

Criterion-III

Research Consultancy and Extension

Criterion III: Research, Consultancy, and Extension

3.1 Promotion of Research

3.1.1 Is there a research committee to facilitate and monitor research? If yes, give details.

Yes. There are several committees to facilitate and monitor research.

- 1) A separate section Planning Monitoring and Evaluation Board (PME) is created to facilitate research activities and to provide administrative help. All the news /information from various agencies with regard to research projects and schemes are reached to the faculty. The faculty are also given a two-day advisory program on preparation of research proposals.
- 2) University, as per UGC regulations, do encourage research scholars after thesis submission, to apply for Rajiv Gandhi post-doctoral fellowships by giving written declaration stating that, the selected students will be provided with facilities for research.
- 3) As per the University voucher, Research Progress of the Ph.D students are guided and monitored through the formation of a Doctoral Committee comprising of experts in the area of study.
- 4) University of Mysore offers fellowship to SC/ST and other candidates out of its own resources. Details are given in Criterion-I
- 5) Teachers of the university are normally provided with sabbatical leave of one year with full salary benefits, so as to enable the teacher to write a review article/book/memoirs/to fully devote time for research.
- 6) Every faculty of the university is provided with a state of the art Lap top for research computations.
- 7) 24 hours, 365 days electricity, water and other infrastructure necessary for conducting research is provided by the university. 24 hours security is provided to the students, research scholars, and teachers of the university.
- 8) Every department of the university has its own lecture programs by eminent scholars from research institute located in India as well as by people from abroad. Each department has a record of these lectures.
- 9) Under Institution of Excellence (IOE), a central facility of high cost sophisticated equipments has been established. To cater to the needs of students, research scholars and teaching community of the university as well as local, affiliated, and constituent colleges. The list of equipment available at the center as well as various departments are given in the departments profiles.

- 10) The University publishes “Myscience” a science journal to facilitate teachers and researchers to publish their research findings.
- 11) The Directorate of Research was established in 2011 to streamline the entrance, admission and day-to-day activities of concerning Ph.D. programmes of all the Departments and the Research Centers.

3.1.2 Is research a significant activity of the University, if yes how does the institution promote faculty participation in research?

Yes: Research is a significant activity.

University promotes research in the following ways:

- 1) Start up grant up to One lakh for newly recruited teachers.
- 2) Research grant for teachers from the university funds.
- 3) PMEB ensures that all the news/information from various agencies with regard to research projects and schemes are reached to the faculty in time. The faculty are given a two-day advisory program on the preparation of the research proposals.
- 4) Inter-departmental research proposals are encouraged by the university. It is normally done at the level of PMEB.
- 5) University deputes teachers to attend several research workshops/seminars/conferences for furtherance of knowledge of the teachers.
- 6) University provides funds like TA (travel allowance), DA (Daily Allowance) and Registration fees for presentation of scientific findings at the conferences. In certain cases, if the deputation of a teacher exceeds certain period, then a guest lecturer will be appointed to look after the academic work in the respective departments.
- 7) University brings out periodically “My Science” journal and also other journals for the favour of teachers who are desirous of publishing their research findings. This is also supported by Prasaranga, a printing press of the university located inside the campus.
- 8) Faculty are provided with individual research lab with basic instrumentation and infrastructure.
- 9) Every faculty is trained by a library official on the recent methods of collection of Literature by E-sources (Advance secure) pertaining to their topics.
- 10) Faculty are made aware of international rating of regarding, impact factor, h - index etc.

- 11) Training to the faculty for writing individual and collaborative research proposals.
- 12) Group discussion to abreast recent research developments in the subject.
- 13) Encouraging students and faculty to take up summer programs in Research Institutes to that they get wider exposure.
- 14) Training the research students on Research Methodology, Planning new research work, carrying our research experiments, collecting data, research data, book keeping, writing computer programs, carrying out a thorough literature survey, writing a research paper, finding proper good impact journal for publication.
- 15) Sabbatical leave is provided for faculty for writing text books and contributing chapters in monographs/books.
- 16) Conducting PhD course work, PhD entrance test and related examination work
- 17) Participating and organizing national and international conferences/seminars/workshops both within and outside the University.
- 18) Actively organizing and conducting refresher courses for college teachers which also includes training and designing new experiments.
- 19) University research fellowships for carrying out research and projects.
- 20) Providing consultancy service to the members of local colleges /institutes/research centers/ Industries which may or may not result in financial benefits to the University.
- 21) Library staff helps the faculty in the search for refereed quality journal to publish their research findings. University honours the faculty who have been awarded with national/International recognition on Teachers day/Foundation day in Public function to motivate.
- 22) A separate workshop on Research methodology is conducted for faculty and Resource Scholars by UGC-ASC, University of Mysore.
- 23) Theme based faculty development programmes are organized on the recent advances in specific fields by inviting experts in the fields.

The University nurtures inter-disciplinary research involving faculty from different departments. UGC has recognized and has awarded UPE status to further strengthen the inter-disciplinary research.

We have research funding from various agencies like DST, DBT, CSIR, UGC, DAE, DRDO, MOEF etc. A large of faculty members of the university have individual research projects and the list is enclosed (Annexure-1). Every year, many teachers do attend national and international conferences and chair International Symposia, university has earmarked certain amount from the budget to finance the travel and other expenses for those teachers who are eligible once in three years. Under summer programs by the various academies located in India, several teachers of the university are engaged in providing the selected students the research facilities on the campus. Further, university extends from its constrained budget a starting financial research grant of Rs 100,000 to the newly recruited teacher of Post-graduate departments to engage in research of his/her own choice.

3.1.3 What provision is made in the budget for research and development?

- 1) Travel and Dearness allowance for teachers are provided by the university funds.
- 2) MHRD has provided a grant of Rs 100 crores for setting up of Institution of Excellence with a separate building and a center which houses all the equipment needed by research people of the university.
- 3) Provisions are made in the budget to provide funds for maintenance, upgradation of research scholar's hostel. Efforts are being made to provide internet connections to the inmate of these hostels.
- 4) University provides access to full texts of more than 7364 e- journals and a number of e-books through UGC infonet consortia.
- 5) University also encourages each faculty member to submit research proposals to various agencies located in India and abroad.
- 6) University has established nine Chairs and invite people of various fields to spend sometime with the students/research scholars/teachers. These chairs are available to departments on rotation basis.
- 7) Founders day and teachers day are celebrated by inviting experts to deliver lectures of current interests, so that it can motivate the students/faculty of the university. The funding for this purpose are made available from the university budget.

3.1.4 Does the University promote participation of the students in research in the academic programme?

With the introduction of CBCS, there is a lot of avenues for the student to interact with the faculty for doing a research project which will benefit both students and teachers and the university. This aspect has become a part of the post-graduate course in the university. Already many students are engaged in research projects with the faculty of the university as well as with the institutes of good reputation. University encourages students to do summer programs at other institutes

3.1.5 What are the major research facilities developed and are available to faculty and students on the campus?

- 1) Central facility of state of the art equipment procured under IOE grants
- 2) Central facility of scientific instruments procured under UPE, PURSE, CPEPA.

