilizing funds through DST-FIST and other funding agencies. The department also conducted international Seminar on nanotechnology and organized other activities like invited lectures, interactions of alumni, teachers and students. Overall the Department of Biochemistry is performing well in both academic and research activities.

Dr. K.G. Raghu, Principal Scientist, National Institute for Interdisciplinary Science and Technology: The profile of division of Biochemistry in general seems to be very attractive. It is worth to mention the high quality on-going research programme of staff members. This is evident from good number of quality publications in SCI journals. Their quality research is also recognized by the good number of awards and citations they had won in meeting, conferences and various scientific platforms. In addition it is appreciable that division has external funded (DST, UGC, BSR, KSCSTE) projects to support on-going research programmes. Division has conducted various scientific meetings and invited talks to update scientific knowledge in student communities. The library

facilities for staff and students available in the department are highly communicable with good number of modern science volumes. Academic programmes, both OC and M.Phil have generated vast human resources for national building especially in the field of biomedical sciences. The research activity of the division deserves special appreciation as most of them are working on life style related diseases like diabetes and cardiovascular diseases which are the main health problem of current scenario in Kerala. In addition department has produced good number of Ph.D and they are serving in different capacities in different academic institute and R & D organizations. Overall assessment of division is very good and expect more translational research and societal significant scientific programmes for betterment of society in coming days. At the same it is also noticed that more research output is expected from junior faculty members as it is not visible in their profit.

Dept. Council's Response to Peer Review Suggestions

The experts has evaluated the report in detail and they are satisfied and impressed with the progress and current status of the department. They appreciated the educational and research status of the scholars in the department. Their suggestions are really valuable and will consider them as opportunities for improvement and uplift of out department. As Dr. Jayabaskaran mentioned in his report, we will undertake more student extension activities from next year onwards. This year also we had conducted Breast Cancer Awareness Programme and screening camp to our University employees and neighborhood population. Their response was awesome. Necessary steps will be undertaken to get more research output from junior faculty members as suggested by Dr. K.G. Raghu. To conclude, the initiative to conduct Academic Audit by out IQAC team is well appreciated, as the whole process was assessed by external subject experts. Their suggestions and criticisms are valuable for the future upgradation of departments in our University which in turn highlight the glory of our University.

Academic Audit 2015
Department of Communication & Journalism
Extracts from Peer Review

Dr. Syed Amjed Ahmed, Professor, Calicut University: During 2015, the Department of Communication and Journalism maintained its rhythm in its academic activities. It admitted 20 students for its post graduate programme from as many as 237 applicants. Besides teaching various theory subjects, the small faculty of four provided the much needed practical training by bringing out **News Today**, a daily news bulletin (on all working day)m and two periodicals, **Univ Voice & Kalari**. In addition, to train students in television production, the Department organized a Television News Production Workshop with the involvement of TV journalists. The Department also organized Take 3, a two-day media fest in January 2015 in which students from different media institutions of the State participated. During the period under review, 10 research students continued to pursue Ph.D programme under the supervision of two research guides. That the faculty was active in its research pursuits is evident from the fact that they published seven research papers in peer-reviewed journals and seven papers in conference/seminar proceedings. Another noteworthy activity of the Department is that it unfurled the prestigious Linnaeus – Palme Scholarship Exchange Programme with the Lund University of Sweden. Under this Programme, two students from the Swedish University joined the Department in September 2015. As a part of the agreement, Dr. M.S, Harikumar, a faculty member of the Department along with two students spent four weeks at Lund University, Sweden, in January 2016. With such multifaceted activities, the Department though short on faculty has performed well during the period under review.

Dr. Sucheta Nair, Pro-Vice Chancellor, Sree Sankaracharya University of Sanskrit, Kalady: A scrutiny of the Department's academic profile clearly indicates that the Department is performing satisfactorily particularly in academic activities. The teaching staff under an able leadership is seen to have participated in a number of faculty improvement programmes which would enhance quality of teaching. The output in terms of peer-reviewed journal is also commendable. The research programme of the Department is seen to have achieved good progress not only in the area of mass communications research but also that of an interdisciplinary nature. However, a conscious attempt could have been made to undertake UGC's major or minor projects. The academic activities that include short-term orientation programmes, remedial teaching for improving soft skills and counseling/help desk for students do indeed encourage students to face the growing challenges in the media market. The Department could have also made an effort to offer consultancy in the fields of Public Relations and Advertising and undertake outreach activities. Special mention about the Linnaeus- Plame Scholarship Exchange Programme between the Department and the Lund University in Sweden is credible. It will definitely help the Department develop a global perspective on journalism education. In fact, the

Department of Communication and Journalism with its positive approach, is apparently in tune with the general objectives of higher education in Kerala.

Dr. S. Anilkumar, Director, CUSAT: The profile, annual report and other related data submitted by the Department of Communication and Journalism, UoK was evaluated, it is observed that the overall performance of the department is commendable. The fact that the department has established an academic exchange programme under which students are sent to Sweden surely reveals the international orientation it has achieved. The faculty could publish papers in standard Research Journals of reputation. The research articles published by them are of good quality in the concerned areas. Original data and observation presented in their published works can be appreciated. A suggestion that can be made in this context is that the research output of the department could be strengthened further. By way of this, new generation students can be motivated to conduct innovative studies in Communication, which has both academic and professional significance. Timely revision of course content and syllabi has been carried out by the department to match with the developments in the professional arena. This can be of immense help to the students to equip themselves with the changing trends in the media field.

Dept. Council's Response to Peer Review Suggestions

It is observed on the whole that the experts who assessed the academic activities of the Department of Communication and Journalism have appreciated its performance. The research pursuits of the faculty as evident in the publication of research papers in standard journals were pointed out by the experts. The Department Council plans to strengthen further the research activities of the Department by way of studies and publications. The experts have a high opinion about the prestigious Linnaeus – Palme scholarship exchange programme between the Department and the Lund University in Sweden. One expert observed that this programme will definitely help the department to develop a global perspective on journalism education. Beside on this, the Department Council has felt the need to evolve a plan of action to come up with more international collaborations. A plan of action the Department Council envisages is to make efforts to offer consultancy in the areas of PR and Advertising. This can provide new opportunities to the faculty to offer expertise to the required media groups. Another action plan of the Department is to establish more rapport with the media industry. This may provide better avenues to the students to catch up with the changing trends in media scenario.

Academic Audit 2015
Department of Arabic
Extracts from Peer Review

Dr. Abdul-Samad Abdullah, The University of Melbourne, Australia: Teaching: Based on the documented activities provided to me pertaining to the 2015 teaching activities of the Department of Arabic, I believe that the Department's performance in different aspects of teaching were commendable. The implementation of the curriculum aims and objectives was very good as demonstrated through the subject delivery activities and by the manifestations of subjects' specific objectives through different assessment components as evident by question papers and essay topics. The Department of Arabic should be further encouraged to continue emphasizing on linking subjects with practical skills required by labour market and Arabic Department contemporary professional language requirements. ARB 5011 Arabic for Travelers and ARB 523 Language Technology and Communication are right steps in that direction. Teaching Arabic for specific purposes is very essential and is the way for future language learning. **Research:** The research profile and activities of the Department of Arabic, University of Kerala is also creditable. Having a refereed journal published by the department promotes its research profile and adds to its academic reputation. Publishing 2 issues/volumes of the department's bi-annual journal in year 2015 is impressive. Similarly, conducting 2 international seminars in a year and publishing 2 conference proceeding are highly commendable. Staff Research performance was remarkable as well as their participation in presenting conference papers and giving public lectures. Student research completion rate was very good. 4 students have been awarded Ph.D in 2015. **Community Outreach:** The Department of Arabic community engagement was good and needs to be encouraged and supported in order to have more and comprehensive activities with the university community and the general public. Knowledge transfer is one of the important roles of the university. Service to the University and meaningful engagement with the general community are integral parts of knowledge transfer that characterize a good program/university. Arabic Department has done well in 2015, but needs to be supported to do more and more. Activities aimed at students are also commendable. Similarly, the seminars conducted by the department for both staff and students are very important in enhancing the academic attributes of the department. I commend the Arabic Department in all its academic endeavors for 2015. To sum up, the Department of Arabic, University of Kerala has performed very well in the year 2015. I hope to see a well maintained and continuous trajectory of success for the Department of Arabic, University of Kerala in years to come.

