NIRMALA COLLEGE
MUVATTUPUZHA

Muvattupuzha P. O., Ernakulam Dist., Kerala - 686 661
Telephones:0485 2832361, 2836300
e-mail:nirmalacollege@gmail.com, Website: www.nirmalacollege.ac.in

FOURTH CYCLE NAAC ACCREDITATION 2019

CRITERION 3

RESEARCH, INNOVATIONS AND EXTENSION

3.2.2. Number of Workshops/ seminars conducted on Intellectual Property Rights (IPR) and Industry–Academia Innovative practices during the last five years

Submitted to

THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

(An Industry – Academia Innovative Practice)

- **Mr. NICOLA STALDER, Consultant, IAZI, SWITZERLAND**
- **Mr. MATHIAS AMBÜHL, Senior Consultant And Managing Director, IAZI, SWITZERLAND**
- **Dr. GINTO J. POTTACKAL (Statistician at FDA-USA)**

About IAZI, Switzerland

IAZI pioneered a new market 20 years ago when the founders convinced 6 banks to combine their data in order to compute Switzerland's first automated valuation models for real estate. Today, over 200 financial institutions rely on IAZI's model in their everyday business making it the leader in their market.

MEET THE EXPERTS

(An Industry – Academia Innovative Practice)

Objectives:

- ➢ Networking with industry people

- ➢ To get awareness about the opportunities in industry

- ➢ To introduce Skill development courses to improve the competency of students and to increase their career opportunities

- ➢ To familiarize emerging technologies in industry

- ➢ To develop entrepreneurial skills

- ➢ To identify the demands of industries and firms.

- ➢ To know about the challenges in industry and to find the solution

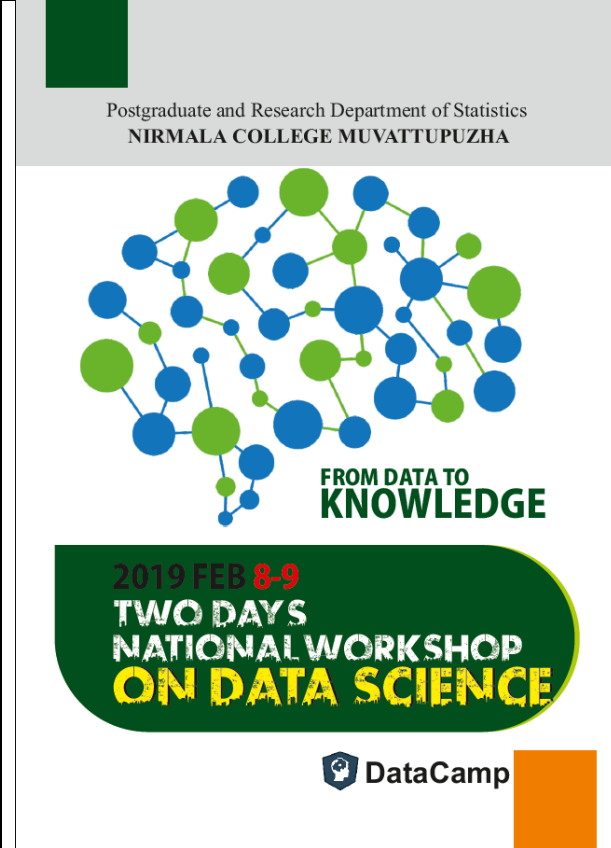## NATIONAL WORKSHOP ON DATA SCIENCE (FROM DATA TO KNOWLEDGE) IN ASSOCIATION WITH DATACAMP

RESOURCE PERSONS	
	• Mr. NICOLA STALDER, Consultant, **IAZI, SWITZERLAND**
	• Mr. MATHIAS AMBÜHL, Senior Consultant And Managing Director, **IAZI, SWITZERLAND**
	• Dr. GINTO J. POTTACKAL(Statistician at **FDA-USA**)
	• Dr. Nidhi P Ramesh (Nirmala College, Muvattupuzha)
	• Mr. Tijo Mathews (**K.E. COLLEGE**, Mannanam)