Following research facilities are available on the campus:

- 1) X-ray powder diffractometer obtained from SAP in Physics Department
- 2) National Single Crystal diffractometer in the Physics Department
- 3) National facility for Drosophila Genetic stocks in the Zoology Department
- 4) Electron Probe Micro Analyzer in the Earth Science Department
- 5) Most of the Science departments have a Central instrumentation facility established under DST-FIST Programme.
- 6) Well established herbarium Botanical garden and Medicinal plants garden at Botany.
- 7) Planted Aquarium at DoS in Botany.
- 8) Seed Pathology lab in Applied Botany
- 9) National Centre for History of Science
- 10) Oriental Research Institute Archive
- 11) Digital library in Library and Information science.
- 12) High Pressure Liquid Chromatography in Biochemistry
- 13) Spectrometer in Biochemistry
- 14) High speed centrifuge in Biochemistry
- 15) Liquid Scintillation counter
- 16) Platelet aggregometer

- 17) ELISA reader
- 18) Lyophilizer
- 19) Rotary Flash Evaporator in Biochemistry
- 20) Electron Microscope in Applied Botany
- 21) Phosphor image analyser for fluorescence in Applied Botany
- 22) Ultra Centrifuge in Applied Botany
- 23) Spectramax Plate Reader in Applied botany
- 24) Real time PCR machine
- 25) Microscopes, Pulse field gel electrophoresis system
- 26) Deep freezers, HPLC system
- 27) UV-Visible spectrometer, High speed refrigerated centrifuge
- 28) Microplate Luminometer
- 29) CO2 incubators
- 30) Sun Microsystems, Silicon Graphics, IBM workstations, Image Prof workstations, Linux/windows/unix servers, Multimedia imaging and printing equipments in computer science dept
- 31) Spectrophotometers (uv-vis), automated protein digester, fluorimeter, semi-auto analyzer, viscometer, freeze dryer, rotary evaporator in Food and nutrition dept
- 32) Electronic lab facility for video production and editing in Journalism Department
- 33) Language Laboratory Cum Multimedia Laboratory in Kannada dept
- 34) Green house and field gene bank for medicinal plants, Microbial sample collections with bio-safety cabinet available in microbiology dept
- 35) Positron Annihilation lab in Physics Department
- 36) Environmental radioactivity lab in Physics Department
- 37) TLD and liquid crystal lab in Physics Department
- 38) Herbal Drug Technology Lab at DoS in Botany
- 39) Materials Synthesis Laboratory at the Earth Science Department
- 40) CHN Analyser the FTIR at DOS Chemistry

3.1.6 Does the university subscribe research journals for reference as per the different departmental requirements?

Yes. University Library subscribes research journals for reference as per different departments requirements. The requirement of each departments is ascertained in the beginning of every academic year and accordingly the required journals are subscribed.

In view of the increase in cost of print publication and availability of large number of electronic journals the initiative-Infonet consortia – by the UGC INFLIBNET has come in a big way to assist all University libraries to meet the general requirement of the teachers and scholars in the Universities. The University of Mysore being one of the members of Infonet consortia is facilitated with access to more than 7000 online journal. These online journals are accessible remotely by all faculty and scholars of the University of Mysore.

3.1.7 Does the university extend recognition to National institutions that provide research training leading to research degrees?

As per Karnataka State University Act 2000, there is a provision for recognizing the National institutes as research centers. The procedure is to constitute a committee consisting of a Syndicate member, Academic Council member, Senior Professors, and Registrar of the University to visit the institute and take cognition of the space, infrastructure, equipment, qualified research personnel, library, and other related requirements before submitting a detailed report to the university. This report will be placed in the appropriate faculty meeting and then syndicate meeting for passing an order stating that the institute is recognized for taking up research leading to Ph.D. degree of the University. At present there are 37 Research Institutions besides 48 PG departments under this scheme.

The list of the research centers recognized by the University of Mysore is as follows:

RECOGNISED RESEARCH CENTRES

Sl. No.	Name of the Research Centre	Subject(s) approved for Research
01	Sri Adichunchanagiri Biotechnology & Cancer Research Centre, Balagangadharanatha Nagar, Nagamangala Taluk, Mandya District.	Biochemistry, Biotechnology, Chemistry and Inter disciplinary areas
02	Regional Institute of Education Manasagangotri, Mysore	History, Psychology, Tamil, Sociology, Kannada, Telegu, Malayalam, Science and Science Education
03	National Institute of Prakrit Studies and Research, Shravanabelagola, Hassan Dist.	Jainology & Prakrit
04	All India Institute of Speech and Hearing Manasagangothri, Mysore.	Speech & Hearing, Speech- Language Pathology, Audiology
05	Central Sericultural Germplasm Resources Centre, Central Silk Board, Ministry of Textiles, Govt. of India, Thally Road, Hosur, Krishnagiri Dist. Tamil Nadu.	Sericulture and Biotechnology
06	Anthropological Survey of India Southern Regional Centre, Manav Bhavan, Bogadi, Mysore.	Anthropology, Population and Communities Studies of Southern India.
07	JSS Research Foundation, JSS Mahavidyapeeta, JSS	Computer Science, Electronics, Environmental Science,

Sl. No.	Name of the Research Centre	Subject(s) approved for Research
	Technical Institutions Campus, Manasagangothri, Mysore.	Urban Geo Construction Design and Planning (Board of Urban and Regional Planning), Polymer Science and Technology, Civil Engineering Sciences, Mechanical Engineering Sciences, Chemistry, Mathematics, Economics, Business Administration, Speech and Hearing
08	Central Food Technological Research Institute, Chaluvamba Mansion, Mysore.	Food Science, Food Technology, Food Science and Nutrition, Polymer Science and Technology, Applied Botany, Biochemistry, Bioscience, Biotechnology, Chemistry and Microbiology
09	PET Research Foundation, PES College of Engineering Campus Mandya.	Computer Science, Electronics, Environmental Science, Geology, Chemistry and Mathematics
10	Vittal Mallya Scientific Research Foundation, B.T.M. 2 nd Stage, Bangalore.	Chemistry, Biotechnology, Biochemistry.
11	National Centre for Biological Sciences, Tata Institute of Fundamental Research GKVK, Bellary Road, Bangalore.	Biological Sciences
12	South Asia Institute of Advanced Christian Studies, (SAIACS), Kothanur, Bangalore.	Christianity
13	Central Coffee Research Institute, Coffee Research Station, Chikmagalur Dist.	Botany, Applied Botany, Chemistry and Zoology
14	Central Sericulture Research & Training Institute, Srirampura, Manandavadi Road, Mysore	Botany, Sericulture, Zoology
15	Indo American Tourism Limited 1 st Floor, HIG 83, Sector-1, On NH 5, MVP Colony, Vishakapatnam.	Management Mathematics Computer Science
16	Central Institute of Indian Languages, (Ministry of Human Resources and Development, Dept. of Higher Education, Government of India) Manasagangothri, Mysore.	Advanced Research Centre in Linguistics
17	Defence Food Research Laboratory Ministry of Defence, Government of India, Siddarthanagar, Mysore	Food Science and Nutrition, Food Technology, Biotechnology, Bioscience, Biochemistry, Microbiology, Chemistry, Food Science, Food Science and Technology
18	Sami Labs Limited Corporate Office, 19/1 & 19/2, I Main, II Phase, Peenya Industrial Estate, Bangalore.	Chemistry, Biochemistry, Biotechnology, Applied Botany
19	Institute for Social and Economic Change, Dr.V.K.R.V Rao Road, Nagarabhavi PO, Bangalore.	Anthropology, Economics, Education, Development Studies, Political Science, Sociology
20	Seribiotech Research Laboratory, Central Silk Board, Ministry of Textiles, Govt. of India, Carmelaram Post, Kodathi, Bangalore.	Biotechnology
21	Centre for Manufacturing Research & Technology Utilization, RV College of Engineering Campus, R.V. Vidyaniketan Po, Mysore Road, Bangalore.	Composite Materials, Material Science, Metallurgy & Metal Casting, Polymer Science
22	Birla Institute of Management Technology, Plot No.5, Knowledge Park-II, Greater Noida (NCR), U.P	Management Studies, Economics, Commerce

