

MAHATMA GANDHI UNIVERSITY

PRIYADARSINI HILLS PO, KOTTAYAM, KERALA



Annual Quality Assurance Report

[2017-18]

Prepared by

INTERNAL QUALITY ASSURANCE CELL

**Submitted to the
National Assessment and
Accreditation Council
(NAAC)**

Part – A

1. Details of the Institution

1.1 Name of the Institution

Mahatma Gandhi University

1.2 Address Line 1

Priyadarsini Hills P O

Address Line 2

Athirampuzha

City/Town

Kottayam

State

Kerala

Pin Code

686560

Institution e-mail address

registrar@mgu.ac.in

Contact Nos.

+914812731001, +914812731007

Name of the Head of the Institution:

Dr. Babu Sebastian

Tel. No. with STD Code:

+914812731001

Mobile:

+91 9447128373

Name of the IQAC Co-ordinator:

Dr A.M Thomas

Mobile:

9495108959

IQAC e-mail address:

iqac@mgu.ac.in

1.3 NAAC Track ID

KLMGU 68656

1.4 NAAC Executive Committee No. &Date:

EC/54/RAR/121 dtd 08/01/2011

1.5 Websiteaddress:

www.mgu.ac.in

Web-link of the AQAR:

www.mgu.ac.in

1.6 AccreditationDetails

Sl.No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B+		2003	15 th September, 2008
2	2 nd Cycle	B	2.90	2011	6 th January, 2016
3	3 rd Cycle	A	3.24	2017	29 th October, 2022

1.7 Date of Establishment of IQAC:DD/MM/YYYY

03/11/2009

1.8 AQAR for the year (for example2010-11)

2017-2018

1.9 Detailsofthepreviousyear'sAQARsubmittedtoNAAC after thelatestAssessmentandAccreditation by NAAC

AQAR 2010-11 submitted to NAAC on 08- 08-2016

AQAR 2011-12 submitted to NAAC on 14- 01-2016

AQAR 2012-13 submitted to NAAC on 10- 02-2016

AQAR 2013-14 submitted to NAAC on 03- 03-2016

AQAR 2014-15 submitted to NAAC on 10- 08-2016

AQAR 2015-16 submitted to NAAC on 10 -11 -2016

AQAR 2016-17 submitted to NAAC on 10 -10 -2017

1.10 InstitutionalStatus

University

State

☒

Central

☐

Deemed

☐

Private

☐

AffiliatedCollege

Yes

☐

No

☒

ConstituentCollege

Yes

☐

No

☒

Autonomous collegeofUGC Yes

☒

No

☐

Regulatory Agency approved Yes ☐ No ☒

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution: Co-education ☒ Men ☐ Women ☐

Urban ☐ Rural ☒ Tribal ☐

Financial Status: Grant-in-aid ☐ UGC 2(f) ☒ UGC 12B ☒

Grant-in-aid + Self-financing ☒ Totally Self-financing ☐

1.11 Type of Faculty/Programme

Arts ☒ Science ☒ Commerce ☒ Law ☒ Management ☒

PEI (Phys Edu) ☒ TEI (Edu) ☒ Engineering ☒ Health Science ☒

Others (Specify)

Engineering & Technology, Technology & Applied Sciences, Environmental and Applied Sciences, Behavioural Sciences, Paramedical Sciences, Tourism

1.12 Name of the Affiliating University (for the Colleges)

NA

1.13 Special status conferred by Central/ State Government--

UGC/CSIR/DST/DBT/ICMR etc. -NA

Autonomy by State/Central Govt. / University - NA

University with Potential for Excellence ☐ UGC-CPE ☐

DST Star Scheme ☐ UGC-CE ☐

UGC-Special Assistance Programme ☒ DST-FIST ☒

UGC-Innovative PG programmes ☐ 1 Any other (Specify)

UGC-COP Programmes

1.14 Inter University Centres Established in the Year 2017-18

No Inter University Centre was established in the Year 2017- 18

2. IOAC Composition and Activities

IQAC

2.1 No. of Teachers

2.2 No. of Administrative/Technical staff

2.3 No. of students

2.4 No. of Management representatives

2.5 No. of Alumni

2.6 No. of any other stakeholder and
Community representatives

2.7 No. of Employers/Industrialists

2.8 No. of other External Experts/

2.9 Total No. of members

2.10 No. of IQAC meetings held

2.11 No. of meetings with various stakeholders:

No.

Faculty

Non-Teaching Staff/Students

Alumni

Others

2.12 Has IQAC received any funding from UGC during the year?

Yes

No

If yes, mention the amount

N.A

2.13 Seminars and Conferences (only qualityrelated)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

TotalNos.	<input type="text" value="9"/>	International	<input type="text" value="1"/>	National	<input type="text" value="6"/>	State	<input type="text"/>
		Institution Level	<input type="text" value="2"/>				

(ii) Themes

1. Sastrayan – from 26/02/2018 to 27/02/2018. To familiarise the public and studentcommunity with the activities of the teaching departments and the facilities in the research centres of the Universities.
2. Workshop on Faculty Management System was organized.
3. Adalat - Mahatma Gandhi University has been consistently organizing Student Adalaths to resolve complaints of students.
4. The University level monitoring cell on anti-ragging is instituted to tackle the menace of ragging in the institutions under the university. Permanent Cell to Combat Sexual Harassment
5. Hands on MOOC workshop under research project “Innovative Research in Pedagogy for Mini-MOOCs blended with Instruction strategies to enhance Quality of Higher Education”
6. JAIVAM is a project intended to disseminate inputs among the public to empower them to progressively migrate to organic way of limiting by exposing them into organic agricultural practices.
7. The university regularly conducts national/international seminars/conferences, faculty development programmes/ refresher courses /workshops to improve the skills of its faculty members - 5
8. The **Business Innovation and Incubation Centre (BIIC)** supports innovations / incubations / entrepreneurship by extending administrative, academic and financial support to students through R&D support, start-up grants, patent facilitation, and entrepreneurship support.
9. The University has started a **Placement and Training Cell** headed by a Faculty member which ensures mentoring of the students through special programmes on soft skills, leadership qualities, personality traits, communication skills, essential life skills, internet ethics, and etiquette among the students.

10. 3 days International Workshop on Photo Chemistry conducted by School of Environmental Sciences, IUIC and ACCESSD

2.14 Significant activities and contributions made by IQAC

- ✓ Honouring PhD scholars- The IQAC conducted a programme on 01.08.2017 honour all those who had been awarded PhD degree from Mahatma Gandhi University.
- ✓ The importance of technology transfer to industry has been appreciated by the IQAC and it has been decided to explore participation with industry on this front
- ✓ On the job training programmes for Assistants
- ✓ Considerable advance has been made by the University in the execution of MOUs with research Institutions in State, National & International Level.
- ✓ Internal Quality Assurance Cell (IQAC) hosted a "Publisher-Academy Interface Meeting" on Thursday, 17th of August 2017, 2 PM. The title of the talk is "Scholarly Publishing- Elsevier Platforms and Peer Reviewing" by Dr. Greeshma Nair (Publisher Elsevier, Amsterdam)

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year:

Plan of action Placement cell	Achievements <ul style="list-style-type: none">• The University has started a Placement and Training Cell headed by a Faculty member which ensures mentoring of the students through special programmes on soft skills, leadership qualities, personality traits, communication skills, essential life skills, internet ethics, and etiquette among the students. The University has also empanelled 15 professional trainers to conduct training programmes in its affiliated colleges and University Departments.• The students are motivated to attend the programmes conducted by the University Employment Information
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	<p>and Guidance Bureau for personal enhancement, career identification, and soft skill development. Besides special programmes organized by the schools of the University, National Service Scheme and Director of Students Services.</p> <ul style="list-style-type: none"> • The University has started a Directorate for Applied Short term Programmes to conduct highly specialized skill based short term programmes by pooling the academic, learning, instructional and manpower resources to benefit the students of University departments, affiliated colleges and other aspirants. • The School of Management and Business Studies, conducts a week-long Finishing School programme in the last semester of MBA programme. Thrust is being given to identifying and rectifying skill/ competence gaps to enhance employability of the students. Skill training sessions are also conducted in every four months for a period of three days to enhance their skills. • The School of Indian Legal Thought has a scheme for improving professional skills for which the School has introduced mock trials, court visits, public interest lawyering and para legal services like legal awareness campaigns. The students are also sent to law firms to improve their drafting skills. • The Inter University Centre for Organic and Sustainable Agriculture (IUCOFSA) carries out University's commitment to the people through an innovative programme entitled 'Jaivam' incollaboration with Haritha Keralam Mission of the Government of Kerala with the objective of making Kottayam district, the first Organic Farming Literatedistrict of the country. The National Service Scheme Volunteers are engaged in propagating the jaivam mission aimed to promote
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	<ul style="list-style-type: none"> organic and sustainable agriculture. The School of Social Sciences has introduced field experience programme to Archeology students especially at the Pattanam archeological site. The School of Computer Sciences has introduced add-on course as part of Spoken Tutorial Project (an initiative of NMEICT, Ministry of Human Resource Development, Govt. of India).
Consultancy Programmes	<ul style="list-style-type: none"> IQAC motivated all the schools to take up more consultancy programmes related to social relevance. The importance of technology transfer to industry has been appreciated by the IQAC and it has been decided to explore participation with industry on this front. The International and InterUniversity Centre for Nanoscience and Nanotechnology has transferred two technologies to pharmaceutical industry this year.