DATE	NUMBER OF STUDENTS PARTICIPATED
08-02-2019 09-02-2019	160

BRIEF REPORT

Data Scientists are most sought after professionals in Big Data Analytics and IT Industry. Each and every domain of science, technology, arts, and economics are inclined more towards analytics which needs a massive amount of data collected for a long period of time. Shortage of skilled professionals in a world which is increasingly turning to data for decision making has also led to the huge demand for Data Scientists in start-ups as well as well-established companies. Besides business analytics, Data Scientists are also involved in building data products and software platforms, along with developing visualizations and machine learning algorithms. Thus the knowledge in the field of Data Science opens several high demand career paths. With an objective to give exposure to the students in the advanced topic of Data Science and artificial intelligence, the Post Graduate and Research Department of Statistics Department

of Statistics conducted a **National Workshop on Data Science (From Data to Knowledge) in association with the Data Camp,** a US based online "data science" learning platform offering tutorials and courses in data science. The company focus on the technology R, used for Big **Data**, **data** visualization, and programming with R and offer courses on interactive R, Python, Sheets, SQL and shell courses. The workshop was organised by the, Nirmala College, Muvattupuzha on 8-9 February 2019. Nicola Stalder, Consultant, IAZI, Switzerland & Mathias Ambühl, Senior Consultant and Managing Director, IAZI, Switzerland were the Chief Guests of the programme. Softwares developed by IAZI have already been used for applications such as core banking solutions, credit applications, web clients etc. The programme was inaugurated on 8th February 2019 at 09.30 am. The topics covered were, Review of basic R programing, Introduction to *Tidyverse*, Dates and Times in R with *lubridate*, Data manipulation in R with *dplyr*, Data visualisation with *ggplot*, New trends in data science, Cluster analysis, Supervised learning, Classification and Unsupervised learning. Students from various institutions in Kerala had participated in the Workshop. The training was well appreciated by the participants as it helped them to gain insight in the field of Data Science.

A CALL FOR ECO INNOVATION

TEACHERS FOR ENVIRONMENT

In Association with Kerala State Council for Science, Technology and Environment (KSCSTE), Kerala

OBJECTIVES:

➢ Awareness about eco-innovation through classrooms

➢ Awareness about the need for social responsibility, environment conservation and preservation in the minds of the students along with innovation

TEACHERS FOR ENVIRONMENT

RESOURCE PERSONS	• SILPA V. KUMAR IFS, DEPUTY DIRECTOR, PERIYAR TIGER RESERVE • PROF. S. SIVADAS, FORMER HOD, DEPT. OF CHEMISTRY, CMS COLLEGE, KOTTAYAM • DR. S. SANKAR, RTD. SCIENTIST, KFRI, PEECHI • ADV. ASHKAR KHADER, LAWYER, HIGH COURT OF KERALA

DATE	NUMBER OF TRAINEES PARTICIPATED
22-1-2019 to 25-1-2019	48

BRIEF REPORT

Eco-innovation aims at environmental sustainability through new products or services, new management and business methods, which is likely to prevent or substantially reduce the risks to the environment, pollution and any other negative impact on the environment. Eco-innovative projects in different sectors are considered to be the next major challenge in the growth trajectory of our country. Every classroom and discipline must incorporate concepts related to environmental education. It incorporates the need for social responsibility, environment conservation and preservation in the minds of the students. Teachers can help students make wise choices about responding to climate change and safeguarding the planet's future. This can be implemented not only by teaching environmental science, but also by fostering an awareness of how students' own actions can create a better world. With an objective to develop environmental consciousness among the students through classrooms, a four-day training programme "Teachers for environment" was organised by the Postgraduate and Research Department of Zoology and funded by Kerala State Council for Science, Technology and Environment, Govt. of Kerala from 22nd to 2th January 2019. The focal theme was Urban Forestry, Protection of Environment and Promotion of Ecological Aspects with the soul goal of making the academic community knowledgeable and trained in the advanced and

traditional methods in urban forestry, environment protection and get empowered in promoting the locally relevant ecological aspects through various activity oriented methodologies like mini dramas, role plays, citizens debate, games, conservation conference ,power point lectures and field trip.