Sl. No.	Name of the Research Centre	Subject(s) approved for Research
23	Institute of Public Enterprise, Osmania University Campus, Hyderabad, AP.	Commerce, Economics, Management Studies, Political Science
24	Jubilant Biosys Limited, 96, Industrial Suburb, 2 nd Stage, Industrial Area, Yeshwanthpur, Bangalore	Chemistry & Biochemistry
25	Labland Biotech Private Limited, Plant Tissue Culture, K.R.S Main Road, Mysore.	Biotechnology, Microbiology and Botany
26	Mahatma Gandhi National Institute of Research and Social Action (MGNIRSA), Street No.17, Gagan Mahal Road, Domalguda, Hyderabad.	Environmental Protection and Pollution Control particularly Rural Development, Information Technology, Microbiology, Biotechnology, Waste Management, Gender Equity and other related fields Anthropology, Political Science
27	Astra Zeneca India Pvt. Ltd., Post Box No.2409, HA Farm Post Office Bangalore.	Bio-chemistry, Microbiology, Chemistry & BioSciences
28	SCMS Institute of Bio-Science and Biotechnology Research & Development, Management House, South Kalamassery, Cochin.	Bio-Science Bio-technology
29	National Bureau of Agriculturally Important Insects (Indian Council of Agricultural Research), H.A.Farm Post, Hebbal, Bellary Road, Bangalore.	Botany, Microbiology and Biotechnology
30	National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore.	Natural Science, Engineering, Social Sciences and Humanities.
31	Suvidya Institute of Philosophy and Social Sciences, Bangalore	Philosophy
32	Nitte Research and Education Academy, NMIT Campus, Govindapura, Gollahalli, Yelahanka, Bangalore	Computer Science, Electronics, Mathematics, Business Administration/ Management
33	Anthem Biosciences Pvt. Ltd., No.49, Canara Bank Road, Bommasandra, Industrial Area, Phase-I, Hosur Road, Bangalore	Bio-Chemistry, Applied Botany & Bio-Technology, Microbiology, Chemistry
34	Maharaja Research Foundation Maharaja Institute of Technology Campus Belavadi, Srirangapatna Taluk, Mandya Dist.	Computer Science & Information, Science, Management, Electronics
35	National Ayurveda Dietetics Research Institute (Formerly The Regional Research Institute (Ay.) Govt. Central Pharmacy Annexe, Ashoka Pillar, Jayanagar, Bangalore	Botany
36	National Aerospace Laboratories (Council of Scientific and Industrial Research), PB No.1779, HAL Air Port Road, Bangalore	Computer Science & Engineering
37	Central institute of Plastics Engineering and Technology, Ministry of Chemical and Fertilizers, Government of India, No.437/A, Hebbal Industrial Area, Mysore-570016	Polymer Science & Technology

Research and Publication Output

3.2.1 Give details of the ongoing minor and major projects?

In the table amount received from different agencies like UGC, DST, DBT, DANIDA, CSIR, AICTE, DAM Hampi, DAE, EEC, ICAR, Canadian International Development Agency, Other Agencies

Sl. No.	Particulars	2006-07 in Rs	2007-08 in Rs	2008-09 In Rs	2009-10 in Rs	2010-11 in Rs
1	UGC Projects	3,62,25,546	6,98,97,650	12,59,90,579	9,43,43,847	10,12,29,687
2	Govt of India	1,84,67,081	1,99,45,629	15,39,861	2,10,04,971	3,12,45,232
3	Other agencies	51,35,234	47,26,874	45,03,332	64,33,219	5,06,65,485
4	Govt of Karnataka	5,57,000	11,56,803	8,61,700	41,32,500	2,45,14,000
5	Foreign Agencies	98,228	31,302	0	13,19,675	0
6	Private Agencies	12,67,200	7,08,000	0	0	1,25,000
TOTAL		6,17,50,289	9,64,66,258	14,98,95,472	12,72,38,712	16,21,79,404
	Development Grant	7,50,000	2,14,00,000	30,00,000	30,00,000	15,00,000
	Institution of Excellence	0	0	0	33,33,00,000	33,33,00,000
TOTAL		6,25,00,289	1,17,86,66,258	15,28,95,472	46,35,38,712	49,69,79,404

3.2.2 Does the university have research funding from the Government, Industry, NGO or International agencies? Give details

Table given in section 3.2.1 shows the funding agencies and the amount received

3.2.3 Does the University have research students currently registered for Ph.D.?

At present 1035 students have registered for Ph.D.

3.2.4 Does the University provide fellowship/scholarship to research scholars?

Yes. The University provides fellowships of different nature for research work. The following are some of them.

- 1) University of Mysore PG research fellowship
- 2) University of Mysore provides fellowships to do M.Phil. in certain subjects and the monthly fellowship is Rs 3000/- for the two years duration. Now it has been stopped since 2009.

- 3) University of Mysore SC/ST Research Fellowship - University provides fellowship of Rs 5500 as JRF per month and Rs. 6000 as SRF per month . Several fellowships have been given for the last five years. Each department is provided with 4-5 fellowships every year. The candidates seeking the fellowship should have at least 50 percent of marks in Masters degree and should have passed PhD entrance exam. The duration of the award is for three years.
- 4) All registered SC/ST/Minority students are encouraged to apply for the Rajiv Gandhi research fellowship of UGC and there are many such students working on the campus.
- 5) University Faculty Improvement Programme for SC/ST faculty - A separate fund has been set aside for encouraging SC/ST faculty of the university and also from constituent colleges to take up research leading to Ph.D. degree. Normally the number of such fellowship does not exceed 10 each year.

**3.2.5 Does the University have post-doctoral fellows currently working in the Institution?
Yes.**

- i) There are many post-doctoral fellows working in several departments and also under the Institute of Excellence program.
- ii) Rajiv Gandhi post-doctoral fellowship holders for SC/ST with Ph.D. degree are many on the campus and they are working under several senior research professors. The details are available in the departmental profile.

3.2.6 Give the highlights of the collaborative research done by the faculty

- 1) In the Physics department, there is an ongoing collaboration with Central Silk Research and Training Institutes (CSTRI) on the characterization of silk fibers/fibroin using X-ray techniques as well as Positron annihilation techniques.
- 2) Sericulture department also has such collaboration with CSTRI on development of new varieties of silk
- 3) The Atomic minerals Division of the Department of Atomic Energy, Governemtn of India, jointly with the Department of Earth Science of the UOM has undertaken the exploration of radio-active minerals in Kaladgis, Badamis and cuddapah basins.
- 4) Many such activities are practiced by the departments like Chemisty, Earth Science, Biochemistry, Economics and Cooperation, Education, Environmental Science, Psychology, Applied Botany.

- 5) There are also international collaboration and the departments like Biochemistry, Environmental Science, Psychology, Earth Science, Applied Botany and Sociology.