Dr. Sumama Faisal, Assistant Professor, Maulana Azad National University, Lucknow: Department of Arabic, University of Kerala, is undoubtedly one of the highly renowned and most reputed departments of Arabic language & Literature in the country. Despite being one of the youngest departments of Arabic as it was established in 2001, it has secured its position among the leading Arabic departments at national level during this

short span of time. After going through its curriculum and extra-curriculum activities during the last one year, it can be fairly and justly proclaimed that the department has done well and it has appreciably and laudably achieved more than one can expect from it. I will not be exaggerating it I say that the Department has come out with flying colors. As for the syllabus of the department is concerned, it covers a wide range of subjects and topics requisite for dispersing quality education in the relevant field and for developing learning interests among the students. Ranging from the very basic subjects of language learning like Grammar & Morphology (ARB 511 & ARB 522) and Linguistics, Rhetoric & Prosody (ARB 514), to the subjects focusing on the text reading of various genres of Arabic literature form different periods starting with the study of literary masterpieces of the earliest phases of Arabic phases of Arabic literature like Quranic and Hadith Literature (ARB 512, ARB 502) and Classical Arabic Literature (ARB 513), culminating into the study of modern trends in Arabic language and literature through papers like Modern Arabic Poetry (ARB 533), Modern Arabic Prose (ARB 542), and History of Modern Arabic Literature (ARB 543)m this syllabus covers almost all the dimensions required to literally acquaint students with a deep-rooted and flourishing language like Arabic. Criticism is an important thrust area in the present day literary works and activities. By introducing t5he analytical way of text reading to the students and scholars, criticism plays a very important role in enriching and developing languages and literatures. Due importance has been given to the criticism in the syllabus of the Department by allocating a particular paper (ARB 534) for inculcating critical approach among the students. Beside this, papers like Arabic for Travelers (ARB 5011) and Use of Language (ARB 521) in the syllabus are very significant because they can introduce the students with the functional use of Arabic language, can familiarize them with its current usage in their day-to-day life, and can prepare them for their professional prospects. On the other hand, the paper of Translation (AARB 541) is also of utmost importance in today's world when the globalization and international trade activities are breaking all the barriers between the nations of the world, creating opportunities for language experts and translators in all the languages of the world, with Arabic being among the pioneers in this regard. To fulfill this need in and outside the country, inclusion of this paper in the syllabus is quite relevant with the contemporary requirements of the Arabic language. The syllabus also includes two important papers which deal with the culture and history of Arab World in the past and the present (ARB 524 & ARB 531). These papers are important because they introduce the students to the swiftly changing scenario of the Arab World, besides giving them a general introduction of the culture and history of the Arab World. Indo Arabic Literature (ARB 534) is another important paper included in the syllabus especially in view of the rich heritage of Arabic language and literature produced in India over centuries. An overall study of this comprehensive syllabus assures that the targets set by the Department for producing bright and promising students and scholars in Arabic language and literature will be achieved. If we look at other academic and extra-curriculum activities of the Department during the past year like organizing international seminar and extension lectures, publishing research journal, newsletters and seminar proceedings, conducting

debates and literary events, screening educational films and documentaries, we find that the Department is exerting all possible efforts to make it a center of excellence in its field. I hope this appreciable academic progress will be carried forward by the Department in future also with better results and outputs.

Mr. Mohammed M.B., Subject Expert, Kerala Siyaha Holidays Pvt. Ltd.: Being Subject Expert (from industries) of the subject specific peer group for academic audit-Department of Arabic – University of Kerala, I have scrutinized all activities taken by the faculty of the Department in the year 2015. Each every initiative of this year was inspirable and highly commendable in view of its practical academic purposes and viability of the syllabi regarding employment scopes for the students. I hope sooner the department will be more effective in offering practical and purposeful education than ever before in its previous history. The harmonious and intimate cooperation among the faculty and students of the department for academic activities promise us a well skilled and truly qualified human resource. I extend my sincere regards and gratitude for the concerned faculty of the department for maintaining such a condition and values they put forward in all the steps during this year.

Academic Audit 2015
Institute of Management in Kerala
Extracts from Peer Review

Dr. B. Rajasekaran, Department of Management Studies, MS University: I have gone through the scheme and syllabus of the department during 2015 and found that the general MBA students are getting good content whereas the Tourism students are given content only in the second year. Hence it would be advisable to include more tourism related papers in the first year for the MBA (Tourism). The students were very active in participating in many programmes including meeting the leaders, sharing their contribution to the needy, participating in university athletic and cultural programmes and coming out victors. There is one consulting assignment of Dr. J. Rajan and found that they are in the right direction to complete the same. The faculties have published in national and international journals. Dr. K. S. Chandrasekar has been involved in publishing articles and delivering key note addresses, inaugurating events etc. I feel the department needs to add more faculty on permanent basis as after Dr. J. Rajan retires during March, there will be only one left to run the show. This department I consider boasts of the highest number of students in full time programmes. There is hence a need to ensure that the department has more permanent faculty who can give fillip to management education. I wish the department all success.

Dr. K.P.V. Ramanakumar, Dean, Faculty of Management Studies, SCSVMV University, Kanchipuram: I see that the new scheme and syllabus approved during 2014 is in force. There are multiple opportunities for the MBA students as they can choose electives from the streams of Finance, Marketing, HR, Operations, systems, International business etc. However the opportunities for the Tourism students are only limited to choosing papers as all of them are core subjects only. Hence it would be better if more tourism related papers are included in the first year for the MBA (Tourism). I feel that with paucity of permanent faculty, the number of articles/ seminar papers etc., are less compared to other similar management departments. However, both the Professors are capable enough to produce more work. The department usually comes out with Management Innovator journal but during this period, they could not show me one. However, I feel that the department can do much better as they are embarking on creating awareness to the industry and trying to collaborate with the industry. I would request the department to tie up with some of the companies in Techno Park, HLL Life care limited etc. IMK can join hands with corporate hospitals and offer MBA (Healthcare management) which is much sought after.

Prof. Dr. M. Senthil, Alagappa University, Karaikudi: I have gone through the academic activities of the department during 2015 and found that the course work has been successfully undertaken with all faculties involving in the class works, providing assignments, conducting class based seminars, case studies etc. It was found that there is a consulting work through KTDC is on. They have also been involved in philanthropic activities aimed at the needy and the downtrodden. However, the department has not undertaken any seminars on national or international basis which is a negative one. Having said that, the department faculty otherwise has engaged in participating in national and international seminars. The students were given exposure through the annual management meet 'TRIMA' during 2015. Overall I find the department activities as good and there is a need for improvement in conducting seminars. One area which is a demerit is the paucity of permanent faculty which requires immediate action.

Dept. Council's Response to Peer Review Suggestions

The department council took into cognizance the merits and demerits of the functioning of the department academically and resolved to address the issues raised by the experts in terms of conducting seminars, offering more courses for the Tourism which can be initiated for the year 2017-18. Steps to be taken to request University to appoint Permanent faculty members.

Academic Audit 2015
Department of Demography

Extracts from Peer Reviews

Prof. K S James, Professor of Population Research and Acting Director, Institute for Social and Economic Change, Bangalore: The Department of Demography, of Kerala University, is one of the few departments in Demography established under the faculty of science in India with strong focus on the technical demography. The department is known for building a next generation of young demographic scholars for the country. It has achieved a unique place in term of both teaching, research as well as extension services. My assessment on the various aspects of academic and teaching activities are provided below. **Teaching:** Currently, the department offers courses in Demography and Actuarial Sciences. These courses are very relevant in terms of understanding population issues in the country as well as in developing skills in areas of various vital computations for understanding the society better. The Department has been known its vibrant Ph.D programme. The course on Actuarial Science is rarely offered in India and as such has high potential in terms of generating an young generation of experts on this important area. This will provide better job opportunities for the students. It may be pointed out that the number of Ph.D students the department faculty are supervising are also impressive. The Department has well qualified faculty to teach these courses and therefore, the training that is available is undoubtedly of high quality. The department selects ideal class size which will help in improving the quality of teaching and providing individual attention to the students. The gender and caste composition is also desirable and helps all sections with opportunities. Three students cleared GATE/NET/SET and this is one area of improvement. The placement of the students are encouraging but perhaps need more attention as well. As the courses in the department are unique with various opportunities, it is important that the students are exposed to the opportunities available through different measures. **Research:** The members of faculty in the department are also involved in research studies and projects having considerable policy relevance. The department also has a very high quality journal which has gained its name in the field of demography. However, there are still areas for improvement in research studies which will also help the students in gaining exposure to the emerging areas of demography. The conduct of conferences and seminars in the department is noteworthy. It clearly indicates that the Department has been active in the field of demography in India and has been contributing to the development of discipline in the country. **Outreach:** The Department's library has good number of books and journals for students and for the university to take advantage of. The students appear to be involved in the community outreach activities. The department is also organizing special lectures, and other activities for the dissemination of the research work. This is unique as the Department goes beyond the class room teaching.