The programme was inaugurated by Silpa V. Kumar IFS, Deputy Director, Periyar Tiger Reserve by lighting the lamp followed by the inaugural address stressing the very relevance of teaching community in environment management and conservation of biodiversity values. The afternoon session was led by Prof. S. Sivadas, Former HOD, Dept. Of Chemistry, CMS College, Kottayam and he inspired the group by his talk on 'Role of Teachers in Environment Protection and Promotion of Ecological Aspects'. a technical session led by Dr. S. Sankar, Rtd. Scientist, KFRI, Peechi, detailing on the 'Kerala Scenario of Urban Forestry and Soil Conservation'. His simple but in-depth presentation on the topic paved path for new thoughts. The next session on the 'Current Scenario of Environmental Issues and Mitigations' by Dr. Punnen Kurien, Principal, St. Marys College, Manarkad shed light on the importance of traditional knowledge. The third day of the training programme was made interesting and informative with a field visit to KFRI, Peechi. Another thought-provoking session in the event was the talk on 'Environment Protection Laws and Policies' by Adv. Ashkar Khader, Lawyer, High Court of Kerala. A total of 48 participants including teachers, teacher trainees and postgraduate students registered for the training programme. A post evaluation session was conducted on the final day of the programme using the concept of mapping method. The activity revealed widened extended concepts of each participant, regarding environment and its different aspects reflected the effectiveness of the training programme.

Silpa V. KumarIFS inaugurating the training Programme

keynote address by Silpa V. Kumar IFS

Prof. S Sivadas in the Technical Session

Teachers working in the Workshop

Dr S. Sankar Former Scientist, KFRI leading a session

Dr. Sujatha, Scientist, KFRI explains the soil profile

Trainees observing in the butterfly garden, KFRI

Dr. S. Sujanapal, Scientist, KFRI explains urban forestry practices in Kerala

Trainees are in front KFRI extension centre

Adv. Ashkar Khader is taking Session on Environment Policies

മുഖ്യപ്രഭ നടത്തിയ ഡോളജത്തിൽ നടക്കുന്ന അധ്യാപക പരിശീലന ശില്പശാല ചെയ്യാൻ കല്ലൂർ നടങ്കരം ഡോക്ടർ ...
സ്റ്റർ ശിവ യു. കുമാർ ഉദ്ഘാടനം ചെയ്യുന്നു.

...ധികൾക്കു സ്വീകരണം നല്കി

അധ്യാപക പരിശീലന ശില്പശാല

പോത്തൻപാട്ട് പഞ്ചായത്തിലെ നാളും വ്യാപക കുടിവെള്ള പദ്ധതി
 രെ ഉദ്ഘാടനം ഡോക്ടർ ശശി എം.എൽ.എ നിർവ്വഹിക്കുന്നു.

കുടിവെള്ള പദ്ധതി ഉദ്ഘാടനം ചെയ്തു

ACCOUNTING OF INTANGIBLE ASSETS AND TRADEMARKS

RESOURCE PERSON	Mr. AMAL PAUL
	(Audit Manager, B & K Associates)