3.2.7 What research awards and patents were received by the faculty during the last five years?

2010-11

Prof. H.S. Prakash: (i) Awarded Swethambar Puri Medal from Indian Botanical Society

Prof. S.R. Niranjana: (i) Awarded Fellowship of National Academy of Agricultural Sciences

Prof. Krishne Gowda: (i) Received Distinguished Alumni Award. 2010-11 marks the 30th Anniversary of the founding of the Centre of Urban Studies and Urban Planning. Over the past 30 years, those who have graduated and made very substantial contributions to urban development locally, regionally, and globally – The University of Hong Kong has recognized and awarded as a Distinguished Alumni. (ii) Provided Full Scholarship and invited to the 1st International “Sustainable Urban Management” Course from 23rd to 28th August 2010 in the International Urban Training Centre (IUTC) and UN-HABITAT, Gangwon Province, The Republic of Korea.

Prof. K.M. Chandar: (i) Kannada Sahitya Academic Award to Prof.K.M.Chandar

Dr. Padmashekar: (i) Selected as the President of the 8th Kodagu Dist. Kannada Literary Conference. It was rare gesture for a woman for the first time in the history of the Kodagu Dist. Kannada Literary Parishat. (ii) Awarded 2010 Sadodita Award for her re-known research contribution. The award was instituted in memory of Sri Ramakrishna Hegde, past Chief Minister of Karnataka. (iii) Recognized as a novel contributor to Kannada Literature and hence she has been included in the list of 100 dignitaries documentary films produced by the Karnataka Govt.

Prof.R.Indira: (i) Sadodita Award from the Shashwati Trust for Significant contribution in the field of Research (ii) Honorary Associate Adjunct Professorship (2009) from the University of Iowa, USA (this recognition is an acknowledgment of the ‘centrality of her professional expertise to the mission of International Programs of the University of Iowa). (iii) Famous Past Fulbrighters (2009) One of the three former Fulbrighters from Karnataka featured in the section ‘Famous Past Fulbrighters’ in the United States Virtual Consulate, Bangalore.

Prof.K.Yeshodhara: (i) Honoured by Sagacious Academy, Hassan for Educational Services – 28th January 2011 (ii) Honoured by Karnataka Viswakarma Saahithya Kalaa Academy ® Bangalore for Educational Services – 23rd January 2011

Prof Jamuna Prakash: (i) ARP award 2010-11: Selection for “ Awards for best research publication” by the vision Group on Science and Technology (VGST),Karnataka State Government, Karnataka. (ii) NSI prize for Best oral presentation, 42nd National Conference of Nutrition Society of India, 19-20 November 2010, Mumbai. [Sudha Sairam and Asna Urooj. Evaluation of antidiabetic effect of Artocarpus altilis using in-vitro and ex-vivo techniques.] (iii) NSI prize for Best Poster presentation, 42nd National Conference of Nutrition Society of India, 19-20 November 2010, Mumbai, [Charlotte G Karunakaran and Asna Urooj. A comparative study on the life style practices and somatic status in pre and post menopausal women.] (iv) Best Poster award : 6th Nutra India Summit, International Conference on Nutraceuticals. Mumbai, 15-18th February 2011. [Bhavya S.N. and Jamuna Prakash. Antioxidant activity in different extracts from corn based ready-to-eat breakfast cereals.] (v) Best paper Award : National Congress on Children and Adolescent Health”, Zahedan, Iran. 8th December, 2010. [Shahla Shafiee, Mohsen Mesgarani, Khyrunnisa Begum. Pubertal timing and nutritional status among adolescent boys from Mysore city, India]. (vi) Haveli Ram Pasricha award (Community Nutrition) for paper presented at 41st National Conference, Nutrition Society of India. National Institute of Nutrition, ICMR, Hyderabad. 20-21st Nov. [Deepa Prakash and Jamuna Prakash. An analysis of family food behavior and dietary pattern of selected school children from Bangalore city.]

Dr.S.K.Kiran Kumar: (i) Awarded Honorary Professorship of the International Academy of Yoga Teachers Training, Belgrade Serbia.

Prof.Shalini R Urs: (i) Awarded Annual Mortenson Distinguished Lecture by University of Illinois, Urbana Champaign. She delivered a lecture on “Shifting Terrains, Crossing Boundaries: Digital Libraries are personal and Social Again!” on 20th October, 2010

2009-10

Dr. N.Suresh Kumar: (i) Excellent Contribution to prakrit literature - Dr.A.N.Upadhye Commemorative Award, Dakshin Bharath jain Sabha, Sangli, 2009.

Prof. H.S. Prakash: (i) Elected as Fellow of National Academy of Agricultural Sciences.

Prof. S.R. Niranjana: (i) Awarded Sir C.V. Raman Young Scientist from Government of Karnataka.

Prof. Bharathi P Salimath: (i) Rashtriya Gaurav Award, 2009. (ii) Best Citizens of India Award, 2009

Prof. K.A. Raveesha: (i) Awarded ISCA Young Scientist Award in Agriculture and forestry section by the Indian Science Congress Association from 3rd to 7th January 2010 at Thiruvananthapuram, Kerala for the paper entitled “A novel botanical fungicide julifloravizole isolated from *Prosopis juliflora* (Sw.) DC. for the management of phytopathogenic fungi.

Dr. Shoba Jagannath: (i) awarded the best poster presentation for the paper “Role of avenue tree in mitigation of urban air pollution with reference to *Polyalthia longifolia* Hook.F.Thomas” at the International Conference on Challenges to Biodiversity & Environment for Sustainable Development, 12th to 14th March, 2010, JSSTI, Mysore.

Prof. K. S. Rangappa: (i) Visiting Professorships: Hokkaido University, DST-JSPS

Prof. H. S. Yathirajan: (i) Member – American Chemical Society-2009-10 (ii) Fellow - Indian Chemical Society – 2009-10

Prof. Prakash R. Naik (i) Nominated as member of Editorial board of Journal of Applied and Natural Science, 2009

Prof. V.A. Vijayan: (i) Nominated member of Scientific Advisory Committee, Vector Control Research Centre (ICMR), Pondicherry and Nominated member of SAP, Department of Biotechnology, Bharathiar University, Coimbatore.

Dr. M.S. Krishna: (i) Awarded Best paper presentation for the paper entitled “Male age influence on offspring qualities in *Drosophila bipectinata* presented at National conference on emerging fields in life science” organized by University of Mumbai, Mumbai.

Dr.Ashoka: (i) Awarded Sri M.G. Ranganatha Memorial Text book 2nd Prize for his text book Modern Criminology on 01-10-2009;(ii)Awarded the ISC - Prof.S.S.Srivastava award for the year 2008 for Excellence in the teaching and Research in Criminology on 22-10-2009.

Dr.H.K.Sheela: (i) Awarded the Ph.D. degree by the University of Mysore for her thesis “Abhinaya through the Ages (A Socio Philosophical Approach)” on 08-01-2010.

2008-09

Prof. A. Balasubramanian: (i) Prestigious Vikram Sarabhai Award

Dr. N.S. Rangaraju: (i) Member for Mysore City Heritage Committee nominated by Govt. of Karnataka Sub-committee member for the JNNURM Tourism and Heritage

Prof. Padma Shekar: (i) Nominated to the governing council as a member of the National Institute of Prakrit Studies and Research, Dhavalatirtham, Shravanabelagola.