MOOC	<ul style="list-style-type: none"> • The IIUCNN has introduced a MOOC on ‘Global Understanding’ as a credit open course in collaboration with North Carolina State A & T University. The Centre is also developing MOOC on Introduction to Nanoscience and Nanotechnology and on Analytical Instrumentation Technique. • The School of Pure and Applied Physics has developed the conceptual outline of a MOOC based on Astronomy. • The School of Gandhian Thought & Development Studies has developed an online certificate programme in ‘Gandhian & Peace Studies’. • The School of Management & Business Studies has initiated action for starting MOOC course on General Management & Functional areas. • The Department of Life Long Learning has started an online certificate course in Management of Learning Disabilities.
Skill up-gradation of students and enhancement of employability.	<p>Introduction of add-on programmes under Additional Skill Acquisition Programme (ASAP) in various Schools/Centres:</p> <ul style="list-style-type: none"> • The School of Environmental Sciences has started add – on courses in – a) Environment & Sustainable Development b) Health, Sanitation and Environment, to all Post Graduate students in the University Campus. • 24 affiliated colleges have been acting as platform for the Additional Skill Acquisition Programme (ASAP) which is sponsored by the Government of Kerala.

	<ul style="list-style-type: none"> • The School of Social Sciences has introduced field experience programme in Archaeology to students especially at the Pattanam archaeological site. • The School of Computer Sciences has prepared a proposal for a Software Development Centre for students to acquire work experience. The School has also introduced add-on course as part of Spoken Tutorial Project (an initiative of NMEICT, Ministry of Human Resource Development, and Government of India). • The School of Management and Business Studies has conducted Add-on courses on “Business Data Analysis using Tally and Excel” to enhance the employability skill of MBA students. • The School of Environmental Sciences has started add-on courses in a) Environment and Sustainable Development b) Health Sanitation and Environment to all post graduate students in the University campus. In order to empower students with English speaking skills, Thursday Club has been formed under the aegis of School of Environmental Sciences, where the students gather every Thursday and discuss general topics of their interest in English coordinated by a faculty member.
Improvement in the performance of the	<ul style="list-style-type: none"> • A new concept of convergence of different disciplines is promoted and an exclusive building called Convergence Academia Complex (CAC) is under construction at an estimate of Rs. 29 Crores. CAC will house all the Inter University and Inter School Centres having diversified programmes in order to promote interdisciplinary research. • Interdisciplinary research projects sanctioned by various national agencies and institutions

<p>University on the Research & Extension front.</p>	<p>including the UGC, FIST, DRS, ISRO, COSIT, CSIR, DAAD, DIT, DRDO, KSCSTE, ICMR, BARC, MOEF, ICCR, ICSSR, ICHR, KSHEC, IED, IIFT etc.</p> <ul style="list-style-type: none"> • DST ranking: 8th position in India & 1st in Kerala • Received Rs. 9 crores under the PURSE programme for 2016 to 2019 & listed among higher academic standing Universities of the nation. • Only University in Kerala to be awarded the DBT builder programme for the period 2012-17. • 29th Position among Indian Universities for the usage of resources of E-Shodh Sindhu Digital Library Consortium 2015. • Academic collaboration with research institutions of international reputation such as the Max Planck Institute, Germany, Brown University, USA, University of Strasbourg, University of Nancy, University of Paris XII, University of South Brittany, University of Nantes, France, California Institute of Technology, USA, University of Toronto, Canada, Catholic University Leuven, Belgium, Jinan National University, China, Heidelberg University, Germany, and the Institute of Political Studies, Rennes, France, University of Wisconsin-Parkside, Duke University, Plymouth State University, Technical University of Denmark and Ben-Gurion University, Israel • Participating University in National Missionssuch as National Mission on Radiation Monitoring (Kerala Region; with Dept. of Atomic Energy, Govt. Of India), National Mission on Uranium Monitoring (5 central districts of Kerala with Dept. of Atomic Energy, Govt. Of India), Spoken Tutorial Project (an initiative of NMEICT, Ministry of Human Resource Development, Govt. of India), Swatch Bharat Abhiyan, Unnat Bharat Abhiyan, RUSA. • National Vegetation Carbon Pool Assessment (Southern Kerala) in collaboration with ISRO, Dept. of Space, Govt. Of India.
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	<ul style="list-style-type: none"> • A pioneering research and development activity to promote sustainable organic farming in the state of Kerala and preservation of all natural varieties of Flora and Fauna. As part of this programme, ten thousand National Service Scheme volunteers have visited each and every household of Kottayam district and made them organic farming literate.
E- learning Initiatives	<ul style="list-style-type: none"> • The University has won the award for the Best Institution for E-Learning Facility instituted by the Government of Kerala. • The Department of Printing and Publishing forays into Knowledge Book Publishing during the period. • University Library has developed a PhD Theses archives at http://www.mgutheses.in/ and has been uploading electronic version of PhD theses and Synopsis of PhD theses in to national repositories of INFLIBNET Shodhganga and Shodhgangotri respectively.
International Collaborations and Linkages	<ul style="list-style-type: none"> • The School of Environmental Sciences (SES) has initiated a new linkage with Bournemouth University, UK. • SES has ongoing linkage with: <ul style="list-style-type: none"> a) National Centre for Antarctic and Ocean Research (NCAOR, Goa) b) California Institute of Technology, USA on Sustainable Sanitation. c) National Centre for Polar and Ocean Research (NCPOR) d) Pohang University of Science and Technology, Korea e) Norwegian University of Life Science f) Technical University of Denmark

	<p>g) Technical University of Kosice, Slovakia</p> <ul style="list-style-type: none"> The School of Computer Sciences has established linkage with: <ul style="list-style-type: none"> a) IIT, Hyderabad b) VM Ware, Bangalore; CDAC c) Department of Computational Biology, University of Kerala d) Centre for Artificial Intelligence and Robotics (CAIR), Bangalore. UCIC has initiated steps in interacting with Indian Embassies to increase the number of enrollment of Foreign students in the campus, which ultimately increased the number of foreign students under ICCR scholarship schemes in 2017-18 to 15 including students in Affiliated colleges
<p>Infrastructure development – Tapping RUSA funds</p>	<p>An amount of Rs.20 cr was sanctioned under RUSA to the University as infrastructure grant to carry out a spate of activities spread over infrastructure, renovation and purchase of equipment, computer and books.</p> <p>The following were the major works</p> <ul style="list-style-type: none"> A Student Amenity & Incubation Centre (₹4,12,61,584/-) Campus Wi-Fi and Smart Classrooms (₹4,97,12,375/-) Solar Power Plant System (₹3,34,45,367/-) Purchase of 540 computers for E-governance & examination wing (₹1,23,56,972/-) Modern Laboratory equipments for 4 Science Departments (₹2,31,62,116/-) Renovation of Buildings on the Campus (₹3,02,90,556/-) Renovation of kitchen in the students' hostels

	(₹42,77,610/-) <ul style="list-style-type: none"> • Renovation of students' canteen (₹4,98,511/-) • Fencing using chain link in the outskirts of department hostels (₹25,13,559/-) • Construction and Repairing of roads to Professor's quarters (₹13,65,238/-) • Purchase of books for departments (₹12,82,248/-)
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Whether the AQAR was placed instatutorybody Yes

Management ☐ Syndicate ☐ Any other body ☐

Provide the details of the actiontaken.

**Approved by Hon'ble Vice Chancellor, exercising power u/s 3.10(17) of MGU Act, 1985
dated on**



MAHATMA GANDHI UNIVERSITY

**INTERNAL QUALITY ASSURANCE CELL
PRIYA DARSINI HILLS PO, KOTTAYAM, KERALA**

Annual Quality Assurance Report [2017-18]

Submitted to the
National Assessment and Accreditation Council (NAAC)

The Annual Quality Assurance Report (AQAR) of the IQAC for the year 2017-18

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. *(Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30,2013)*

Part – B

Criterion – I

1. CurricularAspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	43			
PG	32			
UG	2			
PG Diploma	1	2	2	
Advanced Diploma				
Diploma	2	1	3	
Certificate	5	4	8	1
Others (M Phil)	27			
Total	112	7	13	1

Interdisciplinary	3			
Innovative	2			

1.2 (i) Flexibility of the Curriculum: CBCS

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	62
Trimester	--
Annual	--

1.3 Feedback from stakeholders*Alumni ☐ Yes ☐ No Parents ☐ Yes ☐ No Teachers ☐ Yes ☐ No Students ☐ Yes ☐ No
(On all aspects)

Mode of feedback :Online ☒ Qual ☒ Quantitative ☐ Other ☐ Operating schools (for PEI) ☐

****Please provide an analysis of the feedback in the Annexure***

The University has a formal mechanism to collect feedback on curriculum from students. The general format of the feedback forms is provided by the IQAC of the University. Feedback was also collected manually at the end of the Semester through a Feedback Proforma. The responses were analysed and discussed by Faculty. The Schools regularly collect feedback during Alumni meets and PTA meetings. Major remarks pointed out the fact that curriculum provides a broad coverage of the subject area providing in depth knowledge in the subject. Feedback from the various stakeholders are used in the regular updation of syllabi and up to date choice of electives, meeting the demands of the industry. The University has initiated the development of on-line feed back system under the “Web based Software Solution for data management for IQAC” to collect feedback from alumni, Industry, Parents.