DATE	NO. OF STUDENTS PARTICIPATED
25-02-2019	38
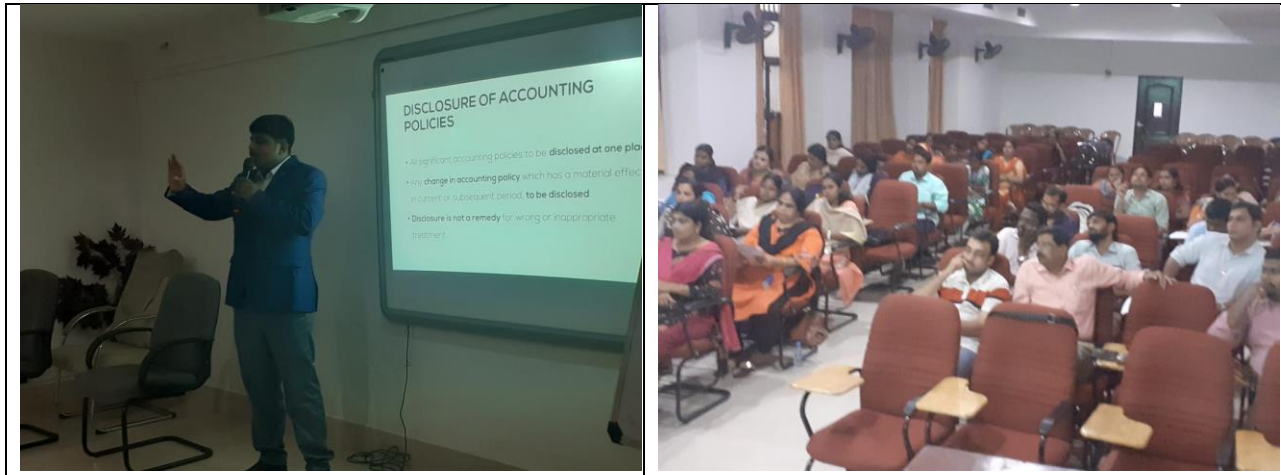
Seminar - Accounting of Intangible Assets And Trademarks

The postgraduate and Research Department of Commerce organized a seminar on "Accounting Aspects of Intangible Assets and Trademarks for M. Com students on 25th February 2019. Sri. Amal Paul, Audit Manager, B&K Associates was the resource person. The seminar covered the scope, definitions and applicability of Accounting Standard 26 (AS-26). The resource person also discussed about the accounting of brand, trademarks and goodwill.

AN INDUSTRY – ACADEMIA INITIATIVE

Mr. SREEJITH RADHAKRISHNAN

PROGRESSIVE SOFTWARE SOLUTIONS AND TRAINING,

About the Industry- PSST-Progressive Software Solutions and Training located at Muvattupuzha. It is a training center for computer and software related matters. Authorized center for PMKV under skill India (under government of India),Center for development of imaging Technology(C-DIT) (under government of Kerala),Tally institute for learning(til), Hardware and networking academy. It is a software academy for software training and academic projects for college students. They offer training for all major software courses.

Objectives:

➢ To introduce Skill development courses to improve the competency of students and to increase their career opportunities

➢ To familiarize emerging technologies in industry

➢ To develop entrepreneurial skills

➢ To identify the demands of industries and firms.

WORKSHOP ON ANGULAR JS (JAVA SCRIPT)

DATE	NUMBER OF STUDENTS PARTICIPATED
18-12-2018 to 20-12-2018	120

BRIEF REPORT

JavaScript is already a well-established technology known for rendering hot digital properties. A number of web development frameworks based on JavaScript continue to power an ever-increasing number of websites and web applications. AngularJS is one of these frameworks and it is a favorite platform for building mobile and desktop web applications. AngularJS is open source, completely free, and used by thousands of developers around the world. A knowledge about this framework helps the students to build large scale, high-performance, and easy to-maintain web applications. A three-day workshop on Angular JS was conducted by the Dept. of Computer Science from 18/12/2018 to 20/12/2018. Mr. Sreejith R., Academic Advisor., Progressive Cybernetics Limited, Muvattupuzha lead the sessions. The workshop helped the students how to use AngularJS to build rich client applications for the web. The students were able to

1. Familiarize and run Angular framework.
2. Create web application with Angular JS
3. To understand basic features such as expressions, data binding directives, filters and dependency injection.
4. Get Hands-on training on AngularJS 2.
5. Understand Angular JS controllers and directives.

NIRMALA COLLEGE
MUVATTUPUZHA

(Affiliated to M.G. University and Approved by AICTE)

Department of Computer Science

Workshop on

Angular JS

By

Mr. Sreejith R., Head-Business
Progressive Cybernetics, Muvattupuzha

Date : 18,19,20 Dec 2018   Venue : MCA Block

A BRIDGE TO APICULTURE INDUSTRY (TRAINING PROGRAMME)

Trainers

- **MR. T. K. RAVINDRAN (HORTICORP)**

- **MR. T. M. SUGATHAN (AVOLY GRAMA PANCHAYATH)**

About Horticorp: Kerala State Horticultural Products Development Corporation (Horticorp) is a fully owned Government Company under the Department of Agriculture, Government of Kerala. The Company is registered with the Registrar of Companies, Kerala on the 20th day of March 1989. Horticorp has been entrusted by the State Government with the role of procurement, processing, storage and marketing of Horticultural produces throughout the State, thus encouraging indigenous farmers to produce more vegetables and also prevent unreasonable price hikes.