Dr. M. Ramashandra: (i) Elected as the Vice-President of the International Congress of Social Philosophy (ICSP) for the Eighth consecutive time. (ii) Elected as the General Secretary for the Karnataka Darshan Parishat for the Fourth consecutive time. (iii) Elected as the Executive Member for the International Congress of Yoga and Spiritual Science for the Third consecutive time.

Dr. Midatala Rani: (i) Received the National Award, “Shiksha Rattan Puraskar” along with the “Certificate of Excellence” for her Meritorious Services, Outstanding Performance and Remarkable Role. The Award has been instituted by the India International Friendship Society, New Delhi. Former Governor of Tamil Nadu and Assam Dr. Bhishma Narain Singh presented the award on 18th November, 2008.

Prof. M.S. Lalithamma: (i) Member of State Research Advisory Committee Under Sarva Shikshana Abhiyan Mission of Karnataka, Government of Karnataka for 2008-10. (ii) Chairperson of Sub Committee related to training programmes and teaching methodology under research, evaluation and Monitoring Interventions under SSA, Government of Karnataka for

2007-08

Prof. Bharathi.P Salimath: (i) Received DBT- overseas fellowship for a period of six months to work on The Role of VEGF in Metastasis at Medical University of South Carolina, South Carolina, USA

Prof. S.R. Niranjana: (i) Pesticide India Award – 2008 at 30th Annual Conference and Symposium on Advances in Biotechnology for Plant Protection - November 17 to 19, 2008, Mysore, India. (ii) P.R. Verma memorial Award – 2008, at 30th Annual Conference and Symposium on Advances in Biotechnology for Plant Protection - November 17 to 19, 2008, Mysore, India. (iii) Guman Devi Varma award – 2008, at 30th Annual Conference and

Symposium on Advances in Biotechnology for Plant Protection - November 17 to 19, 2008, Mysore, India.

Prof. K.S. Rangaappa: (i) Patent filed between Prof. K. S. Rangappa, University of Mysore and Prof. Tapas Kumar Kundu, JNCASR, Bangalore.

Prof. H.S. Yathirajan: (i) Member – American Chemical Society-2008-09. (ii) Affiliate Member – IUPAC—2008-09. (iii) Indian Chemical Society – 2008-09

Prof. P. Nagabhushan: (i) Nominated as Visiting Professor for the year 2009 by ISTE New Delhi. (ii) Felicitated with Outstanding Academician and Researcher Award in appreciation of life time contribution to the field of Computer Science and Engineering at ICCR 08 PES College of Engineering, Mandya. (iii) Special lectures on Recent Trends in Food Science delivered to Food Science and Nutrition students at Pondicherry University, Pondicherry. 5-6th March 2009.

Dr. Mewa Singh: (i) Fellow of Academy of Science (ii) Fellow of National Academy of Science, New Delhi

Prof. N. B. Ramachandra: (i) Karnataka State Council of Science and Technology – awarded Sir C. V. Raman young Scientist for 2007 in Life Sciences. (ii) Selected as a Editorial member for the Journal “Zoological Research” of Chinese Academy of Sciences, China, 2008 Dec. The University School of Design: (i) Awarded for Excellence in Architectural Education by Pidilite in February 2009.

Prof. Y.S. Gowramma: (i) Received Prof. K.Bhyrava Murthy award instituted by Akila Bharata Sarvajna Samskrutika Pratistana for her book ‘Socratesninda Hegelvarage’ on 15-03-2009

2007-08

Dr.V.D.Hegde: (i) Received the National Award “Souhard Samman” for his services and contribution in Hindi and Kannada literature, from Uttar Pradesh Hindi Samsthan, Lucknow and was honoured by Sri Nakul Dube, Culture and Urban Development Minsiter of U.P.Govt on 28.3.2008 at Yashpal Sabhagar, U.P.Hindi Samsthan, Lucknow.

Dr. R. Indira: (i) Awarded the Canadian Studies Faculty Research Fellowship by the Shastri Indo Canadian Institute. This fellowship was supported by the International Council for Canadian Studies and the Department of Foreign Affairs and Trade, Canada.

Prof.K.Yeshodhara: (i) “Hridayavantharu” (Noble Men) award – 2008 in recognition of distinguished achievement in the field of education on the occasion of ‘All India Kannada Cultural Convention 2008’ at Vapi, Gujarat , organized jointly by Vapi Kannada Sangha, Gujrat and Hridayavahini of Mangalore, 16th & 17th Feb 2008.

Dr. Asna Urooj: (i) Best poster award : “Physico-chemical characteristics of defatted rice bran and its utilization in a bakery product”. Sudha Sairam, Gopalakrishna A.G & Asna Urooj. 39th Annual Conference of Nutrition Society of India, 15th-17th Nov, 2007, Hyderabad.

Dr. Khyrunnisa Begum: (i) Best poster award : “Nutritional status of beneficiaries of ICDS in Mysore District: situational Analysis”. Anitha A and khyrunnisa Begum. Consultation meets on strategies for prevention of malnutrition and micronutrient deficiencies. Organized by national institute of Public cooperation and child development. Nov. 2007.

Prof. Jamuna Prakash: (i) ‘Antioxidant components and antioxidant capacity of selected green leafy vegetables’. Best paper Award. Jamuna Prakash Co-author of paper presented during 39th National conference of Nutrition Society of India, NIN, Hyderabad,18-19 November 2007. (ii) I Prize for poster at 77th Annual Session & symposium of the national Academy of Sciences, India on Novel approaches for food and nutrition security. CFTRI, DFRL and University of Mysore. Mysore.6-8th Dec. 20

Prof. Sadananda M. Yamakanamardi: (i) Awarded as Fellow of the Academy of Environmental Biologists (FAEB) in the 27th Meeting of the AEB held at Meerat, Utthar Pradesh State, India.

Prof. V. A. Vijayan: (i) Recognized as one of the consortium co-principal investigator of National Agricultural Innovation Project of ICAR under the leadership of Directorate of Biological control, Bangalore for four years. (ii) Nominated as Scientific Advisory Committee member for Vector control Research Centre (ICMR), Pondicherry for three years, from 2007.

2006-07

Dr N Suresh Kumar: (i) Received the Shree Gomateshwara Vidya peeta national award in 2006.

Dr Shivamurthy: (i) Elected as Fellow of Indian Association of Angiosperm Taxonomists.

Dr K N Ambrutesh: (i) Awarded the Suvarana Kannada Rajyotsava State Government Award.

Dr G S Gopalkrishna: (i) Received the Dr. Satish Dhawan Award 2004 in 2006.

Prof Padmavathamma: (i) Sadhana Puraskar award 2006.

Dr S Basavarajappa: (i) Suvarna Kannadiga State level award and Bharatiya Rashtriya Vocational Excellence award and Gnana Mandara National Award.

3.2.8 Are there Research papers published in referred journals periodically, by the faculty? If yes, specify.

International journals	2500
National journals -refereed papers	3858
Books	437
Conferences (International and National)	1558
Research Projects (Including 194 student research projects)	275

3.2.9 Give the list of publications of the faculties (See Annexures)

- a. **Books**
- b. **Research papers**
- c. **Abstracts**
- d. **Proceedings**
- e. **Theses etc.,**

The details of books, research paper, conference /seminar papers published by the faculty members of the University are enclosed as annexure to this document. Similarly the list of theses accepted by the University of Mysore during the past 5 years is also provided as the annexure.