Overall, the progress of the Department in terms of teaching, research and outreach are impressive. By addressing small issues, the department can grow to a Department of excellence in terms of providing a leadership in the field of demography in the country.

Dr. P.K.Babu, Associate Professor in statistics and Demography, Govt. Medical College, Kottayam: The Department is having a stunning performance with 5 teaching programmes having 67 students and the teaching activities being managed by 5 teachers and other supporting staff. The prestigious NET exam was cleared by 3 students. The Dept. Library is well stocked with about 7500 books and a large number of journals with back issues. The book issuance rate is 55 per member is also noteworthy. The Department has hosted 5 conferences of National and regional importance with participation ranges from 237 in the IASP conference to about 100 in both the elderly day celebration and world population day celebration. The syllabus of M.sc and M. Phil courses of both Demography and Actuarial science is up to date and of higher standards to equip students to face the international community. The faculty is involved in various projects directly related with public health issues of India. The students are also getting community experience as part of their curriculum. The only drawback noted is the absence of foreign students and the students from tribal community. Since the Department is dealing with much specialized subjects steps may be initiated to attract students from these categories with support from Government and the University.

Dr. U. V. Somayajulu, CEO and Executive Director, Sigma Research and Consulting, New Delhi: The Department of Demography, of Kerala University, was established in 1979 under school of Physical and Mathematical Sciences and Faculty of Science. The department has five regular teaching staff with three of them being Doctorate degree. The other two teaching staff may be encouraged to get Ph.D degree as it helps them immensely in their teaching work. The department also has five guest faculty including internationally recognised Demographers. **Courses:** The department offers M.Sc and M Phil in Demography and Actuarial Science and Ph.D in Demography. Perhaps, the Department may think of starting Ph.D in Actuarial Sciences depending on the demand for such course in the job market/industry. **Students:** It is encouraging to note that the student strength is higher than the number of seats allocated for the two M.Sc courses. Majority of the students enrolled for various courses are females and this is a good sign. Considerable number of students are from the SC group. Three students cleared GATE/NET/SET and this is one area of improvement. Six students got placement in the Department and Achuta Menon Centre. The department may also think of placing the students in research and academic institutions/agencies as summer interns as this gives the students adequate exposure. The students need hands on experience regarding application of the techniques they were taught. **Journal:** The Department has its own journal – Janasamkhya, which is well known in the academic circles for its standards. **Library:** The Department's library has good collection of books and journals.

Conferences/Workshops: The department has successfully organised one national conference and one national pre conference workshop for students/scholars. It also observed world population day and international day of elderly with dissemination of findings of study among the elderly. **Projects:** The department is involved in a project funded by Population Foundation of India. The Dept. also signed an MOU with the Census of India to setup a wok station and this is a good initiative. **Community Outreach activities:** The students are involved in the community outreach activities, but this can be one area for strengthening with better planning to make it more frequent. The Dept. has organised a special lecture by Prof. C.M. Suchindran, Bio Statistics Dept. North Carolina University, USA. The teaching faculty members were active in research publications and presenting papers at national and international conferences/seminars. The department is organising periodic seminars to encourage students to present papers and this is a good initiative and the same can be formalised and some proceedings can be brought out from these.

Dept. Council's Response to Peer Review Suggestions

Department Council has reviewed the reports of academic audit provided by experts and decided to take necessary steps to improve performance of the Department based on the suggestions. It was decided to look for more areas of research and to tap new funding opportunities available for population research. It is also decided to take measures to improve performance of students in the NET exams. All other suggestions for improvement were discussed and decided to take necessary steps to address the suggestions. It was decided to review progress on these on a regular basis.

Academic Audit 2015
Department of Hindi
Extracts from Peer Reviews

Dr. N. Mohanan, Dean, CUSAT: The Department Functions well and all the academic activities are on par with any other Departments of Hindi in the state and also its potential of competence matches with the leading departments in the country. The lacunae of the department which is very clearly visible is the faculty strength, though the Department's academic programme goes on well, the total faculty strength of the Department is only two. Hence it is very much essential to appoint new faculty members .By upgrading the faculty strength the department can bring more research funding from various funding agencies.

Dr. C. Jayashankarbabu, Pondicherry University: Observations: The Department conducts both M.A. and M. Phil. Programmes, it also offers PhD, PDF programmes at the research level. I have observed that the course content is in tune with the UGC model curriculum .The scheme of the question paper is very good which will make the students more competent for appearing for Competitive National level tests. UGC-NET, SET examinations could go up with more orientation classes. The Department should offer more elective papers. I recommend that more number of faculty members should be recruited to cater the need of the department and shoulder the responsibility with the existing faculty members. More research funding to be attracted for improving research facilities in the department.

Mr. M.G. Somsekharan Nair, Sr. Hindi Officer, VSSC: The Department offers M.A, M. Phil, PhD and PDF programmes. I have observed that the syllabi is on par with the contemporary need of the language teaching and learning and also partially fulfilling the need of the official language implementation sector, banking sector etc. But to be precise I would like to suggest a Post graduate diploma programme in Translation, administrative drafting and reporting and journalism may be started by the department at least as a part-time course (morning or evening by looking into the feasibility). The research work should be more focused towards the identified thrust areas It would be better to conduct more number of workshops/seminars in the areas of official language implementation and functional Hindi, which could fetch job for the students .

Dept. Council's Response to Peer Review Suggestions

Efforts will be made to conduct at least one workshop every year. Will try to arrange more invited talk by visiting faculty with expertise in diverse fields. Request University to fill-up the vacant faculty positions .Will try to bring in more research funding from various funding agencies. **Long term Plan of Action:** Try to get funding from UGC under the scheme of strengthening Hindi departments of Non Hindi Speaking areas. Will explore the possibility of signing Mou's with different central agencies.

Department of Biotechnology

Extracts from Peer Reviews

Dr. T. R. Santhosh Kumar, Scientist E11, Rajiv Gandhi Centre for Biotechnology:

Upon close analysis of the academic activities of the Department of Biotechnology, University of Kerala, I can very well say that the progress of the department over years is quite impressive in terms of teaching and research output. Despite having limited research facility and less of number of teaching staff, the team has successfully carried out several seminars and workshops , all are very well suited to the need of the society and definitely help to strengthen the capacity building in the area of Biotechnology. The department has also attracted several extramural funding in diverse of areas of Biotechnology with impressing financial inflow to the Department with strengthening of the infrastructural facilities. Their project work on monoclonal antibody production is commendable and this definitely helps the research students to learn the practical aspect of cutting edge modern research technologies and its applications. The close association of this department with industries for their effort to develop monoclonal antibody and agreement with Bipha Drug Laboratories very well explain their academic capabilities and potential in the area of Biotechnology. Considering the significant academic excellence and performance of the department over the last few years and importance of Biotechnology in both academic aspect especially in teaching /training and its impact on future development, I also recommend making the Department of Biotechnology into an independent school. This will further help them to mobilise more faculties and attract more research funding for the further evolvment of the department in to an internationally reputed biotech academic centre.

Dr. Madhavan Nampoothiri, Principal Scientist & Head, NIISTCSIR: Department has done quite an impressive academic work in the area of Biotechnology. Other than the Academic exercise, the Department looks to be very keen and very strong in the area of Research as well. Around 16 PhD students were registered in the Department and four Post-Doctoral researchers were working in Department. Four major research projects were ongoing which include the creation of Inter university center for Genomics and gene technology (IUCGGT) for various in-house projects supported by Dept. of Higher Education and a grant of worth one crore received for the year 2015 itself. Other than this, KSCSTE young scientist project, DST Fast track project etc. were there in the Department. Also made a note that excellent infrastructure facilities were created for research which includes costly instrumentations like FPLC, HPLC, RT PCR, Fermenter, Cell culture facility etc. So I place on record my great appreciation for this. Another interesting observation, is the Department is very keen to conduct workshops and seminars. In 2015, they made two national seminars, one on Nanosceince and Nanotechnology and another one on New Perspectives in proteomics. The workshops were related to Flow cytometry & cell sorting and Animal cell culture & molecular techniques. I must mention that the topic

covered in all such programs are of the most advanced ones and appreciate the coordinator for selecting such topics. Academically also, it is noticed that out of seven master students, six of them passed with distinction. The topics of External electives done by the Department students are highly interesting like the outside school selections, yoga philosophy and practice and Brahmi script etc. Other infrastructure facilities include a good updated library having 2605 books and of which 108 were new additions. 14 journals were also subscribed. The Department signed a MoU with Biplha Drug Laboratories Pvt., Ltd. This is again a great achievement. Overall, the activities of the Division are excellent and Head of the Department deserve a great appreciation in managing the overall activities. Few suggestions are, the number of permanent faculties should be improved. There is only one permanent Assistant professor, who is the Head and two contract basis lectures. This can affect huge work load on them and that can affect the quality. So please consider to improve the number of permanent staffs at the earliest and then they can offer M.Phil. as well which is not now and also I think, once it has been done with a critical mass of both teaching and non-teaching staffs, this Department can be considered for independent school as it is an area of Applied Life sciences and considering the importance and its future development.