Objective:

➤ To develop entrepreneurship skills among students

➤ To make the students aware of the opportunities in apiculture industry

TRAINING PROGRAMME ON APICULTURE

DATE	NUMBER OF STUDENTS PARTICIPATED
18-01-2018	110

BRIEF REPORT

Apiculture is perceived as a hobby but often resilient livelihood – one that keeps people out of poverty. In rural communities where access to income is limited, small-scale beekeeping can contribute significantly to livelihood security. Apiculture and related trades tends to be underplayed in both policy and planning. In order to overcome the dearth of talented youngsters and encourage the students to take up apiculture as a hobby first, a seminar was organised on the topic by the Department of Botany. The meeting stared by evoking the name of god. Dr. Sr. Tessy Joseph welcomed the gathering. Mr. Sugathan and Mr. Ravindran shared their expertise in beekeeping with the gathering. Mr. Ravindran demonstrated basic bee handling techniques with the students and also shared with the gathering various important uses of honey and other bee products. He also discussed about the technicalities involved in bee keeping as well as the various products isolated from bee culturing. Emphasis was on the use of apiculture as a mode of income in rural area as well as the advantages and methods of using honey and its derivatives. He also discussed about different schemes by government that provide subsidy to the bee keepers. A total of 110 students attended the meeting. The participants included under graduate students of the department.Students from Zoology and faculty members from other department were also in attendance. Ms. Jaiby Cyriac extended the vote of thanks to the gathering.

TRAINING COURSE ON PROGRAMMING

- **Mr. TOBY JOSE, PROGRESSIVE SOFTWARE SOLUTIONS AND TRAINING.**

  About the Industry- PSST-Progressive Software Solutions and Training located at Muvattupuzha. It is a training center for computer and software related matters. Authorized center for PMKV under skill India (under government of India), Center for development of imaging Technology(C-DIT) (under government of Kerala), Tally institute for learning, Hardware and networking academy. It is a software academy for software training and academic projects for college students. They offer training for all major software courses

Objectives:

➢ To introduce Skill development courses to improve the competency of students and to increase their career opportunities

➢ To familiarize python programming language, the most popular language for Data Scientists.

WORKSHOP ON PYTHON PROGRAMMING

DATE	NUMBER OF STUDENTS PARTICIPATED
06-03-2018 to 08-03-2018	32

BRIEF REPORT

Python is a programming language known for its general purpose nature that makes it applicable in almost each domain of software development. Python can be used in many domains of development such as web development, desktop applications, network programming, business applications etc. It is also essential for doing computational programs in research. Also, it is used in the advanced fields such as Data Science and Artificial Intelligence. With an aim to develop practical ability and knowledge about the different concepts of Python Programming, a three day workshop on this programming language was conducted by the Dept. of Computer Science for MCA students from 6/3/2018 to 8/3/2018 by Mr. Toby Jose, Centre Head, Progressive Cybernetics, Muvattupuzha for MCA students. Through Python Programming Workshop, the students were able to

1. Master the fundamentals of writing Python programs
2. Learn the core of Python scripting elements such as variables, expressions and control structures.
3. Discover how to work with lists, tuples and dictionaries
4. Write Python functions to facilitate code reuse.
5. Use Python to read and write files.
6. Get Hands-on training in Python.