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Due to the rapid developments in the subject area, the Schools need to maintain the syllabus of the programmes offered up to date and meeting the demands of the industry as well as academia. To achieve this, the Schools have made the best use of the provision to update the contents of individual courses in every semester. Syllabi are being constantly updated each semester subject to the regulations of the Board of Studies and the recommendations of the Faculty Council. The latest knowledge in a given field is thus incorporated into the syllabi. Also, Ph.D Programme syllabus for coursework was bestowed special attention for revision. All the P.G and MPhil Programmes offered by the Schools follow the Revised CSS Regulations 2016. The revision allowed inclusion of more practicals and theory content relevant in the areas concerned. The contents of syllabus of individual courses are updated every semester by including the latest developments in related areas since tremendous developments are going on within a small period of time in the field of Computer Science. This helps the teachers and students to keep their knowledge in the field up-to-date. Ph.D Programme syllabus for coursework is

diverse each student having different syllabus depending on his / her research theme. A new Open Course, 'Disabilities' was designed and started to be offered from 2017.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Institute of Research in Learning Disabilities (IRLD) has been established at School of Behavioural Sciences. In order to provide equal opportunity and full participation, the students with special needs should be facilitated in mainstream of education. Inclusion is a dynamic ongoing process that requires communication of sharing of information between regular teachers and students irrespective of ability of disability. The objectives of IRLD are 1- to conduct studies and researches in the area of LD, 2- to publish news letter, handouts, booklets and books related to LD and Inclusive education, 3- to prepare the prospective teachers for the classroom management of students with LD, 4 -To start post graduate diploma programme in LD and Inclusive education, and 5- to conduct seminars and awareness camps for promoting inclusive education and for management of LD.

University Centre for International Co-operation (UCIC) has prepared 23 e-learning modules in different subject areas for global learners as part of the FDP programme organized by the centre. Also short modules are identified for conducting short term programmes under the head "India Study Programme".

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
90	37	20	33	

2.2 No. of permanent faculty with Ph.D.

77

2.3 No. of Faculty Positions

Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
-	17	2	10	3	2	-	-	-	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

Guest	44	Visiting	33	Temporary	5
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	94	93	50
Presented	93	74	35
Resource Persons	33	31	54

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- The digitalization of information has made education more constructive with innovative changes in instructional practices, policies and researches.
- University is also on the verge of creation and use of e-content for teaching, learning and research.
- The University has already taken initiatives to adopt Massive Open Open Online courses through SWAYAM, an indigenous digital platform of Govt. of India enabling students to join online courses and facilitating credit transfer. Faculty members are also encouraged to develop quality MOOC courses which will provide global visibility to the University system. Dr. Sajna Jaleel, Associate Professor, School of Pedagogical Sciences is a Course Co-ordinator on the SWAYAM platform.
- A MOOC course on Organic Farming and Sustainable Agriculture was also developed with a plan to be introduced in the syllabi of Environmental Studies at the undergraduate level. The centre also signed a Memorandum of Understanding to start a dual Post Graduate Diploma in Organic Certification in collaboration with University of KASSEL, Germany.
- For the effective utilization and seamless integration of technological innovations in the current teaching-learning process, this year the University has set up 14 smart classrooms under the RUSA project, acting as virtual connect centres enhancing the quality of education at all levels. In addition to edu-conferencing, virtual classrooms and dedicated satellite-based education systems, there are also operational examples of self-instructional digital materials organized into learning management systems.
- Dr. R Satheesh Centre for Remote Sensing and GIS of the **School of Environmental Sciences** is now one of the Distance Learning Centres of Indian Institute of Remote Sensing (IIRS) in Kerala. The School has conducted twelve online courses of IIRS with a total participation of 215 students during the period.
- All the schools and centres of the University provide ICT enabled teaching-learning atmosphere equipped with Wi-fi enabled classrooms/projectors, state-of-the art

software, Virtual labs and simulation tools and Smart class room for conducting lectures and Video conferencing facilities for real time interaction with experts/scientists from national/international organizations.

- School of Computer Sciences has a specialized Research Lab with a Private Cloud for maintaining School level digital repository of workshops, seminars, PhD open defences and other e-learning research resources. The post graduate and research students of the school, use this as a learning/computational tool as well as a resource by accessing the cloud from remote nodes in different labs and class rooms. The School also hosts a High Performance Computing environment running on one Master Node server, two compute node servers and one GPU node server. The post graduate and research students from science departments whose work requires highly intensive computations can utilize this environment.
- In the present world of technological advancements with a strong demand for global education, in situ Global Class Room is more innovative. It provides user driven environment which allows cross-country real time collaboration and interaction with teachers and students of the entire world. In situ Global Class room learning is a great option for those who have constraints with time and location in regards to education. Many universities around the world could participate in live learning sessions and seminars and contribute to strengthen synchronous modes of learning.

2.7 Total No. of actual teaching days during this academic year

189

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

- Double Valuation, Online Internal exam through EDMODO, Open Book Examination, etc have been introduced. Machine interface exam has also been introduced for the qualitative improvement of listening skills of students.
- With the help of ICT enabled exam management and Automation, the University has been very prompt in conducting exams and publishing results on time. Online transmission of Question paper to the examination Centres for the PG Programme has already been introduced and the same is going to be introduced for the III Semester UG Programme also. Online Question Bank System has also been introduced in the University
- CCTV enabled exam halls help to strengthen the examination system and reduce malpractice cases.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

60	36	34
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2.10 Average percentage of attendance of students

90

2.11 Course/Programme wise distribution of pass percentage :

SL.NO	Title of the Programme	Total no.of students appeared	No. of students passed	Pass %	Remarks
1	MTTM (2016-18) June 2018	17	16	94.1	There is no classification of results as per CSS Regulations
2	Five Year Integrated Interdisciplinary Master of Science (2012-17) July 2017	8	8	100	
3	Five Year Integrated Interdisciplinary Master of Science (2013-18) June 2018	13	13	100	
4	MA Economics (2016-18)	13	9	69.2	
5	MA HISTORY (2015-17) July 2017	7	7	100	
6	MA ANTHROPOLOGY (2015-17) July 2017	3	3	100	
7	MBA (2015-17) November 2017	60	45	75	
8	M.Sc CHEMISTRY - INORGANIC CHEMISTRY (2015-17) August 2017	8	7	87.5	
9	M.Sc CHEMISTRY - ORGANIC CHEMISTRY (2015-17) August 2017	8	8	100	
10	M.Sc CHEMISTRY - PHYSICAL CHEMISTRY (2015-17) August 2017	7	6	85.7	
11	M.Sc CHEMISTRY - POLYMER CHEMISTRY (2015-17) August 2017	8	3	37.5	
12	M.Sc DSRS (2015-17) July 2017	8	1	12.5	
13	M.Sc Psychology (2015-17) July 2017	4	4	100	
14	PG Diploma in Indian Sign Language 2016	2	2	100	
15	MA English(2015-17) November 2017	10	10	100	

16	MA Malayalam (2015-17) November 2017	10	9	90
17	MA P&IR (2016-18) April 2018	14	13	92.85
18	MA P&HR (2016-18) April 2018	3	3	100
19	MA P&PPG (2016-18) April 2018	5	4	80
20	M.Sc ESM (2015-17) July 2017	9	9	100
21	M.Sc ESDM (2015-17) July 2017	10	8	80
22	M.Sc MICROBIOLOGY (2015-17) September 2017	10	10	100
23	M.Sc BIOCHEMISTRY (2015- 17) September 2017	9	8	88.89
24	M.Sc BIOTECHNOLOGY (2015-17) September 2017	10	9	90
25	M.Sc BIOPHYSICS (2015-17) September 2017	5	3	60
26	M.Sc Computer Science (2015-17) August 2017	21	16	76.19
27	M.Tech Computer Science & Technology 2015-17 SEPTEMBER 2017	13	10	76.92
28	M.Sc Physics 2016-18 July 2018	20	18	90
29	M.Ed 2015-17 October 2017	34	33	97.05
30	MA GANDHIAN STUDIES 2015-17 NOVEMBER 2017	10	8	80
31	MA DEVELOPMENT STUDIES 2015-17 NOVEMBER 2017	5	4	80
32	M.Phil Rehabilitation Psychology 2016-17 july 2017	3	3	100
33	M.Phil Physics 2016-17 July 2018	10	10	100
34	M.Phil Education 2016-17 May 2018	5	5	100

35	M.Phil Business Studies 2016-17 July 2018	6	6	100
36	M.Phil Chemistry	11	11	100
37	M.Phil P&IR 2015-16 February 2018	7	7	100
38	M.Phil Social Work 2015-16 August 2017	5	5	100
39	M.Phil Gandhian Studies 2015-16 August 2017	3	3	100
40	M.Phil Development Studies 2015-16 August 2017	2	2	100
41	M.Phil Malayalam 2015-16 July 2017	7	7	100
42	M.Phil English 2015-16 July 2017	7	7	100
43	M.Phil Theatre Arts 2015- 16 July 2017	6	6	100
44	M.Phil Computer Science 2015-16 September 2017	6	6	100