Prof. Dr. S. Kannan, Regional Cancer Centre, Thiruvananthapuram: The Department of Biotechnology has been actively involved in teaching and research activities in the year 2015, even though the Department is highly limited with only one permanent teaching faculty. Besides, M.Sc. academic programme, the following are the main research activities carried out by the Department during the reported year. Organized two National Seminars, Conducted two National Scientific Workshops, Five extramurally funded Research Projects are carrying out, Received 7 research awards by Faculties and students, Currently 15 students are carrying out their Ph.D. course, Seven External Dissertation works of M.Sc. and M.Tech students were carried out, Papers are presented in 8 National and International Conferences. In my view the research activities of the Department is good and I hope that it will enhance the academic excellence of the University of Kerala. However, I will suggest a few following suggestions to improve the activities of the Department: First of all, University should take immediate action to increase the number of permanent faculty from one to at least to five. Otherwise, it is very difficult to improve the academic excellence of the Department. Increase the infrastructure facility to state of art to conduct high profile research. Increase or enhance research activities by collaborative research with their active research groups in other nearby Universities and Research Institutes. Steps may be taken to provide special coaching and orientation to M.Sc. students to increase number of students qualifying the national level competitive examinations like NET–JRF, etc. Provision for e-reference for the students may also be considered. Hoping a good research and teaching activities in the Department in coming years. However, without increasing the permanent faculty strength, it is absolutely impossible. The overall performance of the Department is Good and it is in comparable with a standard Indian University.

Dept. Council's Response to Peer Review Suggestions

The Department Council considered and discussed the audit report received from the external experts. It decided to take up the suggestions and recommendations to further improve the quality in teaching and strengthening the infrastructure and research facilities of the department in the coming years. The council also resolved to take necessary steps to request the University to increase the number of teaching faculty and develop the Department in to School of Biotechnology as it is an area of applied Life sciences.

Academic Audit 2015
Department of Tamil
Extracts from Peer Reviews

Dr. A. Satheesh, International Institute of Tamil Studies, Chennai: The activities of Department of Tamil, University of Kerala in the year 2015 shows that, Department of Tamil is growing towards a successful heights. Creating the research scholars with high research aptitudes, obtaining grants from many institutions for conducting notable research works, organizing workshops and conferences , publication of books, conducting research journals are the essential basic duties of a higher research institute. Department of Tamil has done it well. Such works are basic keys of generating a best society in the future .The publication of Malayalam - Tamil and Tamil Malayalam Dictionaries which are expected for many years was published in the year 2015 is are a milestone in the history of Department of Tamil. For doing comparative studies between Tamil and Malayalam languages these lexicons are inevitable. Four National Seminars, three Workshops and many Endowment lectures conducted by these department in the domain Tamil and Malayalam relation reveals the deepest knowledge tradition. Papers published by the faculty of the department reveals their continuous effort in their respective academic field. The journals of the Department of Tamil such as “Ilavenil” shows the best activity of the Department. Care should be taken, to qualify the UGC examination in future. Congratulations for the achievements of the Department and I wish the best future for the Department.

Dr. Sahayadhas, State Council for Educational Research and Training: The journals released by the staff and students are appreciable .The seminars, workshops and endowment lectures organized by the department support the curriculum and skill development of the students .The staff profiles depicts the up to date knowledge of the staff in their respective fields. The vision and mission of the department is not stated properly. It is necessary for the Academic audit. Well-equipped library but it should be modernized with digital facilities. University department are supposed to be the apex bodies of the academic activities. Care should be taken to enrich the faculty strength especially with Professor and Associate professors. All the very best for the future activities of the Department.

Dr. Krishnaswamy Nachimuthu, Central University of Tamil Nadu: The overall performance of the department is good. A consistent and overall aggressive effort should be taken to strengthen the Tamil programme in the field of teaching, research and publication to maintain its standing and lead in the field. Care should be taken to make the programmes more relevant to Kerala. I wish the Department a bright future. I compliment the department for its achievements.

Academic Audit 2015
Department of Sanskrit
Extracts from Peer Reviews

Dr. C. S. Sasikumar, Sree Sankaracharya University, Kalady: After examining all the documents given by the HOD of Dept. of Sanskrit, University of Kerala, I have found that all the faculty members of department of Sanskrit have done a good work in academic and research point of view. Four research articles were published in the peer reviewed journals by the faculty members during the year 2015. P.G and M.Phil. programmes have sufficient students and have hundred percent results. The enrollment of women candidates is high and encouraging. The remarkable achievements of the department are as follows: The department has organized two workshops and five seminars in 2015. One student qualified in the National Eligibility Test (NET) and two students qualified the State Eligibility Test (SET). Twelve students have received their Ph.D from the department in the last three years. No minor or major projects were undertaken by the faculty. Although the department offers M.Phil. and Ph.D programme, the lack of a departmental journal is a weakness. **Suggestions:** The number of permanent faculty members may be increased in accordance with the work load, Publication of a departmental research journal, Undertaking funded research projects by faculty members, Orientation programme for JRF/NET with career guidance and Alumni activities may also be included in the report. Overall, the performance of the Department is very good.

Dr. V. Sisupala Panicker, U G C Emeritus Professor of Sanskrit: The academic activities of the Department of Sanskrit University of Kerala in 2015 are satisfactory. In spite of the deficiency of sufficient faculties, Classes and academic activities have been conducted properly. “Centre for Vedanta Studies” annexed to the Department has conducted five seminars and two workshops. The training Programme on Yoga was also conducted successfully. The participants were greatly benefited. NET/ SET Coaching classes are also being conducted effectively. A number of eminent dignitaries visited to the department have delivered lectures on various topics during the academic year. The Faculties of the Department participated in National and International seminars. Their academic contribution is worth mentioning. Sankara Jayanti was also celebrated in a befitting manner in the Department. I am very happy to place on record that the Overall performance of the Department of Sanskrit is good.

Dept. Council’s Response to Peer Review Suggestions

The Department Council which met on 6th May 2016, discussed the reports and decided to take appropriate steps in carrying out the following suggestions. 1. The Department should publish a departmental journal as soon as possible. 2. The Department should go for taking up major and minor research projects. 3. Alumni activities of the Department may be included in the report of the Department in future. 4. Scope for student – teacher exchange programmes and collaborations with foreign Universities may be explored.

Department of Library & Information Science

Extracts from Peer Reviews

Dr. G. Devarajan, Former Professor & UGC Emeritus Fellow: There are a good number of books in the subject in the Department. The main weakness of the Department is that there are only two permanent faculty members in the place of seven Faculty members. The existing faculty members are doing excellent academic work. The Department has organized one conference. The research productivity and publications of the Department should be enhanced remarkably in the forthcoming years.

Dept. Council's Response to Peer Review Suggestions

The Department Council met on 5th May 2016 went through the report. On the basis of the report received from the external expert, the Department Council resolved to request the University of Kerala to take necessary steps for filling up the vacant permanent faculty positions immediately for the smooth functioning of the Department. Further the Department Council resolved to request all the faculty members to take up funded projects which will enhance the image of the Department. It is also decided to take measure to increase the number of research and other publications of the faculty and research scholars.

Academic Audit 2015
Department of Malayalam
Extracts from Peer Reviews

Prof. Dr. Anil Kumar, University of Calicut: I have reviewed the academic audit report of the Department and I am happy to observe that the academic performance of the Department maintains high standards and serves as models.

Prof; Dr. Naduvattom Gopalakrishnan, Emeritus Professor, University of Kerala: I rate the academic performance of the Department of Malayalam as of high standard and model.