NIRMALA COLLEGE
MUVATTUPUZHA
(Affiliated to M.G. University and Approved by AICTE)

FOUNDED 1953

Department of Computer Science

Workshop on
Python

By

Progressive Cybernetics, Muvattupuzha

Venue : MCA Block

Date : 6,7,8 March 2018

CERTIFICATE DISTRIBUTION AFTER THE TRAINING PROGRAMME

MEET THE EXPERTS

Training Programme to develop professionals for tomorrow's air transport industry

- **MISS. HARSHA.P, KAIROS TRAINING INSTITUTE, THODUPUZHA.**

- **About Kairos Institute:** Kairos Institute offers the best aviation, tourism, logistics and hospitality skills for a student. The ability to design aviation and logistics courses around the requirement of the students and the industry makes the Institute one of the best Aviation and Logistics College in Kerala.

Objectives:

➢ To get awareness about the opportunities in industry

➢ To introduce Skill development courses to improve the competency of students and to increase their career opportunities

➢ To identify the demands of industries and firms.

WORK SHOP ON APPLICATION OF IATA FARE RULES AND RESTRICTIONS

RESOURCE PERSON	• MISS. HARSHA.P, TRAINER, KAIROS INSTITUTE, THODUPUZHA.

DATE	NUMBER OF STUDENTS PARTICIPATED
12-7-2017	32

BRIEF REPORT

With rapid growth in tourism industry and increase in demand for qualified individuals with crisp knowledge in this field, knowledge of IATA related subjects will help the students to secure jobs in major airlines, airports, travel companies, tour operating companies etc. This also help the students to start travel companies or organize independent paid tours. Department of Management Studies, Nirmala college, Muvattupuzha organized a one day "Work shop on application of IATA fare rules and restrictions" for the final year students of BTTM. 32 students participated in this program which was conducted on 12th July, 2017. The class was handled by Miss Harsha P, Trainer, Kairos Institute, Thodupuzha. The main aim of the programme was to provide advanced training on using the IATA BSP, Global Distribution systems and other fare calculation procedures. IATA offers a wide range of fares and ticketing systems to enable to update and expand pricing skills.

RELEVANCE OF DESTINATION BRANDING IN TOURISM INDUSTRY

RESOURCE PERSON	MR. JACOB MATHEW, KAIROS INSTITUTE

DATE	NUMBER OF STUDENTS PARTICIPATED
15-09-2017	50

BRIEF REPORT

Tourism is one of the main economic engines for nations with contributions to both GDP and provides employment. Tourism and hospitality provide employment opportunities in different sectors like accommodation, transportation services, food and beverage industries, travel agencies etc. Tourism is a driver of job growth and economic prosperity, accounting for 1 in 10 jobs worldwide. Recognizing the role of geographical indication in strengthening the tourism industry, a seminar on "Relevance of destination branding in tourism industry" was organized by the Department of Tourism in collaboration with Kairos Institute one of the major hospitality trainers in this field which provides orientations for students in aviation, tourism, hospitality shipping and logistics. The seminar was conducted on 15-09-2017 at Punnakkottil hall. A total of 50 students participated in this day long workshop. Mr. Jacob Mathew from Kairos Institute was the resource person. He discussed about Indian GI act and the need for legal protection of GI, and international protection for GI under Trade Related Intellectual Property Rights (TRIPS). The seminar also highlighted the importance of branding and marketing in tourism industry by giving special emphasis on the logo 'Incredible India', launched by The Ministry of Tourism of the Government of India for promoting tourism.

Mr. Jacob Mathew, Kairos Institute delivering seminar on "Relevance of destination branding in Tourism Industry"

PROBLEMS AND PROSPECTS OF PINEAPPLE CULTIVATION

(IPR GEOGRAPHICAL INDICATION-VAZHAKULAM PINEAPPLE)

RESOURCE PERSONS	- DR. P.P. JOY, ASSOCIATE PROFESSOR, HEAD PINAPPLE RESEARCH STATION, VAZHAKULAM - SMT. A. RESHITHA, PINAPPLE RESEARCH STATION, VAZHAKULAM - MR.THANKACHAN MATHEW, PRESIDENT, PINEAPPLE AND RUBBER GROWER'S ASSOCIATION