3.3. Consultancy

3.3.1 List the broad areas of consultancy services provided by the Institution during the last 5 years

- 1) The University-Industry center was established almost ten years back for extending consultancy services.
- 2) University staffs are engaged in consultancy in one-way or other, often leading to financial gains to the University. Some of the consultancy projects are at the academic level. Physics department has an ongoing project with Kevin-Cline company on human hairs by Prof C Ranganathaiah using Positron Annihilation techniques. There are regular academic

level consultancy for the students of Pharmaceutical, Dental and Polymer departments from nearby deemed university /colleges/institutions on the characterization of materials using X-rays.

- 3) Faculty members are involved in consultancy services in companies like DuPont, Vikrant Tyres, S Kumars and other programmes.
- 4) Know your campus awareness program was organised by the University for the general public of Mysore city during February 2011.
- 5) Botany: Plant clinic -Plant disease diagnostic and their management
 - Plant identification services.
 - Monitoring Air-store of Indoor Environments.
- 6) Physics: Materials Characterization using X-ray and Positron Annihilation Techniques; Micromet data generation
- 7) Applied Botany: Seed testing, Tissue culture, Bio-pesticides, Disease resistance testing, Technology for seed storage, mycotoxin detection
- 8) Zoology: Screening pesticides, cytopathological tests
- 9) Sericulture: In vitro production of crease inhibiting enzyme
- 10) Chemistry: Product analysis and quality control
- 11) Earth Science: Ground water potential detection; Drip irrigation, Analysis of soil, water and rock, mineral analysis and processing, Geoscience software development and training, Radioactive minerals exploration
- 12) Biochemistry: The forest department and police departments of Karnataka have used the facilities to authenticate confiscated venom samples.
- 13) Food science and nutrition-Dietetics
- 14) Computer center -Software development
- 15) Psychology: Staff recruitment, organizational and personnel management.
- 16) DOS in Physical Education and sports sciences offered consultancy regarding organization and administration of mega sports meet in various universities.

3.3.2 Does the Institution publish the expertise available for consultancy services?

Expertise available in various departments are given prominent section in the brochure brought by the departments and these are circulated among various industries in and around Mysore.

3.3.3 Give details regarding the nature of consultancy services and revenue generated?

Sl No.	Name of the teacher	Department of studies	Nature of consultancy	Amount inRs
1	Prof C Ranganathaiah	Physics	1)Positron annihilation studies of Human Hair/Kevin-care company 2) With General Electric(GE) Bangalore	4,14,000 2,40,000
2.	Prof R Somashekar	Physics	Characterization of materials Pharmaceutical dept Dental College Polymer Dept of JSS Institutions.	nil
3	Prof B S Vishwanath	Biochemistry	Karnataka Diagonistic Service Mysore	
4.	Prof B Basavalingu	Geology	Pondicherry university, Goa university, MES Ponani Collge, Keral	nil
5.	Prof S A Ahmed	Chemistry	M/s Spices chemicals Pvt. ltd, yadavagiri, Mysore	nil
6.	Prof Asna Urooj	Food	Holdsworth Memorial Hospital Mysore	nil
7	Prof A Balasubramanyam	Earth Science	National Water Development Agency K K Nagar, chennai	nil
8.	Prof. K.T. Basavarajappa & Prof. G.S. Gopalakrishna	Earth Science	MUDA, Mysore	3,00,000

Extension Activities

3.4.1 What out reach programmes are organized by the institution? How are they integrated with the academic curricula?

- 1) Department of Studies in Physics has weekly lecture and interactive program for high school students to encourage them to take up basic science subjects in colleges.
- 2) Committee for the Development of Science in Schools(CDSS)
 - 1) promoting science
 - 2) at lower level
 - 3) To create awareness among school children on basic sciences.

- 4) To dispel the myth learning of science is difficult.
- 5) Empowerment of school teachers.
- 6) Children talent identification.
- 7) Reaching children through seminars by experts.
- 8) Regular monthly science interactive program.
- 9) Residential science learning program for talented children in the Manasagangotri campus.
- 10) Visiting science institutes and laboratories.
- 11) Model building and science exhibition.
- 12) Elocution and quiz competitions.
- 13) Workshop for science teachers.
- 14) Publishing science articles in local newspaper.
- 15) To create a Centre for Innovative Studies to identify and nurture talent in science.
- 16) To provide opportunity for science learning under the guidance of faculty in the campus.
- 17) To establish a mobile laboratory.

3) DST-Inspire-Internship programme organized

Organised by the university for First year PUC students of Mysore and Chamarajanagar districts. A total of about 400 students attended this Five-day workshop. The main objective of this program is to encourage , inspire and motivate youth to take career in basic sciences. Dr V S Ramamurthy , Former Secretary , DST , Govt . of India inaugurated the program and delivered key-note address. One of the uniqueness of the program conducted in our university is incorporation of hands on training with regard practicals skills conducted by the senior professors of science subjects.

- 4) Science Exhibition was conducted for one week in the campus for the students and general public of in and around Mysore. All the 57 departments participated in this endeavor.
- 5) Under the auspices of Karnataka Government Science and Technology program, several two day workshops on particular subjects like nano-materials, Modern Optics, Condensed Matter Physics, Nuclear Physics and astrophysics were held during the last five years.

- 6) Many of the departments conduct programs for the community on a regular basis. The details are available in the department profile.
- 7) KSTA-Special Lecture series in Physics, Botany, Zoology etc.
- 8) VGST-Faculty Development Programme in Medicinal Plants.
- 9) Department of Earth Sciences deputed teachers and research scholars to various scholars and colleges to promote the subject Earth Science. Also several exhibitions are organized at these several institutions displaying rocks, minerals, fossils etc.

3.4.2 How does the university promote university-neighborhood network in which students acquire training, which contribute to sustained community development?

On the campus, there is an amphitheater which is normally used to present some of the students talent like classical music, drama, dance, etc. Whenever university organizes such programs there is a good response from the community.

On a regular basis cultural competitions are held on the campus for all the local colleges to participate and there is a good response to such programs by the local community.

NSS and NCC of the university do take up programs like blood donation, shramadhan like cleaning weeds in the public parks and helping poor patients in KR Hospital. Students of the university participate actively in environment related activities of the city like creating awareness about the used of plastics.

Students from various departments are deputed to various industries for practical training. Departments like MSW, Psychology, Biochemistry, Geology, Biotechnology, and computer science have inherently built-in courses for the students to gain experience by interacting with the society.

3.4.3 How does the institution promote the participation of the students and faculty in extension activities of NSS, NCC, YRC and other NGOs? How often and in what roles are they involved?

NATIONAL SERVICE SCHEME (NSS)

University Level Camps

The Inter-Collegiate camp was held during September 18-27, 2010 in the Centenary Hall, Maharaja's College Campus, University of Mysore. About 270 volunteers and Programme

Officers actively participated in this University Level Camp. The camp had four primary components, namely Shramadan (contribution of labour), special lecturers, cultural programmes and socially beneficial voluntary activities.

Sixteen special lectures were delivered by eminent scholars, scientists and social activities on relevant topics. Ten different cultural programmes were held in the Centenary Hall, with the active involvement of theatre personalities, folklorists and film personalities and media professionals.