Dept. Council's Response to Peer Review Suggestions

The Department Council discussed the peer-review experts and expressed satisfaction. It was further resolved to evolve a scheme to extend the present activities.

Academic Audit 2015
Department of Music
Extracts from Peer Reviews

Dr. Latha Varma, (Rtd Principal, SSSV Madurai): The profile of the Dept of Music shows that the Department has had an active creative and impressive academic year (2015-2016). The noteworthy point is that in spite of having only a single permanent faculty in the Department, who is an Associate Professor, the Department has organized and conducted many activities and programmes including a three day National Seminar, Lecture Demonstration by 2 eminent artists, concert of 2 eminent artists, yoga classes celebration of festivals and bays in memory of great composers like saint Tyagaraja and Maharaja Swathi Tirunal, Documentation of the rare songs Neelakanta sivan, publication of the Musical journal Nadamrutham conducting of a study tour to Tiruvaroor & Thiruvayyar, places of Musical significances and so on. The result of the previous year was also satisfactory. Thus the Dept of Music deserves appreciation and high rank in academic and extracurricular activities. I would like to suggest that the scarcity of the permanent teachers is a very important matter which should be solved.

Sri. Perumbavoor. G. Raveendranath, (Music Director, RTD All India Radio): Dept. of Music University of Kerala has three permanent faculty. One Associate Professor, one teacher-cum-Instructor in Mridangam and Accompanying Artist in Violin. Apart from these, six Guest Lectures are working in the Department. The MA Music offered by the Department has certain specialties. The course includes three elective subjects, ie 'Hindustani Music' and Tala ensembles as compulsory and any of the instruments Violin/Veena/Mridangam as an optional elective. The Department has succeeded in conducting the following during 2015-2016 academic year. They conducted a three day national seminar and Lecture Demonstration of Scholars and experts of Music. The documentation programme was also conducted to preserve the rare krithis of masters. Through the programme 'stage performance' the students benefited immensely. They get opportunity to interact with the luminaries in the field of Music which help them in their studies and career. As part of extension activities students are carrying out public performance related to social environment outside the campus. Through the concert classes included in the curriculum, the Department trains the students to become good performers. Students also provided internet facilities for updating knowledge. The annual journal 'Nadamrutham' published by the Department also needs special mention.

Though the Department has shown progress in all the above aspects, I would like to put forward the following suggestions.

- The vacancies of permanent faculties should be filled
- The syllabus may be reframed by relating the subject to other discipline like therapy, recording, Information Technology etc to enhance job opportunity.

- Students may be encouraged to undertake dissertation work in multidisciplinary subjects.
- The articles and research papers of faculty should be increased.

Dept. Council's Response to Peer Review Suggestions

The members of the council have gone through the reviews of the evaluators and decided to publish more research papers in reputed journals.

Academic Audit 2015
Department of Optoelectronics
Extracts from Peer Reviews

Dr. V.Ramakrishnan, Director, Indian Institute of Science Education and Research (IISER), Thiruvananthapuram: The Department clearly delivers quality post graduate teaching and probes frontier area research problems. The average number of articles published per student is a good number. It is important to note that there are periodic publications in journals. Seminars/ conferences are quite often conducted and do draw people across the country. All of the essential ingredients are in place in terms of talented faculty members and others involved in the delivery of these programs. This success has been achieved in a challenging environment through an impressively systematic and well organized approach to teaching and research development.

Prof. Murukeshan Vadakke Matham, Deputy Director and A/Professor, Center for Optical and Laser Engineering, Nanyang Technological University, Singapore: It is evident that the performance of the Department is one of the best or comparable that I have seen among similar Departments in Kerala and in India (which includes IITs, NITs, IISc) in terms of number of research publications, citations, and impact created. It is all the more amazing and highly commendable that all these achievements are realized with the limited facility. In fact the quality of the research produced is comparable with many international university centers of similar research focus. I have gone in depth with respect to the courses that the Department is offering such as (i) M. Tech Electronics and Communication (Optoelectronics & Optical Communication), (ii) M. Phil. Course in Photonics, and (iii) Ph.D. During my recent visit to Trivandrum, I was interacting with many students of the Department and very impressed to note that they are exposed to excellent learning objectives through these programs. In fact I have recruited students who are trained in the department for PhD programs in NTU. Large number of high impact research publications in international peer reviewed journals and conferences followed by invited talks in Tier 1 conferences clearly indicate the impact the Department has made at national and international level. Further, it is noted that the Head of the Department acted as the Sectional President of the Physical Sciences section of the 102nd Indian Science Congress held at Mumbai University during 3rd to 7th January 2015. The research initiative in Nanophotonics and other research funding obtained during the period under review indicate that the faculty and researchers under the leadership of Prof. Mahadevan Pillai is working as an excellent unit and contributing heavily to Science and Technology. I would be happy to see that the Department is getting more funding through different national and international initiatives. It is commendable to note that the Department was very active in celebrating IYL 2015 as well as doing many significant outreach activities. In short, I would rate the performance of the Department as FE (Far exceeding the expectation). It was a pleasure to review the submitted materials and I wish the Department many more success stories to tell and pen down in the coming years.

Dr. C .Vijayan , Professor, Department of Physics, Indian Institute of Technology, Madras: The Department offers academic programmes such as M.Tech in Electronics and Communication (Optoelectronics and Optical Communication), M.Phil in Photonics, Advanced PG Diploma in Communication Engineering and Ph.D in the area of Optoelectronics. It is nice to observe that several graduates of the different courses are securing very good placement in the fields of teaching, research and industry. The Department has hosted a major National Seminar in the area of Photonics in 2015. The Department has been very successful in the area of sponsored research and the faculty members continue to work hard with vision to obtain funds for the development of new and powerful laboratories for research. The trend had continued this year also, with major projects from Kerala Govt. (one worth Rs.5.67 crores and another worth Rs.50lacs) and research funding from SERB, New Delhi worth 49.74lacs and KSCSTE worth Rs.15lacs. Funding of such magnitude is an excellent record for any University and an indication of the capabilities and the reputation of the Department. Syllabi of the MTech and MPhil programs were revised and updated incorporating recent developments. The faculty members participated in a few outreach programs for colleges and several dignitaries from top institutions in India and abroad visited the department and gave lectures and interacted with students during 2015. The profile of the distinguished visitors is much above the average unusually seen in Universities. The year 2015 also witnessed several forms of recognition in the national arena. Dr. V.P. Mahadevan Pillai, Professor & Head was honored by being appointed as the Sectional President of the Physical Sciences section of the prestigious Indian Science Congress in January 2015. Several posters and oral presentations by students of the Department in national seminars won acclaim in the form of best paper/poster awards in 2015. The international visibility enjoyed by this Department is evident from the very large number of publications in refereed international journals of good impact factor and the large amount of citations and high h-index obtained. The performance of this Department in this regard is undoubtedly superior to that usually expected from any university department anywhere in India. This trend has continued in 2015 also with a very large number of such journal publications and conference presentations. In summary, it is evident that the Department has been continuing its excellent performance in research and teaching in 2015 as well. The international visibility obtained as evidenced from research paper citation and the kind of recognition the Department has attracted in view of sponsored project funding are two specific achievements worth mention, which make this Department stand out in the University system.

Department Council's Response to Peer Review Suggestions

The Department Council meeting held on 28.04.2016 discussed in detail the feedback received from the reviewers of the Department level Academic audit for the academic year 2015 of the Department. The meeting noted the comments made by the reviewers and decided to further strengthen the academic activities.