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- IQAC encourages Schools/Department to conduct periodic meetings to evaluate the academic programmes of various Schools/Departments and makes suggestions and recommendations in the Department Council. This acts as a benchmark for academic activities of the Schools.
- Continuous Evaluation of students through internal tests, assignments and seminars, direct question answer sessions are made. Periodic academic audit and assessment based on PBAS furnished by the teaching faculty is carried out by the IQAC and evaluation reports are sent to each Head of the Department/School for compliance, remedial coaching, tutorials, subject familiarization through videos, visiting resource persons and special lectures and expert lectures from industry.
- The IQAC prepares a plan of action for each semester at the commencement of the semester and ensures that all activities get completed as per schedule. The schedule is also given to the students so that they can plan their studies accordingly. Orientation programmes and counseling are made strict in the learner friendly atmosphere.
- The IQAC also collects feedback from students and gives valuable suggestions and guidelines as and when needed.
- IQAC also improves faculty motivation for competence and promotes adoption

- of innovative teaching learning strategies.
- The Quality Cell at the departmental level prepares the roadmap of qualitative teaching and research.
- IQAC disseminates information on quality related parameters to various functional divisions of the University.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	2
UGC – Faculty Improvement Programme	
HRD programmes	
Orientation programmes	2
Faculty exchange programme	2
Staff training conducted by the university	1
Staff training conducted by other institutions	4
Summer / Winter schools, Workshops, etc.	7
Others	5

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	41	7	1	16
Technical Staff	26	8	7	10

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- Promoting conduct of workshops on Research Methodology, Statistics and modalities for publication.
- Encouraged students to present scientific papers and posters in the seminars organized by the Schools and outside agencies.

- UCIC organized an International Students and Research Scholars meet on 6th December 2017 where 80 international students and research scholars from various Universities in Kerala were present.
- Periodic feedback system
- Invited lectures, seminars by faculty and senior PhD students on thrust areas.
- Promoting participation of faculty in national and International seminars/conferences.
- The libraries of every School, fully computerized, have a very good collection of carefully selected reference books, periodicals and research journals (National & International).
- Students are instructed to conduct seminars on latest research problems.
- The IQAC has decided to institute three Best Researcher Awards in Science, Social Science, and Language & Literature year wise in the University.
- The IQAC has decided to institute Awards for the best patent, best Research publication, best Research Guide, best Thesis etc to promote an amicable environment congenial to the young researchers of the University.
- It has been decided to set up a patent cell and technology transfer unit for ushering in a patent culture in the University.
- The IQAC has decided to formulate norms and criteria for the Best School/Centre award implemented in the University.
- Gives importance to Research and dissemination of research findings by encouraging faculty and research scholars to contribute articles in different journals and through presenting papers in the National and International Seminars, Conferences, etc.
- It has been decided that each School would initiate consultancy programmes.
- The importance of technology transfer to industry has been appreciated by the IQAC and it has been decided to explore participation with industry on this front. The International and Inter University Centre for Nanoscience and Nanotechnology has transferred 2 technologies to pharmaceutical industry during the year.
- 'Sasthrthrayan 2018' was organized by the IQAC for three days from 10th March, 2018 to make the public and students aware of the activities of the University Departments.

- IQAC has taken steps to organize workshops/seminars/training programs /invited talks in the frontier areas of the subjects concerned there by giving the students, an opportunity to understand the current thrust areas and get in to research programs. Many of our students have benefited through these activities. Students are facilitated on doing summer projects outside the alma mater under the Aspire scheme of Govt. of Kerala to enable them to gain a broader exposure to research. Several of the faculty gives scientific talks at nearby colleges and schools and also over the IR and visualmedia.
- The IQAC has conducted internal orientation exercises. Faculty members of the Schools have shown enthusiasm in strengthening the academic activities. Research proposals of all programmes submitted to the school are jointly discussed and suggestions are incorporated

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	10	49	8	7
Outlay in Rs. Lakhs	644.2	1349.66	962.3	619.8

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	13		
Outlay in Rs. Lakhs	8.03	57.37		

3.4 Details on research publications

	International	National	Others
Peer Review Journals	387	105	13
Non-Peer Review Journals	28	38	5
e-Journals	20	12	2
Conference proceedings	61	54	14

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received (Rs)
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Major projects	2 to 5 years	UGC, DST, DAE-BRNS, DRDO, KSCSTE, ICMR, ICSSR, BRFST-BRNS, MHRD, ITM- Ministry of Earth Sci, KSDMA, Govt. Of Kerala	16,30,41,964	13,49,29,300
Minor Projects	1 year	UGC-DAE-CSR, BRNS-DAE, SERB, CSIR, DST, KSCSTE	57,37,000	57,37,000
Interdisciplinary Projects	3 to 5 years	Ministry of Edn & Sci-Russian Federation, Swedish Research Link	90 million roubles	9,00,000
Industry sponsored	2 to 5 years	MeitY, ISRO	3720000	8,36,700
Projects sponsored by the University/ College				
Students research projects (<i>other than compulsory by the University</i>)				
Any other(Specify)				
Total			29,59,78,964	14,43,23,000

3.7 No. of books published i) With ISBN No. chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP CAS DST-FIST
DPE DBT Scheme/funds

3.9 For colleges Autonomy CPE DBT Star Scheme
 INSPIRE CE A her

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	19	35	19	34	
Sponsoring agencies	University, CRMLD	UGC, DST, IRLD, The Composite Regional Centre for Persons with Disabilities – Kerala	UGC, DST, University, Kerala HortiCorp, Govt of Kerala	University	

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International National Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs :

From Funding agency From Management of University/College
 Total

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	17
	Granted	
International	Applied	
	Granted	
Commercialised	Applied	
	Granted	

3.17 No. of research awards/ recognitions received by faculty and research fellows
Of the institute in the year

Total	International	National	State	University	Dist	College
33	10	22	1			

3.18 No. of faculty from the Institution who are Ph. D. Guides

85

and students registered under them

524

3.19 No. of Ph.D. awarded by faculty from the Institution

81

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF

59

RF

Pro

21

fellows

As

9

r

16

3.21 No. of students Participated in NSS events:

University level

27

State level

20

National level

International level

3.22 No. of students participated in NCC events:

University level

State level

National level

International level

3.23 No. of Awards won in NSS:

	University level	<input type="text"/>	State level	<input type="text" value="3"/>
National level	International level	<input type="text"/>		<input type="text"/>

3.24 No. of Awards won in NCC:

	University level	<input type="text"/>	State level	<input type="text"/>
National level	International level	<input type="text"/>		<input type="text"/>

3.25 No. of Extension activities organized

University forum	<input type="text" value="4"/>	College forum	<input type="text"/>
NCC	NSS	<input type="text"/>	Other
		<input type="text" value="24"/>	<input type="text" value="14"/>

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

The Schools/Departments have arranged extension activities envisaged to benefit the rural population of the state with special importance to the areas under the jurisdiction of the University.

- The University has Sustainable sanitation research in collaboration with CALTECH, USA. As a part of ‘Singh – Obama 21st Century Knowledge Initiative (UGC-OSI)’, an Indo-US collaborative project, the University continues its research on ‘Rain water for Humanity ’program which is on establishing, cost effective rainwater harvesting structures and on sustainable sanitation suitable to this region (Achinakom, Vechoor panchayath). The university also runs a major research project exclusively on the Vembanadlake – A Ramsar site in Kerala. The project is on assessing the status of pollution in the lake and improvement of livelihood of the people living around Vembanadlake.
- The research team at University has developed a cheap filter from agro-waste for the efficient water purification in collaboration with Federal University of

Uberlandia, Brazil which is come under Indo-Brazil bilateral cooperation funded by DST. Moreover, the University has been running an Industrial project on” Efficient eco-friendly cheap filter for water purification” in collaboration with ANDANI ventures, Goa. The project encompasses on evaluating the status of pollution in ground water table to improve the live hood of the people in the industrialized area in Goa.

➤ Another research team at University developed different EMI Shielding materials based on various polymers which can efficiently suppress the electromagnetic radiations emitted out of electronic assemblies. This research is a joint collaboration with Meity, (Ministry of Electronics and Information Technology) Delhi. The outcome of this work will be an effective platform for reducing the electromagnetic pollution which needs to be addressed for social wellbeing. In particular a shielding material for mobile phones has been developed. The University has already filed a patent on this with in collaboration with MietY, Delhi.

➤ The University has been running a project entitled “Drug delivery systems releasing bio-available curcumin for biomedical applications” in collaboration with PLANT LIPIDS PVT.LTD, Kolencherry, Cochin and Aurea Biolab Pvt. Ltd, Kolencherry. The aim of this study is to formulate biocompatible drug delivery systems to deliver Curcumin which has potent anti-cancer and wound healing activity.

➤ Climate change mitigation through biochar application

Biochar (BC) is produced by thermal decomposition of organic material under limited supply of oxygen. The present study envisages the sustainable utilization of biochar as a soil amendment by integrating the local community especially women by empowering them towards increased soil C sequestration and agricultural productivity that would help to save wetland ecosystem from the peril of weed menace and climate change. Through this work community benefit can be made effective by cooperative efforts towards a shared vision to mitigate climate change. The work is expected to execute in Kuttanad wetland areas.