The volunteers also took active part in the Shramadhan (contribution of labour). During these ten days all the university campuses were cleansed by the volunteers. Two new check dams were built and four check dams were rejuvenated which facilitated water conservation and recharge of ground water resources. The volunteers contributed about 100 bottles of blood and pledged to donate their eyes also.

State Level Camps

Six volunteers participated in the pre-Republic Day camps held at Bangalore during October 5-15, 2009. 2 of them were selected for participation in the National Republic Day Parade held at New Delhi subsequently. About 20 volunteers also participated in the state level cultural festival held at Bangalore during January 1-7, 2010. The volunteers also won individual prizes for their notable contribution in the state level cultural festival.

National level Camps

Two volunteers Dileep and Shashirekha represented the University in the National Republic Day held on January 26, 2010 at New Delhi. About 6 volunteers of the University also participated in the National Integration Camp held at Bangalore University Campus during January 17-24, 2010. The volunteers had the benefit of interaction with other volunteers representing different States and Union Territories during these two unique occasions.

Cultural Exchange Programmes

The volunteers of University actively participated in 03 district level camps, one university level camp, 2 national level camps, 1 state level camp and 2 Mysore division level camps. The NSS wing, University of Mysore and Kannada and Culture Department jointly

organized cultural ambassador camp at Mysore during January 23-27, 2010 which enabled about 150 volunteers to emerge as culturally active ambassadors of our times.

Special Camps organized

The strength of NSS volunteers increased from 12,000 to 13,000 during the year 2009-10. Accordingly 10 new units and 1,000 new volunteers were enrolled in the University. 10 rural colleges were enabled to launch NSS activities and bridge the gap between the university and society. About 13,852 volunteers (7,978 Male volunteers and 5,874 Female volunteers) were enrolled. About 1000 toilets were constructed in the rural areas during district level and annual special camps. About 1000 bottles of blood were also collected and given to government hospitals.

A state level seminar on NSS was organized on November 15, 2009 jointly by the NSS wing, TOC wing, Karnataka State Open University and Mahajana's College at Mysore. A special lecture programme was organized by the NSS wing on January 23, 2010 at Mysore on the occasion of 500 Birth Day Celebration of Shri Krishnadevaraya. A regional workshop was conducted on February 4, 2010 on H1N1 Prevention and Treatment at Mysore.

NSS Training and Orientation Centre (TOC) for Karnataka

The Centre conducted five training programmes, each for a period of 10 days, for 182 programme officers. The NSS programme officers of the following Universities/Departments had attended.

- 1) Bangalore University
- 2) Gulbarga University
- 3) Karnatak University
- 4) Kuvempu University
- 5) Mangalore University
- 6) Mysore University
- 7) Pre -University Education
- 8) Rajiv Gandhi University of Health Sciences
- 9) University of Agriculture Science, Dharwad
- 10) University of Agriculture Science, Bangalore

- 11) University of Agriculture Science, Bagalkot
- 12) University of Agriculture Science, Raichur
- 13) Vishveshwaraiah Technological University, Belgaum
- 14) Tumkur University
- 15) D.E.T.
- 16) D.T.E.
- 17) D.S.E.R.T.
- 18) K.V.A. & F.S. University, Bidar
- 19) Law University, Hubli

National Cadet Corps (NCC)

Statistics of Cadets and Officers

Sl. No.	Name of the Unit	Cadets	Officers
1	13 Karnataka Bn. NCC, Mysore	2110	18
2	14 Karnataka Bn. NCC, Mysore	2055	21
3	15 Karnataka Bn. NCC, Mysore	1750	14
4	3 Kar. Girls' Bn. NCC, Mysore	700	07
5	1 Kar. Eng. Company, NCC, Mysore	100	02
6	1 Kar. Arty. Bty. NCC, Mysore	150	01
7	3 Kar. Naval Unit, NCC, Mysore	900	14
8	4 Kar. Air Squadron, NCC, Mysore	1300	15
Total		9065	92

Finance

A sum of Rupees six crores and fifty lakhs (Approx) was spent for the training of Cadets, covering Mysore, Mandya, Hassan & Chamarajanagara Districts.

Total Number of Cadets trained in NCC during the year : 5931

NCC Camps

Following were the NCC camps attended by the cadets:

- 1) Republic Day Camp (RDC) – 2009 (Delhi)
- 2) All India Thal Sainik Camp (Boys)

3) All India Thal Sainik Camp (Girls)

4) All India Nau Sainik Camp

5) All India Vayu Sainik Camp

In addition to these there were regular Health, legal aid , Personality development and eye donation pledge programs were arranged as a part of NSS and NCC units.

3.4.4 Is there any research or extension work to ensure social justice and to empower under-privileged sections in particular, women and children?

The department of human development, a wing of Institute of Development Studies, Social Work and Social Science departments are engaged in such activities

3.4.5 What is the impact of extension on the community? Specify.

Programs conducted by Kannada institute has been recognised by the community in particular and the people at large. Prof. Ambalike Hiryananna is appointed by the Government of Karnataka as the Vice-Chancellor of Folklore University.

Law workshops held in university of Mysore could garner encouragement and also recognition by the leading legal luminaries of the country to select Prof Iswar Bhatt of the Law department to head a leading law university located in West Bengal as Vice-Chancellor.

NCC, NSS and Physics Education students are much sought after for arranging any governmental or public programs in Mysore city.

Industry people do come for academic discussions but we feel that much has to be done in this area to generate funds for the university.

3.5 Collaborations

1) There are several institutes (Dental college, Pharmaceutical college and polymer department) in and around Mysore and the students of these institutes do come for research consultancy and such type of activity may not result in financial gain always. This is only a modest way of bridging the gap between societal requirement and research experience available within the university.

- 2) Applied botany has consultancy service in the areas of seed testing, tissue culture, biopesticides, disease resistance testing.
- 3) National facility for Drosophila is maintained and serviced by the Zoology department people from the university funding.
- 4) In sericulture, we have collaborative work in the areas of characterization of newly developed silk (Physics department) as well as in vitro production of crease inhibiting enzyme.
- 5) Anti-venom studies are being carried out in Biochemistry department.
- 6) Counseling for students for exam related problems are routinely given by the staff members of the Psychology department. In addition learning disabilities, wild life, and zoo management consultancy are also provided by this department.

3.5.1 How many linkages does the institution have, for research and extension?

University has entered into MOU with several foreign universities like Sagina Valley University USA and Kingston University of UK for collaboration and exchange programs. This is done in accordance with the provisions of the state university act.