Appendix - 1

A1. Department Profile for Academic Audit (for 2015)

Name of Dept.		: Department of Russian
Website of the Dept.		:
Names of Permanent Faculty		: 1
Names of Contract Faculty		: Nil
Guest/Visiting/Emeritus Faculty		: Guest 4
Programmes offered (other than Ph. D)	Masters	No. of Applications received - No. of Seats - (CSS – 10, Part time -10) No. of Females - No. of Outside State Students - No. Foreign Students -
	M. Phil	No. of Applications received - No. of Seats - No. of Females - No. of Outside State Students - No. Foreign Students -
	Others	No. of Applications received - No. of Seats - No. of Females - No. of Outside State Students - No. Foreign Students -
Ph. D Programme (related to candidates registered in the Dept. only)		No. of Guides in the Dept. -
		No. of External guides in the Depts. -
		No. of FT students -
		No. PT students -
		Total No. of (FT & PT) -
		No. of females -
		No. of students from outside state –
		No. of foreign students -
		No. of Ph.Ds submitted last year -
		No. of Ph.D awarded last year -
No. of Ph. Ds awarded in last years/No. of guides -		
Post-Doctoral	No. of Post-Doctoral Fellows	
No. of Publications by faculty and/or students in:	Peer reviewed (approved by Board of Studies): In other peer-reviewed journals : Conference proceedings : Seminar proceedings :	
Patents, if any, filed/granted	Nil	
Library Utilization (Books issued/member	MA & Ph. D =	
No. of funded projects (current)	Nil	
Total amount of above	Nil	

No. of Consultancy assignments	
Total outlay of the above	
MoU active during the year (name institutions)	
Journals Published by Dept. (Yes/No.)? Issues brought out in the year	
No. of major syllabus revisions in last 3 years	Masters : M. Phil :
Dept. Brochure given to all students?	
List most important or costly instruments or facilities in the Dept. (indicate if newly acquired)	
No. of PG dissertations approved	
No. of PG dissertations done in external institutions (list institutions)	
No. of M. Phil dissertations approved	
No. of M. Phil dissertations done in external institutions (list institutions)	
List maximum 3 unique/best academic practices (<i>briefly in 1-2 sentences, indicate if new</i>).	
External electives done by Dept. Students	(a) within school - (b) outside school -
No. of students who qualified the NET/SET/GATE/other competitive exam (specify) during the year	
No. of books published by the faculty during the year	Authored Edited :
No. of academic events organized by the dept. during the year	Conferences... Seminars... Workshops... Symposia...
No. of extension activities conducted	
/students progression (%)	Masters: M. Phil:
Any other note-worthy academic activity	

To be appended: 1. Question papers of all examinations during last year including internal test and assignment questions. 2. Synopsis of all Ph.Ds, Masters and M.Phil dissertations submitted last year. 3. Photocopy of one selected publication by each faculty. 4. Annual Report of the Dept.

Appendix – 2

EXTRACT FROM MALCOLM ADISESHIAH COMMISSION REPORT OF 1985

(SET UP BY THE GOVERNMENT OF KERALA IN EXERCISE OF THE POWERS CONFERRED BY SEC. 71 OF CHAPTER IX OF KERALA UNIVERSITY ACT 1974, TO ENQUIRE INTO THE WORKING OF THE UNIVERSITY OF KERALA)

Letter of Transmittal : [To attain excellence] (a) the opportunity for higher education should be provided to all those who have the aptitude for it; irrespective of the class to which they belong; (b) the state may have to establish an Open University to meet the need of those who are unable to attend regular colleges; (c) the restructuring of the examination system which will rid it of its deep seated ills is needed and indicated; and above all (d) there is need for a certain degree of depoliticisation of the University and the Colleges, so that the governing organs, the administration and management, staff, students and University non-teaching staff devote themselves wholly and whole heartedly to the pursuit of academic excellence.

Preface

Sub-section (1) of Section 71 of the Kerala University Act, 1974 (17 of 1974) provide that the Government may at any time and shall, at the expiration of ten years from the commencement of the Act and thereafter at the expiration of every ten years, constitute a Commission to enquire into the working of the University. The Government of Kerala, accordingly, constituted a Commission in March, 1984, to enquire into the working of Kerala University from 19.8.1974, the date of coming into force of the said Act, and to make recommendations to Government. The Commission consisted of the following persons as Chairman and members.

Dr. Malcolm S. Adiseshiah,
Fellow, Madras Institute of Development Studies, Madras Chairman

Rev. Dr. P.T. Chandi,
(Former VC, Gerakhpur University) D-6, Jawaharnagar, Trivandrum Member

Prof. V.V. John,
(Former Vice-Chancellor Jodhpur University) Jodhpur, Rajasthan Member

2. The Commissioner and Secretary to Government, Higher Education Department is the Member –Secretary to the Commission. The Additional Secretary, Higher Education, Shri K. Sivasankara Pillai was deputed to the Commission as Additional Secretary.

3. The Commission was required to enquire into and report on:- (i) the working of the University in general during the period to which the inquiry relate; (ii) the financial positions of the University including the financial position of its Colleges and Departments; (iii) any changes to be made in the provisions of the Kerala University Act or Statutes, Ordinances, Rules and Bye-laws made thereunder with a views to bringing about improvements for bettering the performance of the University.(iv) such other matters as may be referred to the Commission by the Government.

4. The Commission was given powers to call for and obtain from the University the records required for reference or verification in connection with its work. The Commission was authorized to visit and inspect the offices, departments, laboratories, workshops etc. of Kerala University and of the institutions maintained or recognized by or affiliated to Kerala University, and also to visit other places or institutions which the Commission found it necessary in connection with its work. The Commission was also authorized to obtain the assistance or advice of experts or individuals in matters connect with its work.

5. The Commission started functioning on 14th May, 1984. It had six sittings in connection with Kerala University at Trivandrum in May, July, September and November 1984, and January and March 1985. There were two further sittings in April and May 1985 when the Reports on Kerala University and Calicut University were finalized. The Commission held discussions with the Vice-Chancellor, Pro-Vice-Chancellor, Registrar and Finance Officer of the University and with the Deans of various faculties and Heads of University Departments.

6. The Commission issued to detailed Questionnaire requesting the views of the University Officers, Teachers, Students' Unions, members of the Syndicate and the Senate, Ministers and Members of the Legislature and the general public, on various aspects of the working of the University, 1975 Questionnaires were issued and 244 replies were received. A copy of the Questionnaire is attached as an Appendix to the Report.

7. The Commission visited the University Departments in the Kariavattom Campus in addition to the Department of Aquatic Biology, Malayalam Lexicon Department, Institute of English and the Kerala University Library. The Commission also visited a number of colleges under Kerala University some of which are now affiliated to Gandhiji University.

8. Self-assessment reports were obtained from the Heads of various University Departments outlining the academic achievements, and the problems and issues faced by the Departments.

9. A few eminent scholars from Universities and other reputed institutions outside the State were invited by the Commission to undertake peer assessment of a few selected Departments of Kerala University.

1. Dr. C.V. Subramanian, Director, Advanced Centre and Prof. of Botany, University of Madras : Botany

2. Dr. P.S. Subramanian, Chief Professor of Chemistry, Presidency College, Madras: Chemistry

3. Dr. CF.T. Kurian, Director, Madras Institute of Development Studies, Madras: Economics

4. Dr. S. Dandapani, Professor of Education. Regional College of Education, Mysore -6: Education

5. Prof. S. Settar, Head, Dept. of History and Archaeology, Karnatak University, Dharward: History
6. Dr. K. Kunjunni Raja, Hon. Director, Theosophical Society Library, Madras: Linguistics, Malayalam, Lexicon, ORI.
7. Dr. P.M. Mathews, Head, Dept. of Theoretical Physics, University of Madras: Physics
8. Dr. C.R. Prasad Rao, Head, Sociology Dept., Andhra University, Waltair: Sociology
9. Prof. T.N. Ananthakrishnan, Director, Entomology Research Institute, Loyola College, Madras: Zoology

Extracts

Some of the other highlights of the period are: (1) the establishment of a Computer Centre in 1977 with a Computer purchased at a cost of Rs. 27/- lakhs out of grants specially sanctioned by the UGC (2) the World Conference on Malayalam, Kerala Culture and Development held at Trivandrum in November 1977 in which over 1,000 delegates, including many scholars from abroad, participated and (3) the establishment of the College development Council in 1978 in order to promote the developmental activities of affiliated colleges. During this period occurred the Marks Scandal. The investigations conducted by the Government and the University revealed many instances of corruption, cheating and falsification of marks which led to the Government's decision to hold a judicial inquiry. The Justice M.P. Menon Commission which went into this matter submitted its report to the Government in January, 1984.

The problems facing the University are numerous, complex and challenging; and it appears there are no easy solutions. But the problems are not insurmountable. The main task is to identify them and understand them and then seek ways and means of solving them in the light of the real goals of higher education. This is the task to which the Commission has addressed itself in this inquiry.

Speaking generally, the University Departments have well qualified staff and a satisfactory record of teaching and research. Out of 206 members of staff in the 27 teaching departments 136 have PhDs and other high research qualifications.

To begin with, some observations may be made which are of a general character and some recommendations which would apply to most or all of the Departments.