➤ Production of value added organic fertilizers

The project investigates on the possibilities of converting waste materials into

biochar and its further refinement towards the production of value added fertilizer which enhances the benefit of organic farming. Biochar is the product of carbonization of plant or animal biomass that can be used for soil enhancement and carbon negative applications. The production of biochar and its application to the soil will deliver immediate benefits through improved soil fertility and increased crop production in addition to soil carbon sequestration. Present work focuses on above said aspects of biochar and the specific objectives under different sections will be carried out as per standard procedures of International Biochar Initiative (IBI) methods, American Society.

Other activities

School of Behavioural Sciences

- **International Seminar on Higher Education for Persons with Disabilities; Cross-Cultural Perspectives** was organized jointly by School of Behavioural Sciences and School of Pedagogical Sciences at School of Pedagogical Sciences Seminar Hall on **5th July 2017**.
- National workshop on Hypnotherapy on 24th & 25th July 2017
- International workshop (IWQRMBS-2017) on 26th & 27th September 2017.
- International workshop on ‘ Understanding and Supporting Children with Autism (IWUSCA-2017) on 28th September 2017
- One day seminar on ‘Trends and issues in the implementation of rehabilitation programmes
- Organized a number of training programmes for different sectors of the society to empower them in the area of disability prevention, detection and rehabilitation.
- Organized seminars and workshops in the area of mental health and disability and facilitated active participation of students from Nursing, Physiotherapy, Medicine, Education and other allied disciplines to have a team approach in rehabilitation
- Organized and conducted home visits to identify the problems of persons with disabilities and their care givers in the actual family situation
- Organized and conducted debates and discussions in connection with the observance of various relevant national and international days of importance.

- Field visits to palliative care centres, special schools and various rehabilitation centres were arranged to enhance knowledge and develop positive attitude for working among persons with various disabilities

School of Bio-Sciences

- A two day seminar on ‘New Avenues in Bioscience Research (supported by DST-PURSE Phase II, DST, Govt. of India) from 19th March, 2018.
- Visit to Najeewan trust a house for mentally ill
- Conducted an awareness programme Bodhani about Healthy Life Style. Awareness programme on Cyber Crime, A public seminar on prevention on cruelty against animals.
- INQUISTIONE 2017, a two day international seminar on ‘ Research Capacity Building for Prospective Bioresearchers’ on 20th& 21st December 2017.
- A collaborative national seminar on ‘ Ecotechnological Perspectives for Sustainable Development’ in collaboration with KSCSTE, Kerala Academ of Sciences and Kerala Biodiversity Board on 27th& 28th Jul 2017.
- MISSION 3A, two day national programme on ‘Awareness Againt Antibiotic Resistance supported by DST-PURSE , Govt. of India.
- Campus selection, organised by the School and conducted by SciGenom Research Foundation (SGRF) and Kerala State Industrial Development Corporation(KSIDC)
- Two day national seminar on Recent Trends in Applied Life Sciences on 15th& 16th March 2017.

School of Chemical Sciences

- Conducted a workshop on “Safe Handling of Chemicals and Management of Chemical Wastes in Laboratories
- Conducted workshop on Microscale Experiments

School of Computer Sciences

- The School collaborating as a nodal department with the Business Incubation and Innovation Centre (BIIC), Mahatma Gandhi University, conducted reviews of the student start-up projects attached to the School on 13.7.17 & 27.9.17. The faculty of the School serve as mentors for the student start-up projects of BIIC.
- Conducted a DST-PURSE (Phase II) Supported Special Talk on ‘Measuring Academic Research- Role of Journal Indexing and Scientometrics’ on 08.11.2017.
- The School as part of Shastrayaan- “Open House Programme” of the University conducted a 2 day exhibition on 26th and 27th of February 2018. The aim of Shastrayaan was to highlight the overall research contributions and other academic activities carried out in the university through the various research and teaching schools and centers.
- INTERFACE 2017 - an annual IT Meet (IT competitions for PG students), organized by the School provided a platform for students in Computer Science and Technology from various Universities and Colleges in South India to exhibit their technical talents and also served as a forum for information interchange in the field.
- 2-day Capacity Building Workshop on ‘Network Simulator-3’ from 19.12.2017 to 20.12.2017.
- 5-day National workshop on ‘Digital Image Processing, Pattern Recognition and Computer vision using MATLAB (DST-PURSE supported).
- An annual technical publication ‘IT Glimpse’ is compiled and published by the students of the School includes research articles from Faculty, researchers, students and alumni of the School and both printed and online versions are published..
- The School organized a Quiz competition on “Socially and Educationally Inspired Women” at School on 9.3.2018 as part of International Women’s Day Celebrations.

- The School conducted many Seminars and Workshops for providing training to the Faculty and students of the School.

School of Environmental Sciences

- State level workshop on ‘Environmental Impact Assessment’ from 8-10 February 2018 in association with Directorate of Environment and Climate Change, Govt. of Kerala.
- State level Training cum workshop on ‘Wetland Monitoring’ was organized on 7-10 March 2018

School of International Relations and Politics

- Organised a special lecture on ‘China –India Rivalry in the Globalisation Era’ by Dr.T.V.Paul, Professor, McCill Universit, Montreal, Canada and book release ‘The Elusive Peace Process : PA and the US by Dr.M.V.Prasad, Assistant Professor of Politics, Sree Krishna College , Guruvayur on 3rd January, 2018.
- Organised Student Exchange Programme in collaboration with University of Virginia, USA from 18th June 2018 to 29th June 2018.
- Organised a discussion on ‘Contemporary Kerala: Imaginaries of human Dignity’ on 15th March, 2018.Participants were Rosa Felicia(Transgender), Dr.Dhana Madhav(Social Activist), Dr.Narayanan M Sankaran(Dalit Adivasi Behujan Minority Students Association) and Chandran Komath (Asst.Professor, Govt. College, Kottayam)
- Special lecture on ‘100 years since Bafloor declaration: The elusive Palestine Question’ by Dr.Stanley Johny (International Affairs Editor, The Hindu).

School of Gandhian Thought and Development Studies

- The School organized a Seminar Course on ‘Art, Religion and Transcendence’, an Interdisciplinary course structured in 4 classes interfacing History of Art and Culture , Philosophof Religion, Philosoph of Science, Cognitive Psychology and Anthropology by Fr.(Dr.) K.M.George (Dr.Poulose Mar Gregorios Chair).

- Two Day's UGC sponsored National Residential Workshop on 'Documenting Indigenous Knowledge: Methods and Methodologies' was organized jointly by the Kerala Bhasha Institute , Thiruvananthapuram.

School of Pedagogical Sciences

- International Seminar on Higher Education for Persons with Disabilities: Cross Cultural Perspectives on 5th July 2017 in association with School of Behavioural Sciences.

School of Social Sciences

- Organized and conducted One Day in the Campusto inculcate an aptitude for science among school children, 'one day in the campus' programme was organized which include workshop and interaction with an eminent scholar. Students from nearby government schools are usually invited for thisprogramme.

Department of Lifelong Learning and Extension (DLLE)

- Established a Civil Service Training Institute to provide training for the public to appear in UPSC Examinations.
- Planning to implement an Organic Farming Village (jaivagramam) project at the Kattathi Village in association with the Athirampuzha Grama Panchayath.
- Indigenous Organic Farming Project (IOFP) has been started for supporting tribal farmers spread over Idukki, Ernakulam and Kottaam districts of Kerala.

International and Inter University Centre for Nanoscience and Nanotechnology

- Organised ICRM 2018, a three day international conference on 'Reuse and recycling of materials' from 9th March 2018. Invited lectures, plenary lectures, poster exhibitions, brainstorming sessions, discussions with researchers, academy-industry deliberations were included.

Inter University Centre for Disability Studies (IUCDS)

- National Conference on 'Early Intervention' jointly organized by the Composite Regional Centre for Persons with Disabilities – Kerala and IUCDS from 23-24 March 2018

- Distributed Free Hearing Aid Distribution on 26th & 27th March 2018 jointly by the National Institute of Speech and Hearing.

Institute of Research in Learning Disability

- International seminar on Educational and Psychological Perspectives of Learning Disorders (ISLD 2017) on 17th & 18th November 2017 in collaboration with The Council for Research and Management of Learning Disorders (CRMLD)
- National Seminar on Trends and Developments in the Education and Rehabilitation of Children with Hearing Impairment on 26th and 27th February 2018 in association with AWH College of Education, Feroke, Kozhikode.
- National Conference on Indian Sign Language (NCISL 2018) on 16th and 17th March 2018, organized in association with Indore Deaf Bilingual Academy (IDBA).

Inter University Centre for Organic Farming and Sustainable Agriculture

- Global Organic Meet 2018 (second international seminar on emerging trends in organic farming and sustainable agriculture) on 22, 23 & 24 April 2018 at CMS College, Kottayam.

Inter University Centre for Biomedical Research and Super Speciality Hospital

- IUCBR & SSH Brain Storming Session on Drug Research, on 10th November, 2017.

Institute of Contemporary Studies (ICCS)

- ICCS conducted Sastrayan Programme during 26-27 February 2018 organized by Mahatma Gandhi University.