DATE	NUMBER OF STUDENTS PARTICIPATED
17-03-2016	98

BRIEF REPORT

Situated close to the pineapple hub-Vazhakulam, the college community has witnessed the immense possibilities of entrepreneurial activities associated with pineapples. Vazhakkulam Mauritius Pineapple is unique in aroma, flavour and sweetness due to its high sugar content and low acidity. Vazhakulam Pineapple was registered as Geographical Indication (GI) No.130 under Agricultural – Horticultural product at the GI Registry, Chennai on 4th September 2009. A seminar was organized by Department of Botany on "Problems and Prospects of Pineapple cultivation" with an emphasis on how GI registration has boosted the export of pineapple from the state considerably. Dr. P.P. JOY, Associate Professor, Head Pinapple Research Station, Vazhakulam was the resource person

He discussed about how GI helps to prevent a third party whose product does not conform to the applicable standards. Prof. Dr. P. P. Joy talked about the importance of pineapple to the local economy. He also explained the economics and the status of pineapple cultivation in Kerala. The speaker also gave insights into the research initiatives of Pineapple research station

(PRS) in developing the pineapple cultivation and various projects undertaken in helping the farmers in the sector. The talk empowered students to gain understanding about the research projects going on in the field. It also helped them to get awareness about various issues faced by the farmers in this sector. Ms. Reshitha demonstrated various dishes prepared using pineapple. Mr. Thankachan Mathew, president, pineapple and rubber grower's association discussed various techniques involved in pineapple cultivation. A total of 98 students and the public attended the meeting.

INTER-DISCIPLINARY SEMINAR ON THE ROLE OF PATENTS IN PROTECTING AYURVEDA AND YOGA

In Collaboration With

PATHANJALI PADANAKENDRAM, SREE SANKARACHARYA SANSKRIT UNIVERSITY, KALADY

RESOURCE PERSON	- DR. V. M PARAMESVARAN POTTI, GOVT. AYURVEDA COLLEGE, THIRUVANANTHAPURAM P. BALACHANDRAN, RENOWNED SCREENPLAY WRITER, ACTOR AND FORMER PROFESSOR, SCHOOL OF LETTERS, MG UNIVERSITY KOTTAYAM - PROF. P. MANOHARAN RTD. PROF. KANNUR UNIVERSITY

DATE	NUMBER OF STUDENTS PARTICIPATED
29-09-2015	42

BRIEF REPORT

Ayurveda as a system of medicine has got due recognition and applaud worldwide. The Intellectual Property Rights under World Intellectual Property Organization (WIPO) and Patents received to ayurvedic propertied medicines and plants have attracted many to this field mainly for commercial purposes. This wide commercialization of ayurvedic medicines has led to several ill practices in Ayurveda. Recognizing the importance of protecting Ayurveda and its relevance in everyday life of humans, Department of Malayalam has organized a seminar on Role of patents in protecting traditional knowledge by giving special emphasis on Ayurveda and yoga as system of medicines. The seminar briefed the need for amending existing patent laws for getting patents for ayurvedic medicines, new inventions on ayurvedic field, propagating yoga and Ayurveda for making people "Swastha".

The Post Graduate and Research Department of Malayalam organized an academic collaborative seminar on Ayurveda and Yoga for holistic Development on 29.09.2015 with the financial support, expertise and mutual understanding of Pathanjali Padanakendram, Sree Sankaracharya Sanskrit University, Kalady. P. Balachandran, Renowned screen playwriter, Actor and Former Professor, School of Letters, MG University Kottayam, inaugurated the workshop. In the morning session Prof. Dr. V. M Paramesvaran Potti delivered a Lecture on 'The Imaginative Construction and role of patents in protecting Ayurveda in Modern and ancient perspectives'. The Principal, Rev. Dr. Vincent Joseph presided over the meeting. Dr. Sanish P. B welcomed the gathering. Dr. Lissy Joseph, Head of the department felicitated in the meeting. Dr. Beenamma Mathew proposed the vote of thanks.

Prof. P. Manoharan Retired Professor, Kannur University delivered a lecture on 'Yoga and Tranquility in Life in the afternoon session. Dr. Annie Thomas welcomed the gathering and Asst. Prof. Seema Joseph proposed the vote of thanks .Teachers and students from nearby colleges participated in the programme. Dr. Beenamma Mathew and Dr. Sanish P.B, were the co-ordinators of the program.