Academic Isolation: To quote from the peer assessment of the Physics Department, "the Major functions of a University Department are performance of and training in research work and teaching. The extent to which these functions have been discharged must be judged both by absolute standards and in relation to the environment in which the work has been done and the facilities available for such work. The location of Kerala University at almost the southern tip of India makes a certain degree of isolation inevitable". The isolation referred to is in regard to involvement in national and international academic streams and currents of scholarship and research. Barring a few notable exceptions, the University Departments figure rarely in national awards, in national programmes or in

large scale research projects funded by central agencies. *The recommendation is made therefore that (a) well organized efforts should be made by all the departments to establish and maintain live contacts with national research funding agencies such University Grants Commission, DST, (Department of Science and Technology). ICSSR (Indian Council of Social Sciences Research), ICAR (Indian Council of Agricultural Research) and University procedures and rules must be stream-lined to provide expeditious help in such efforts. The University must see to it that communication between central and national agencies and the Departments are carried on quickly and smoothly. (b) Efforts must be made by the different Departments to organize national Seminars, workshops and summer Institutes which would draw scholar and research workers from different parts of India and abroad. In one of the peer assessments, it is pointed out “during the last 10 years, the Department has not hosted any national research seminar or symposium”. In another Department, the report is “The All India symposia ---- followed by publication of their proceedings have enhanced the prestige of the Department. So, it is recommended that (c) Fuller use must be made of nationally recognized research institutions and agencies located in Kerala, their facilities, resources and expertise, Institutions such as VSSC (Vikram Sarabhai Space Centre). ISRO (Indian Space Research Organization), CDS (Centre for Development Studies, Tropical Botanical Gardens are among those whose strength and facilities may be availed of. (d) Greater co-ordination and collaboration may be aimed at between the Universities in the State; wasteful duplication of effort may be avoided. (e) The services of eminent scholars from outside the State may be secure to serve as visiting Professors.*

Library Facilities: One serious handicap which almost all the departments suffer from is poor library facilities. The report on the Chemistry Department sways, “Only 3 journals are subscribed as of now (The Indian Journal of Chemistry in which a number of papers from the Department have been published is not now subscribed). Progressive early cut in funding was cited as the reason”. The report on the Physics Department says, “The journals sanction which subscribes to only 2.5 research journals from abroad is absolutely pitiful. A very young faculty might for some years be able to put up herculean efforts needed to survive such a grave handicap, but such a state of affairs cannot go on for long without putting everything into reverse gear”. The Zoology report points out, “It is surprising that the Department is subscribing only to a very bare minimum of journal, and 1,500 books in a Department of more than 15 years standing appears insufficient taking into consideration the phenomenal growth in the diversity of disciplines as well as the knowledge explosion. The Economics report says, “I was distressed to find out not lonely is the amount made available to the library rather small but it has been declining during the last 2 or 3 years. An allocation of Rs. 16000/- to the Department for books and periodicals is an extremely meagre sum”. *The University must give top priority to library requirements and provide adequate resources to improve and strengthen library service and frailties and place them on a level appropriate to expanding research and teaching operations.*

Administrative Constraints: The Heads of Departments were unanimous in their complaints that they came up against bureaucratic bottle-necks in office procedures. Difficulties and delays had to be faced in (a) getting grants allocated to their Departments released in time (b) processing applications for grants for research projects (c) getting even emergency maintenance and repairs for equipment done and (d) securing essential equipment for which budgetary provisions are available. Too much of the academics’ time is

wasted in routine administrative procedures in the University offices. The limit of funds which the Head of Department can use for incidental or emergency expenses at his discretion was Rs. 100/-; it was increased to Rs. 2000/- in 1983; this figure at present prices is inadequate.

Specialized Post-graduate Course: A surprising fact is that while some of the departments of the University, largely the science departments, are free to run Masters courses different from those offered in the affiliated colleges, in other departments they feel constrained to carry on with stereotyped and out-of-date syllabi because of political pressures put up by teachers of affiliated colleges and members of Boards of Studies. This seems not unreasonable and wasteful in view of the highly qualified staff-teams the University Departments can boast of and the better library and laboratory facilities they have. One of the peer assessment reports says, "In my discussions with the students, one of the main issues that they brought up was the need to have a more demanding course. I hope very much that the Department will have some freedom for experimentation". On the other hand, the Zoology report says, "The regular 2 year MSc course has commenced from this academic year in general and applied Zoology. In this connection it may be mentioned that this course is more purpose-oriented and deviates from the traditional MSc courses in colleges". *The Commission strongly recommends that a University Department with staff competence and necessary facilities should be given the freedom to vary the courses of study and examination procedures in the interests of academic progress and national needs.*

Observations on some Departments: Reference must be made to departments which deserve special mention for the uniqueness and quality of their work and to some others which have problems needing prompt attention.

Department of Aquatic Biology and Fisheries: The self-assessment report points out, "the main interest has been to examine the Biology of economically important species of aquatic animals and plants and their ecology so that these very important and rich resources could be properly utilized and conserved for the full benefit of the community. 590 kms. of coast line, 2500 sq. kms., of fishable area, 500 sq. kms. of backwaters and 44 rivers have been the broad basis of our study". In spite of a shortage of staff and constraints in regard to space and equipment, the Department has done commendable work which has received wide recognition. |Some 46 students have qualified for PhD during 1968-1983 and 40 for the MPhil degree. Many large scale research schemes have been undertaken with assistance from national funding agencies. The Head of the Department has an impressive and outstanding record of national honours and scholarly achievements. Two staff members retired during 1981-82; these posts unfortunately have not yet been filled. *Steps must be taken immediately to fill the vacancies.* Senior positions have to be filled in the near future and procedures must be set going.

Malayalam Lexicon Department: This Department is engaged in the compilation of a comprehensive encyclopedic dictionary. The lexicon is planned as descriptive-cum-historical dictionary broadly following the lexicographic principles adopted by the Oxford English Dictionary. It is a Malayalam –English dictionary. Those whole set of 11 volumes is expected to be released by 1988. According to the peer assessment there is urgent need to appoint senior staff to take the place of two who will shortly retire. "The experienced Assistant Editors and Sub-editors in the Department will retire before the retirement of

the Chief Editor. There will be no qualified and experienced had to take up the editorial work when he retires in about 4 years from now. One or two qualified and competent scholars have to be selected immediately as sub-editor or Assistant Editor and trained in the work". *An important recommendation by the visiting expert is that computer facilities (available in the University) should be issued to store information gathered in 30, 00,000 index cards built up in the scriptorium. Necessary financial assistance must be afforded to preserve for posterity this valuable scriptorium. This s a recommendation we would endorse.*

Linguistic Department: The Department has made great progress during the period under review. To quote from the peer assessment, "there are two M A courses (General linguistics and applied linguistics), MPhil and PhD courses, two well-equipped laboratories (phonetic laboratory and language laboratory) and a well-stocked reference-cum-lending library. 10 research projects have been completed mostly in areas of dialect survey....more than 30 books in various fields in Linguistics have been published by members of the faculty; members of the staff have attended several national and international conferences. *Among the recommendations we would endorse are (1) funds to be made available for the publication of a research journal in Linguistics which the Department is well qualified to bring out and which will be of great scholarly value. (2) The construction of a room to locate the phonetic laboratory which is now housed in the same room as the language laboratory.*

Botany Department: The assessment of the expert commends the Department's pioneering efforts to develop and strengthen teaching and research in the important area of Cytology, Genetics and Plant Breeding, "by well-planned, sustained and painstaking work, the Department has established a reputation as entre of excellence in the general area of Cytogenetics and Plant Breeding but especially in Cytology. The work on Cytology of ferns is outstanding and internationally recognized".

Zoology Department: In the opinion of the expert called in to assess the work of the Department, "the steady stream of contribution in all these four fields of research-Insect Endocrinology and reproductive Biology, Animal behavioral studies, Soil Biology, Vector Biology-have earned for this Department a place in the national and international circles. The significant facts that emerge from the totality of research involvement in the Department is the increasing interaction on the part of the faculty to become involved in interdisciplinary areas of rese4rch, a truly positive trend in purposeful research.

Physics Department: Summing up his assessment the expert says, "The Department has an active research programme and a steady record of research in the past as well as an effective MSc teaching programme. The research has been of high caliber in certain areas while in certain others, projects need to be designed with greater depth and scope. The over-all direction of the academic activity is progressive and one can look forward to higher levels of accomplishment in the coming years".

Malayalam Department: The Department has come up with an ambitious proposal to reorganize the Department into four divisions with carefully defined areas of work, each with additional staffing of one Professor, One Reader; Two Lectures in each area with additional budget provision of about Rs. 3/- lakhs each. According to the peer assessment, some of the development that this plan seeks to promote can be affected by greater co-ordination between the four departments of Malayalam, Linguistics, Lexicon and

Manuscripts Library. Such co-ordination may be encouraged through the setting up of an Advisory Committee consisting of the Heads of these Departments. It is recommended that the University may act on this important suggestion.