University Centre for International Co-operation (UCIC)

UCIC has organized the following special lecture/talk

- Fellowship offered by Government of Australia for Masters, Ph.D, Post Doctoral and Executive Levels in Australian Universities by K.S. Beena (Professor, CUSAT)

- Book Published titled “Instructional Design for short learning Object” .
- UCIC conducted Sastrayan Programme during 26-27 February 2018 organized by Mahatma Gandhi University. The total number of visitors was 220 and 90 percent visitors remarked very good, 8 percent remarked good and rest of the opinion of satisfactory. Overall the programme went very well and the International Students expressed their gratitude in giving good hospitality and they are ready to take up such events much more attractive way in future.

Advanced Centre for Environmental Studies and Sustainable Development (ACESSD)

- Community empowerment through people’s participation to meet their livelihood needs
- Organic farming campaign
- Environmental impact assessment studies

Inter University Instrumentation Centre

Various services related to the following were provided which include;

- Water pollution monitoring
- Air pollution monitoring
- Advanced oxidation processes
- Environmental and biological application of mass spectrometry
- Nanoscience and nanotechnology
- Membrane science and technology

University Library

- Extended remote access to E-resources subscribed by the university including UGC-INFONET consortium to departments and study centres located outside the main campus of the university.
- Membership facilities were provided to the general public to encourage reading .

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	163.48 acres		Plan Fund	163.48 acres
Class rooms	87		Plan Fund	87
Laboratories	54		Plan Fund	54
Seminar Halls	19	3	RUSA, Plan Fund	22
No. of important equipments purchased (≥ 1 -0 lakh) during the current year.	65	209	Plan Fund	274
Value of the equipment purchased during the year (Rs. in Lakhs)	129 lakhs	127 lakhs	RUSA, DST	256
Others				

4.2 Computerization of administration and library

- **Computerization of University Administration:** The University has introduced e-governance in administration. This measure is to make the University office paperless.
- **Computerization of University Library:** The in-house management of the University library services is computerized using Open Source Library Management Software KOHA.
- Accessibility of new e- journals –The library provides access to resources including e journal and databases under the UGC_INFONET digital library consortium (E-Sodhsindhu) e-journal archives and e- books procured on perpetual access basis, annual subscription basis and digital archives of University PhD Thesis. All the faculty members of the centre suggest essential books and periodicals to be procured regularly.
- The University Library has introduced PhD Theses archives through <http://www.mgutheses.in/> . The Library has been uploading electronic version of PhD theses and Synopsis of PhD theses in to national repositories of INFLIBNET Shodhganga and Shodhgangotri.
- According to the latest report, the University is ranked 29th among 250 universities under the UGC_INFONET digital library consortium.

- Procured E-books from Oxford scholarship online, Taylor and Francis group, Malayalam e-book collection from DCBooks.
- Also procured E- Journal archives from Cambridge University Press, Sage publications and Springer LinkPublications.
- Database like PROQUEST, LISA, 22000 ejournal from j GATEPort.
- Library has web enabled OPAC (online public access catalogue) <http://mgucat.mgu.ac.in>).
- E resources available in the university are extended to outside departments and study centres through VPN (virtual private network)technology.
- Library is managing its website (www.library.mgu.ac.in) web server in the universitylibrary.
- The library follows the following methods for purchasing new titles or journals:
- Library procures the books which are duly recommended by teachers' research scholars andstudents.
- Library procures books on approval from various publishers and vendors considering the courses available in our colleges. The teachers are invited to approve the books by filling up the Requisition Form .Thus the approved books areprocured.
- Teachers visit Book Exhibitions to select the requiredbooks
- **Steps to improve the functioning of Library:** The faculty members of various schools and centers meet to discuss various issues related to improvement of Library and advice suitable solutions for better functioning. They also meet regularly to discuss and finalize proposed policies, budget, specific issues and suggestions to the departmentallibrary.
- **Open Access Availability of Theses:** Open Access Availability of Theses ofdoctoral degrees awarded by the University has been established. (www.mgutheses.org). Digital storage of theses and research publications is available in the University Library.

4.3 Libraryservices:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	184515	113,037433	5732	7844040	190247	120881473
Reference Books	17526	9074660	253	639998	17779	9714658
e-Books	7349	9750450	93	755643	7474	10383468

Journals	357	6490478			357	6490478
e-Journals	370	2202803			370	2202803
Digital Database	55	4528089			55	4528089
CD & Video	1014	1303002			1014	1303002
Online Journal Archives(4 publishers)	320	8117662			320	8117662
PhD Theses(upload ed)	2403		147		2550	

- ✓ Every school in the University has a computerized library and Infonet lab for students and researchscholars

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1075	82	Internet Connection of 100 Mbps bandwidth is available throughout the campus	24	21	66	57	53
Added	567	1				4		
Total	1642	83		24	21	70	57	53

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

- Orientation to M.Phil students of School of International Relations on 11-7-17
- Orientation to students of K.N.Raj Centre on 12-7-17
- User awareness programme to P.G. students of School of Management and Business Studies on 26-7-17
- User awareness programme to P.G. students of School of International Relations and Politics on 16-8-17
- User awareness programme conducted for Research Scholars of School of Chemical Sciences in collaboration with IQAC and M. G. University Library on 24-8-17
- User awareness programme conducted for Research Scholars of School of Chemical Sciences in collaboration with IQAC and M. G. University Library on 24-8-17
- User awareness programme conducted for Research Scholars of School of Computer Sciences in collaboration with IQAC and M. G. University Library on 29-8-17
- User awareness programme conducted for Research Scholars of School of Biosciences in collaboration with IQAC and M. G. University Library on 29-8-17
- User awareness programme conducted for Research Scholars of School of Biosciences in collaboration with IQAC and M. G. University Library on 29-8-17
- Orientation programme for PG students of School of Biosciences on 30-10-17
- Demonstration on Sci-Finder Scholar usage for M.G.University Library Staff on 13-11-2017
- Orientation programme for B.L.I.Sc. Students of St. Peters' College, Kollencherry on 1-2-2018
- User Awareness programme on IEEE Journal Database for Research Scholars on 16-2-18
- Orientation programme to Librarians under Kerala Library Council on 3-3-2018
- Demonstration on Grammarly software for faculty and research scholars on 5-3-18
- LINUX Tutorial conducted by M.G.University Library in collaboration with Kerala Library Association on 30-5-2018
- User Awareness programme on E-Books of M/s. Pearson conducted on 5-6-18
- Lecture on the management of print and e-journals conducted by M.G. University Library in collaboration with Kerala Library Association on 27-6-2018
- The departments have corporate license software with the Microsoft. All the software loaded has been licensed with different agencies.

Name of the software	Licensed by
Microsoft Windows	Microsoft Corporation - Corporate version
Microsoft Office	Microsoft Corporation – Corporate Version
LINUX	Open source software
Anti - virus software	Purchased

- Scanner, print facility and Xerox facilities are available to the students and the faculty.
- The departmental libraries are equipped to enable access to resources.
- **Upgradation of IT infrastructure:** The University undertakes upgradation of computer systems on a periodic basis and also when the necessity so arises. The softwares, printers, scanners are upgraded frequently especially when newer versions are released.
- **Data Management System:** University has instituted a web based Data Management System to effectively collect, store and disseminate institutional data for enhancing academic and administrative quality. The system uses data analytics for identifying institutional strengths and priority areas for future. It is expected to empower the university further in future accreditation, assessment and ranking processes which mainly involves curricular and research output. The online student, industry and alumni feedback mechanism incorporated in the system acts as a tool for social audit of the university's activities.
- **ICT enabled teaching- learning process:**

The digitalization of information has made education more constructive with innovative changes in instructional practices, policies and researches.

Mahatma Gandhi University is also on the verge of creation and use of e-content for teaching, learning and research. The University has already taken initiatives to adopt Massive Open Online courses through SWAYAM, an indigenous

digital platform of Govt.of India enabling students to join online courses and facilitating credit transfer. Faculty members are also encouraged to develop quality MOOC courses which will provide global visibility to the University system. Dr. Sajna Jaleel, Associate Professor, School of Pedagogical Sciences is a Course Co-ordinator on the SWAYAM platform.

A MOOC course on Organic Farming and Sustainable Agriculture was also developed with a plan to be introduced in the syllabi of Environmental Studies at the undergraduate level.

For the effective utilization and seamless integration of technological innovations in the current teaching-learning process, this year the University has set up 14 smart classrooms under the RUSA project, acting as virtual connect centres enhancing the quality of education at all levels. In addition to edu-conferencing, virtual classrooms and dedicated satellite-based education systems, there are also operational examples of self- instructional digital materials organized into learning management systems.

Dr. R Satheesh Centre for Remote Sensing and GIS of the School of Environmental Sciences is now one of the Distance Learning Centres of Indian Institute of Remote Sensing (IIRS) in Kerala. The School has conducted twelve online courses of IIRS with a total participation of 215 students during the period.

All the schools and centres of the University provide ICT enabled teaching-learning atmosphere equipped with Wi-fi enabled classrooms/projectors, state-of-the art software, Virtual labs and simulation tools and Smart class room for conducting lectures and Video conferencing facilities for real time interaction with experts/ scientists from national/international organizations.

- **Cloud and HPC Environment**

School of Computer Sciences has a specialized Research Lab with a Private Cloud for maintaining School level digital repository of workshops, seminars, PhD open defences and other e-learning research resources. The post graduate and research students of the school use this as a learning/computational tool as well as

a resource by accessing the cloud from remote nodes in different labs and class rooms. The School also hosts a High Performance Computing environment running on one Master Node server, two compute node servers and one GPU node server. The post graduate and research students from science departments whose work requires highly intensive computations can utilize this environment.