MOU Outside India

Sl. No.	Institute
1	Department of Architecture, Technical University, Berlin (School of Design)
2	Kingston University, London
3	Kanchanaburi Rajabhat university, Tailand
4	Mahasarakham University, Tailand
5	Lawrence Technological University, USA
6	University of North Texas, USA
7	The Alma Mater Studiorum – university of Balogna
8	Dalhousie University, Canada
9	The University of Pittsburgh
10	University of Savant Academy
11	Saginaw Valley State University
12	Mahasarakham University
13	Ministry of Education and Youth Republic of Seychelles
14	College of Technological Sciences (CTS), Khartoum, Sudan
15	The University of Central Arkansas, USA
16	Department of Architecture Technical University Berlin
17	Kunshochschule Berlin-Weibensee, Hochschule fur Gestaltung
18	The Danish Government Institute of Seed Pathology for Developing Countries, Denmark

Sl. No.	Institute
19	The Government of Maldives
20	University Lyon – 2, France

MOU within India

Sl. No.	Institute
1	Edutech Informatics India Ltd
2	India-Based Neutrino Observatory (INO) – Tata Institute of Fundamental Research (TIFR)
3	IBM India Private Limited, Bangalore
4	Council for the Indian School Certificate Examiner, New Delhi
5	Auriga Multimedia College of Digital Art and Audio Visual Engineering, Thalassery, Kerala
6	Vivekananda Institute for Leadership Development, Mysore
7	Suvidya Educational and Social Service Society (R), Bangalore
8	Innovative Centre for Bio-Science Service Society (R), Bangalore
9	Ants Studio Private Limited, Mysore
10	Karnataka State Co-operative Urban Banks Federation Ltd, Bangalore
11	Raman International Institute of Information technology, Mysore
12	South Asia Institute of Advanced Christian Studies Trust, Bangalore
13	Kaizen 4-Front Technologies, Pvt. Ltd, Mysore
14	University of Agricultural Science, Dharwad
15	Haserlfr solution Pvt. Ltd, Chennai
16	Advanta India Limited, Secunderbad
17	The American Institute of Indian Studies, New Delhi

3.5.2 List the organizations and the nature of linkage and expected outcomes.

Sl. No	Organization	Expected outcome
1	Kingston University, UK	Exchange of faculty and Programs by Sociology and Education departments
2	DANIDA, Denmark	There is a continuous interaction with this institution in seed pathology research which has yielded good results.
3	University of Arkanasas, USA	Exchange of students
4	Kunsthochschule School of Design, Berlin	Exchange of students

3.5.3 How does the linkage promote

- a. Curriculum development**
- b. Internship**
- c. On-the-job training**
- d. Faculty exchange and development**
- e. Research**
- f. Consultancy**
- g. Extension**
- h. Publication**
- i. Student Placement**

Firstly, teachers from the university on either side have an opportunity to visit teach and engage in research on topics of mutual interest. In Kingston University, Social Scientists have already made a visit to corresponding dept in our university and further activities are being examined.

Several merited students were sent to China for a few weeks for exposure and to learn their way of approach to the learning.

Broadly, the promotion is on both sides and in the following way:

Curriculum developments, faculty exchange and development, research, consultancy, extension, publication and student placement.

3.6 Best Practices in Research, Consultancy and Extension

3.6.1 Describe the best practices in research, consultancy and extension with reference to promotion of research/publication output/consultancy and extension activities/collaborations?

Motivating research culture

- 1) Our teaching staff are in the respective department from 9.00 am to 7.00 pm everyday and this has been first step in building a research culture. They are available to the students all the time and this has led to several interesting research activity by staff and hence several research project proposals.
- 2) University has provided all required facilities for a staff member to carryout research on a topic of his/her choice and to have collaboration with any institutes. There are no

restrictions by the university. This has motivated several members to do good research work.

- 3) Start up grants for the newly recruited teaching members.
- 4) There is a separate section PMEB established to look after the research activity of the teaching members of the university.
- 5) University gives awards to the teachers who publish papers in high impact journals. This amount is to the tune of 1 to 2 lakhs rupees.
- 6) The consultancy service offered through plant clinic help the faculty to identify plant discrete problems prevailing in this regions, which in turn helps in the identification of research problem to find solutions.

For Re-accreditation:

1. **What were the evaluative observations made under Research, Consultancy and Extension in the previous assessment report and how have they been acted upon?**

Observation made by the committee:

There are no critical evaluative observations made by 2006 peer committee. They have made a positive observations about the infrastructure, research activities, projects, NCC, NSS, outreach and MOU's made by the university in addition to other extension programs.

- 3.6.2 **What are the other quality sustenance and enhancement measures undertaken by the institution since the previous Assessment and Accreditation with regard to Research, Consultancy and Extension?**

The University of Mysore is well known for its contribution in research, consultancy and extension during the last four decades. After the reaccreditation in 2006 a breakthrough in funding of R & D activities, has been observed in the release of a special grant from the Government of India under the scheme 'Institute of Excellence'. The university was recognized by the Ministry of Human Resource Development, as an Institution of Excellence and provided a special grant of Rs 100 crores in the year 2009. Making use of this grant, it was possible for the University to start an intra and inter-disciplinary research centre on "Bio-Diversity, bio-prospecting and sustainable development". About 53 senior and young faculty members are actively engaged in

research in 39 thrust areas of biological studies. The output of this mega project is expected to generate a large number of research papers, scholars, products and patents which will be an outstanding achievement of this university in the long run. The University of Mysore already paved the way for its long time sustenance in carrying out quality research, consultancy and extension by not only utilizing this grant but also by getting additional funding from other funding agencies as well. The research culture is an inbuilt mechanism of all the department of this university for its sustenance. It is also pertinent to mention that the total number of recent publications released in the last five year has crossed to 4262 with 20373 citations having h-index of 44 since the last assessment. This itself shows that the University is not only conscious about its sustenance but also proving its excellence in these activities.

Yet another milestone in this context is the recognition of the University of Mysore by University Grant Commission as one of the six Universities with potential for Excellence in R & D front with grant of Rs. 50 crores which will provide still better opportunities of long time sustenance in the field of Science and Social science. It is here the University has made proven strides and records for becoming a World Class University before next assessment also.

Right from the 'Operation Bharani' model project of the University in 1960's for Extension and activities in rural sector the University of Mysore has several models of rural developent initiatives implemented during the last three decades. At present the University is reaching the unreach through the following channels of extension:

- a. The university has a well established University-Industry center for providing consultancy services. There are instances wherein this consultancy activity has resulted in financial gains to the university and also sometimes only at academic level. There are several institutes (Dental college, Pharmaceutical college and polymer department) in and around Mysore and the students of these institutes do come for research consultancy and such type of activity may not result in financial gain always. This is only a modest way of bridging the gap between societal requirement and research experience available within the university. Applied botany has consultancy service in the areas of seed testing, tissue culture, biopesticides, disease resistance testing. National facility for Drosophila is maintained and serviced by the Zoology department has helped many higher education institutions. In sericulture, we have

collaborative work in the areas of characterization of newly developed silk (Physics department) as well as in vitro production of crease inhibiting enzyme. Anti-venom studies are being carried out in Bio-chemistry department. Counseling for students for exam related problems are routinely given by the staff members of the Psychology department. In addition learning disabilities, wild life, and zoo management consultancy are also provided by this department. Consultancy to industry, commerce, agriculture and others are provided on regular day-to-day basis.

- b. NSS, NCC, Blood donation camps, general lectures to the people of Mysore, lectures and experimental demonstrations to the high school and college students are arranged in the campus sometimes in the way of exhibitions and other cultural activities. The University has an amphitheater wherein all cultural activities are carried out including information cum awareness creation cultural events on a regular basis by the university students for the general public of Mysore. These programmes are also conducted in rural areas during camps.
- c. The Department of Studies in Law do provide the needy people with legal aid, on various aspects. Health, food and nutrition, personality development, rural women awareness program, training to students who are appearing for competitive exams, remedial teachings for the students who are active in other aspects like sports music, painting, etc. continuously carried out by the University faculty.
- d. The University of Mysore has a Day Care Centre located within the campus which is looking after children of the research staff and other staff members of the university. This centre also creates awareness among the parents on early child care and their development.
- e. Many central institutes located in Mysore and nearby have entered into an MoU with the University of Mysore for recognizing their programs and also for exchange of research scholars.