Economics Department: The Department has a long tradition of research into problems relating to Kerala's development which the visiting expert has highlighted and commended. "The link that the Department was able to establish with the planning process in the State and the Centre on the one hand and the vast amount of data pertaining to the region that official agencies made available have been responsible for this research orientation that the Department was able to cultivate from the beginning". Another commendable feature of the work of the department is that "practically all members of the Department have done and continue to do writing both in English and in Malayalam".

Education Department: The Department has enjoyed good leadership during the period under reviews and can claim a notable record of teaching and research. One of the problems that the Department, like some of the other Departments located in the campus is up against, is the serious shortage of space in its present location. What accommodation there is in the small building near the University Offices has to be shared between German and Russian Departments, the Lexicon Department and the English Department. Some of the class rooms have to be used by more than one Department. *A good, well designed and equipped building on the Kariavattom Campus to meet the space requirements for staff rooms, library, classrooms and a seminar room is an urgent need which must be met.*

Sociology Department: Team work within the Departments is generally satisfactory. Two exceptions appear to be the Sociology Department and the History Department. In the Sociology Department there is a continuing conflict between the two Professors which has resulted in considerable unpleasantness and led to grievous neglect of academic and administrative responsibilities. As the peer assessment puts it "the academic climate of the Department which is a crucial factor to interpersonal co-operation, stimulation and team work in respect of research, writing, publications and project research seems vitiated by a court wrangle between the two senior Professors. While this dispute between the 12 seniors may have its own inter personal, legal and historical dimensions, it is quite unfortunate not only to the public appraisal of the Department, but also to the academic turnover of the Department in terms of diverting one's time and energies away from serious academic pursuits creating an atmosphere of fear, suspicion and factionalism within the Department including the junior staff, scholars and students and impairment of the team work and public image of the Department". *The University must look into these matters and take effective action to put a stop to the unseemly wrangles within the Department.*

Another important matter with the peer assessment draws attention to is the lack of proper accommodation for faculty members and research students in the Department. Further, according to the report, there was no staff member within the Department assigned to teaching work in statistics. "Since knowledge of statistics and quantitative methods is a critical asset to a teacher and research guide in Sociology the Department should made efforts to build the staff competencies in Statistics and quantitative methods. Instead of remaining content with adhoc arrangements, it is better to create a post of a professor of research methodologies (qualitative and quantitative) and recruit a really

competent person by open advertisement”. The suggestion put forward by the visiting expert is one which deserves careful attention, and action.

History Department: The visiting expert who conducted the peer assessment of the department commends it for its research output and for the publication undertaken by it of the Journal of Indian History, a journal of all India stature and high reputation and the Kerala History Journal. We would endorse the recommendation made by the expert that the University should provide necessary clerical and other assistance to enable the Department to publish these journals at a high level of efficacy, regularity and excellence. There are evidences of misunderstanding and conflict between the two senior members of the Department which have marred its smooth working and effectiveness. Some charges of a serious nature have been raised in the peer assessment against one of the professors which we have looked into and of which we have referred 2 issues to the Vice-Chancellor for a fuller investigation and necessary action.

The Instrumentation Centre: The Centre was set up in 1976 to serve the following objectives and functions as defined by the UGC, “to repair and service instruments; to offer courses, and training programmes in instrumentation, to provide research analytical service facilities in all specialized instruments in the University; to provide facilities for undertaking servicing, testing and calibration; development of instruments and training to undertake and encourage research, design and development in instrumentation”. Owing to financial constraints and serious difficulties in securing qualified staff at the levels of salaries sanctioned, only the first objective has been achieved so far and that too not adequately. Lack of space is another constraint which has stood in the way of proper development of the Centre. In the setup of the University with the main campus located 15kms. From the city, and with sophisticated and sensitive instruments in regular use in many of the Departments of science, it is essential that the instrumentation Centre be adequately staffed and equipped. To quote from the peer assessment of the Chemistry Department, “The Instrumentation Centre is not yet equipped to cater to the needs of the researchers. As of now, the Department is managing its instrumental needs from the Regional Sophisticated Instrumentation Centre, Madras, National Chemical Laboratory, Poona and Central Drug Research Institute, Lucknow”.

Recommendations on Administrative Changes:

As already referred to in paragraph 2.2.4 many of the self-assessment and peer assessment reports point out the difficulties the Departments face on account of curbs and restraints imposed by the procedures and working of the University office. The University has 32 departments engaged in teaching and research and supporting activities. With the rapid growth and development of wide ranging operations and activities in these areas, it is recommended that:

(1) *a separate unit or section of the University office under a Deputy Registrar be set up to deal solely with matters relating to the working of the University Departments at both the campuses.*

(2) *Some decentralization in the administrative set up of the University as suggested below must be given effect to:* (a) The Vice-Chancellor and the Registrar could, in academic matters, delegate some of their responsibilities to the Deans and decisions in routine matters could be left to them. (b) *The office of the Dean many be invested with greater responsibilities as in many other Universities in the country.* The Dean will be the Executive

Officer of the faculty and sees that the decisions of the faculty are implemented. He will be responsible for bringing the financial and other need of the faculty to the notice of the Vice-Chancellor. He co-ordinates the use by the various departments in his faculty of common equipments and facilities. (c) The Heads of Departments could be given more freedom and financial powers, *Headship of departments may be rotated on the basis of seniority for a three year term among the Professors in the Departments concerned.*

Appendix – 3

EXTRACTS FROM PADMA RAMACHANDRAN COMMISSION REPORT OF 2000

(SET UP BY THE GOVERNMENT OF KERALA IN MARCH 2000 IN EXERCISE OF THE POWERS CONFERRED BY SEC. 71 OF CHAPTER IX OF KERALA UNIVERSITY ACT 1974, TO ENQUIRE INTO THE WORKING OF THE UNIVERSITY OF KERALA)

The Commission has been guided by the following principles in arriving at findings relating to the University's working and making recommendations for overcoming major problems standing in the way of achieving excellence and relevance in generation of new knowledge and its teaching:

- 1 The University must function as an instrument for the development of the people;*
- 2. It must have freedom to experiment and innovate in teaching, research and extension. We envisage a 'partnership' between Government and University to replace the present hierarchical relationship.*
- 3. Its management should be based on the principles of participation, decentralization, autonomy and accountability.*
- 4. The various bodies of the University have to be depoliticized, made open, be flexible and capable of adapting to new needs or emerging needs in society. They must be largely constituted by academic persons and election is to be kept to the minimum.*

Key Observations

Delegation of Financial Powers to Heads of Departments is totally absent. It is a must if departments must improve. They need unfettered freedom to experiment and innovate in their endeavor to generate new knowledge. At the same time, there will have to be proper mechanisms to ensure their responsibility and accountability for the funds. This is the only way to make autonomy go hand in hand with accountability.

The Commission findings regarding the Departments of the University are that they are behind the times in their courses and the distribution of faculty members is skewed and most uneven. One department has 9 faculty members, many have only one, some have 5 senior faculty and no lecturers. Laboratories need modernization and updating. Computers are few and far between and one is not sure how many teachers are good at the computer. The fact that no financial and administrative powers are delegated to Heads of Departments takes away from academic agronomy. Many of them who could attract a lot of projects probably prefer not to do so as the administrative procedures are exasperatingly slow and project funds are temporarily diverted. For this the Commission recommends greater delegation of financial and administrative powers to Deans, and Heads of Departments and a higher amount given as Permanent Advance, at the same time, setting up proper mechanism for ensuring the accountability of Deans and Heads.

a) Departments need to be modernized b) The University to determine and sanction the needed core of teachers for each Department on the basis of its Plan of Action in discussion with the Head of the Department. c) Take an estimate of equipment's that do not work and of those that need updating for necessary action d) Look into the needs of departments for computers.

The University's requirements are best known to those who work inside it. Hence we recommend that the University bodies be run largely by the academics with help from administration.

New multi-disciplinary and inter disciplinary course have to be planned for advanced levels, no new departments to be started without infrastructure and preparation, grouping of departments into 'Schools', multimedia teaching, quantitative improvements in the PhD programme and peer assessment of Departments-all these form part of this Commission's recommendations. Most important of all, we recommended the shifting of the Palayam campus to Kariavattom so as to end the isolation and neglect of Kariavattom. A programme of beautification of the campus and improvement of facilities must also be taken up so that a proper University township emerges there.