- **Global Classroom**

In the present world of technological advancements with a strong demand for global education, in situ Global Class Room is more innovative. It provides user driven environment which allows cross-country real time collaboration and interaction with teachers and students of the entire world. Global Class room learning is a great option for those who have constraints with time and location in regards to education. Many universities around the world could participate in live learning sessions and seminars and contribute to strengthen synchronous modes of learning.

- All departments are equipped with projector and desktops with internet facility .The ICT facility is used by students for seminar presentation, assignments, project work. An independent learning environment is ensured through access to various open e-resources and the assignments given to students make it necessary for them to tap these e-resources to complete their assignments. The computer aided teaching learning process is constantly improved upon based on inputs and feedback from students.
- **Training Programmes to teachers and students** – The University Library conducts orientation programmes at regular intervals for new batches of students, research scholars and faculty members for using UGC – Inflibnet services and digital consortium encompassing thesis in digital format. The library also provides personalized information services to the students, faculties and research scholars.

4.6 Amount spent on maintenance in lakhs :

i) ICT	4,76,197
ii) Campus Infrastructure and facilities	5,48,800
iii) Equipment	32,17,730
iv) Others	12,33,320
Total :	54,76,047

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- IQAC urged the faculty to include details regarding student support services available in the campus during orientation of new students. The faculty also inform the students about the ‘what’ and ‘how’ of various services available in the campus.
- Financial, medical and moral supports are provided to the students under the auspices of IQAC.
- The IQAC organised events such as technical seminars, workshops and technical meets in order to enhance the soft skills and the skills to improve the personality of the students. They are encouraged to participate and organise various events including gender sensitization and cultural and social interaction programmes.
- IQAC also collects feedback from students and gives valuable suggestions and guidelines as and when needed.
- The students are also encouraged to participate in conferences/seminars and workshops organised by other organisations.
- The students are encouraged to submit start-up projects to the BIIC (Business Innovation and Incubation Centre) of the University. This helps to inculcate a culture of proposing

new ideas which can address societal needs. This in turn will enable them to establish start-ups.

- As part of strengthening the activities of the Placement Cell of the School, a 3-day Employment Readiness Foundation Programme for the students of School was conducted on 3,4 and 5,October,2017.



- The IQAC monitors the activities of the Students Grievance Redressal Cell.
- Personal Accident Insurance Scheme and Financial Aid for serious illness are provided to students by the Department of Student Services on the recommendations of the IQAC.
- Grace Marks are awarded to students for their outstanding performance in sports and in cultural activities.
- The Department of Students Services conducts youth festivals every year and the University also ensures the participation of students in National and Inter University competitions.
- Research fellowships are provided to students for pursuing doctoral studies in

various research centres of the University.

- The Career Guidance Bureau provides training to students for GATE/NET/SET examinations.
- The students are encouraged to participate in seminars, conferences, symposia, workshops etc. to improve their exposure and for overall development of their intellectual abilities.

Students Mentoring: The mentors counsel the students during the periodic reviews and they are encouraged to develop and channelize their skills by participating in conferences, seminars, workshop etc. Online mentoring is also facilitated by creating group mails and every issue that needs attention is addressed by conducting meetings of staff and students. The mentors also arranged 'Erudite' lectures during the period.

5.2 Efforts made by the institution for tracking the progression

- The Progression of students is regularly monitored by the Schools. The faculty advisor assigned to each batch of students collects and files all personal and academic details of the entire batch of students. This enables the faculty member to keep a record of the previous academic record, personal background, current details, semester wise academic and co-curricular achievements of each student in a batch and help to counsel and guide the ward in a more effective and fruitful manner. This produced a positive impact in the student teacher relationship and was reflected in the selection of electives, projects and in the overall performance of the students.
- Written and oral examinations are conducted to evaluate student progression to assess their qualitative improvement. Process-Monitoring through Seminars, assignments and minor projects, internal assessment, test papers, Assignment presentation and seminars, RTVW (Read, Think, Visualize, Write) Workshops and continuous feedbacks (*Direct Feedback and delayed feedback from students and faculty*).

- The faculty advisor assigned to each batch of students collects and files all personal and academic details of the entire batch. This enables the faculty member to maintain the previous academic record, personal background, current details, semester wise academic and co-curricular achievements of each student in a batch and helps to counsel and guide the student in a more effective and fruitful manner. This has produced a positive impact in the student teacher relationship which was reflected in the selection of electives, projects and in the overall performance of the students.
- Slow and advanced learners are identified through internal evaluation. In addition to the regular working hours, extra time has been given to the students to use the laboratory facilities to enhance their knowledge in the subjects not included in the curriculum.
- Remedial courses are being conducted for the improvement of weaker students. For every batch during the 1st semester a 2-week programming session is given for improving the programming competency of the students.
- The status of the students is monitored by the alumni forum which is very active in updating career progress of the students who pass out. Alumni meetings & PTA meetings are organised. Social media is widely utilized to promote student and alumni gatherings and information sharing. WhatsApp groups created for students and alumni.
- Students who pass PG courses are motivated to enroll for Ph.D programme. Several students do part of their Ph.D programme abroad. Collaborations with foreign Universities enable students of this University to join collaborative programmes. Post Graduate students are encouraged to apply for several distinguished fellowships offered by Government of India and other foreign countries for joining doctoral programmes abroad. The University invites industries for campus recruitment for placement of its students.

Available support services to overseas students-

- International Hostel with international menu and dining facilities.
- Transport facilities for official visits to local area etc

- Special medical care is provided.
- Registration of Visa at the time of arrival
- Visa extension if required for academic purpose
- No Objection Certificate at the time of leaving India after completion of course.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others (MPhil+Diploma)
244	743	599	303

(b) No. of students outside the state

1

(c) No. of international students

2

Men	No	%	Women	No	%
	673	35.6		1216	64.37

Last Year

This Year

General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
149	73	12	158	3	392	171	58	12	110	3	351

Demand ratio : 1:13

Dropout %: 2.9

5.4 Details of student support mechanism for coaching for competitive examinations

- The University has a career guidance cell which provides general awareness and coaching for UGC Net exam / PSC exam NET examination especially for SC, ST, OBC and other minorities. A faculty member is in charge of the Career Guidance Cell.

- The Career Guidance Cell conducts personality development classes and spoken English classes for the benefit of students.
- Introduced remedial coaching, competitive exam helpdesk like coaching for KTET and SET examinations and Language training, personality development.
- The University Library has sufficient books which serve as good reference material for students preparing for various competitive tests.
- The faculty members have provided guidance to students to take up IELTS, TOEFL, GRE and GMAT examinations.
- The University has a career guidance cell which provides general awareness and coaching for UGC Net exam / PSC exam NET examination especially for SC, ST, OBC and other minorities. A faculty member is in charge of the Career Guidance Cell.
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No. of students beneficiaries

738

5.5 No. of students qualified in these examinations

NET	32	SET/SLET		GATE	16	CAT	
IAS/IPS etc		State PSC		UPSC		Others	19

5.6 Details of student counseling and career guidance

Student Counseling:

Each new batch admitted to the Schools is assigned a faculty as faculty-advisor. Mainly he/she will take care of the details of study of the students. The faculty advisor identifies the strengths and weaknesses of the students and gives necessary counseling classes and guidelines of how to go forward to successfully complete the programme for weaker

students.

All faculty members take care of the students individually based on their courses and gives necessary guidelines. The School conducts remedial classes for weaker students at the beginning of first and second semesters.

Career Guidance

The University has a career guidance cell which provides general awareness and coaching for UGC Net exam / PSC exam NET examination especially for SC, ST, OBC and other minorities. A faculty member is in charge of the Career Guidance Cell. The Career Guidance Cell conducts personality development classes and spoken English classes for the benefit of students.

Steps taken for upgradation of employment opportunities of students under Additional Skill Acquisition Programmes.

The School is collaborating as a nodal department with the Business Incubation and Innovation Centre (BIIC), Mahatma Gandhi University, established in 2016 with the seed capital donated by the Government of Kerala, aspiring to support innovations/incubations/entrepreneurship by extending academic and financial support to students through R&D support, start-up grants, patent facilitation and entrepreneurship support.

Library

The University Library has sufficient books which serve as good reference material for students preparing for various competitive tests.

No. of students benefitted

95

5.7 Details of campus placement

On campus

Number of
Organizations
Visited

66

Number of
Students
Participated

126

Number of
Students Placed

112

Off Campus

Number of Students
Placed

31

5.8 Details of gender sensitization programmes

- Organized International Women's Day Celebrations at School with a Quiz competition on "Socially and Educationally Inspired Women".



- A counselor is available at the department of Lifelong Learning.
- A course co-ordinator is there for each batch.
- Involved in gender empowerment programme at various levels.
- Seminar and debates conducted on topics related to Rights of women, gender equality etc.
- The 'International Women's Day' was celebrated on March 8, 2018 in the School. A

Quiz program was organised for the students based on the role of famous women in the world in societal developments. This programme enabled the students to understand the influence of women towards developments in society and in what all ways they contribute to nation building.

- Formed a Gender Sensitization committee and Gender awareness classes are given to students
There is an open course on ‘Gender and Society’.
- There is an active Women’s Forum in the Campus which regularly conducts yoga, dance, tailoring and music classes out of office hours in the campus
- The International Women’s Day was celebrated in the University by organizing seminars.
- There are more women students than men at the PG/PhD level in the University.
- Women students have secured most ranks in University Examinations than men.
- There is a functional Anti Harassment Cell in the University.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports:

State/ University level National level International level

Cultural:

State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount(lakhs)
Financial support from institution	24	32.48
Financial support from government	151	79.68
Financial support from other sources	3	1.74
Number of students who received International/ National recognitions	2	65.4

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed:

- Mahatma Gandhi University has been consistently organizing Student Adalaths to resolve complaints of students. During this period, two adalaths were organized of which one (Kanivu 2018) was intended to help the flood affected who lost their certificates. Services were offered free of cost.
- Mahatma Gandhi University Statutes 1997 envisages a Board of Adjudication of Students' Grievances (BASG) which is empowered to entertain, adjudicate and address any grievance of the students of colleges who may for any reasons be aggrieved. The BASG has been reconstituted in the university w.e.f., 2nd November, 2016.
- A Grievance Redressal Committee has been functioning in the university since 17.06.2016 in accordance with the UGC directions as per its Grievance Redressal Regulations 2012. Complaints, if any, received is transferred to the committee for its consideration and suggestions for redressal.
- There is a Permanent Cell to Combat Sexual Harassment (Internal Complaints Committee) in the university campus. The Cell addresses the complaints from women employees and students on sexual harassment. Findings of the Cell are referred to the Vice-Chancellor/Syndicate for redressal/ further actions.
- Those students who belong to SC/ST can contact the SC/ST Cell functioning in the university over the phone or in person for the speedy redressal of their grievances.

There is a link titled '*caste discrimination*' in the home page of the university website (www.mgu.ac.in) in continuation of the instructions from the UGC for enabling SC/ST students to lodge complaints of caste discrimination.

- The University level monitoring cell on anti-ragging is instituted to tackle the menace of ragging in the institutions under the university. A Students Grievance Redressal Cell is operating in the Vice-Chancellor's Office under the supervision of a Deputy Registrar. The Deputy Registrar hears and receives complaints from students and other stake holders.
- Above all, affiliated colleges have been directed to set up Anti-ragging Cells as per UGC guidelines. The University website devotes an exclusive page titled "Grievances" for registering complaints.
- The enquiry section of the public relation department of the University also actively intervenes to redress student grievances on a daily basis.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

VISION

"Mahatma Gandhi University envisions excelling in the field of higher education and cater to the scholastic and developmental needs of the individual, through the continuous creation of a critical knowledge base for the society's sustained and inclusive growth."

MISSION

- To conduct and support undergraduate, postgraduate and research-level programmes of quality in different disciplines.
- To foster teaching , research and extension activities for the creation of new knowledge for the development of society.
- To help in the creation and development of manpower that would provide intellectual leadership to the community.
- To provide skilled manpower to the professional, industrial and service sectors to meet global demands.
- To help promote the cultural heritage of the nation and preserve the environmental sustainability and quality of life.

- To cater to the holistic development of the region through academic leadership.

6.2 Does the Institution has a Management Information System

Yes. Introduced student information database and semester progress card (SIC – Student Information Card). Faculty Management System has been developed.

Instituted a web based Data Management System to effectively collect, store and disseminate institutional data for enhancing academic and administrative quality. The system uses data analytics for identifying institutional strengths and priority areas for future. It is expected to empower the university further in future accreditation, assessment and ranking processes which mainly involves curricular and research output. The online student, industry and alumni feedback mechanism incorporated in the system acts as a tool for social audit of the university's activities.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

Our institution periodically updates the curriculum and syllabus in a systematic way. The curricula of all the courses were revised and updated. In the case of Schools, the faculty council revises curriculum and syllabus. The revision in the curriculum/syllabus is mainly based on the class room experience with course content and scientific advancements in the similar field. The module of electives and dissertation project are designed in such a way to address the current/future requirements. Most Schools used ICT in integrated teaching methods as well as new audio visual methods for curricular transactions. Subsequent syllabus revision and updating in order to meet the changing requirements of the industry is successfully done every year

6.3.2 Teaching and Learning

The University has developed a very effective, transparent and rigorous internal mechanism to assess the cognitive ability of students and research scholars as well as to ascertain the level of knowledge, intelligence and articulation they have acquired over time. Teaching and learning practices were done in a student centric manner. The faculties always incorporate updated research findings in the curriculum, to make the students enable to address research problems. The learning experience of the student is also enhanced by the aid of field works, interaction with eminent personalities in their field of knowledge, visiting other institutions of premier importance. 24X7 access to e-journals and digital resources is provided to students.

6.3.3 Examination and Evaluation

The academic programmes were reviewed and redesigned under the Credit and Semester System (CSS). University conducts all internal and external examinations as per the time table frame for each semester. The evaluation and publication of the result are also being done on a time bound manner without fail. The students are evaluated through their performance in internal and external examinations, assignments and seminars. The pattern of questions was modified in order to assess the different level of understanding of the subject matter by the students. Continuous internal assessment was made more effective in a time bound manner. Continuous evaluation in the mode of questions and answers, spot test at regular intervals, supported with model exams are done.

6.3.4 Research and Development

Research programmes are going on in different areas in collaboration with leading research institutions within India and abroad. These collaborations have made possible for the University to send their research students to different research labs of international repute. Some of the schools are conducting research programs focusing on community development. The University insists on contribution of research papers by the faculty to various books and journals. University has collaborations with several

leading research institutions which enable the sharing /exchange of research students and undertaking exchange programmes. There are special lectures on research methodology and course work upgradation of infrastructure for research, research tools and methods of data analysis is also a continuing process in the University. ABILITY - a project of School of Social Science is being conceived to address the needs of physically challenged students and researchers and to conduct research in disability studies

6.3.5 Library, ICT and physical infrastructure / instrumentation

MGU Library and Information System consist of the University Central Library and more than 30 libraries of the departments, schools and study centers existing in different campuses. The most important achievement of the MG University Library is the endorsement related to the PhD Theses Archives developed by the University Library. The Mahatma Gandhi University is one of the first fifty Universities to come under the UGC- Infonet Programme. Through UGC-Infonet E-journals Consortium, the University Library provides access to more than 4000 journals and databases. The University Library is a fully automated system using the library software package SOUL developed by the INFLIBNET Centre. The Library is also a member of the DELNET (Developing Library Network). Being a member of these networks, the library is able to share the resources of a number of other libraries and has been able to make inter library loan of books. INTUTE Open Access Online Service provides access to the very best web resources for education and research. The software packages used and all content included are evaluated and selected by a network of experts to create the INTUTE System, with millions of resources available on the Internet, it is difficult for researchers to find relevant and appropriate material even with good search skills and use of advanced search engines. Issues of trust, quality, and search skills are very real and significant concerns - particularly in a research context. The INTUTE database makes it possible to discover the best and most relevant resources in one easily accessible place. Researchers can explore and discover trusted information, and be assured that it has been evaluated by specialists for its quality and relevance. MGU is the first university from India, which could host such an official

digital archive of PhD theses in the web using multilingual software and search Mechanism (for Malayalam, Hindi and English).

6.3.6 Human Resource Management

University has adequate number of administrative staff and satisfactory number of academic staff including contract faculties. Faculty student ratio at Schools is 1:2. During the period the academic staff had undergone refresher programs, conferences, seminars and academic exchange to enrich their knowledge and teaching and research experience. Faculty members have opportunity for their carrier growth along with the institutional development. Newly appointed faculties were provided a preparatory amount to start their lab and research activities. Administrative staff was also exposed to internal and external training programs for quality improvement. The achievements of the staff and the students are recognized with appreciation and by honouring them. Various cultural and social clusters were formed by students and staffs, organizing recreational events, social mobility programs, environmental campaignsetc.

6.3.7 Faculty and Staff recruitment

The recruitment of the faculties was done according to the UGC Regulation. Notifications are published in detail in the leading newspapers and university website. External subject experts are included in the expert committee. The selection committee comprising the eminent scholars in each area evaluates the research and teaching talent of the candidate. The recruitment of non-teaching staff is done as per the State Government and University statutory procedures

6.3.8 Industry Interaction / Collaboration

- There are several collaborative endeavours between the Schools of the University and industry.
- Faculty members are involved in various projects with industrial collaboration.
- Field visits to industries; institutions like DIET, SERT etc are undertaken by teachers, students and research scholars.

- In the School of Environmental Science, School of Chemical Sciences, School of Bio Sciences etc. persons from industries such as Agilent, Shimadzu, Perkin Elmer, Thermo etc. engage classes and workshop on the advancement in their respective fields, new instrumental technologies etc.
- In the School of Tourism Studies, experts from hospitality industry take classes.
- School of Environmental Science, like other academic departments has collaboration with Department of Forests and Wildlife, Government of Kerala, Periyar Tiger Reserve Thekkady, etc.
- There is active industry involvement in the form of internship opportunities and placement to these departments

6.3.9 Admission of Students

Students are admitted to courses in the University Departments through an entrance test followed by a Centralized Allotment Process (CAP) by the University involving written test which analyses their compatibility and service attitude. Through CAP an applicant can access several colleges/Programmes by putting in a single application online. It saves time, money and effort of the candidates seeking admission to courses/Programmes in affiliated colleges of MG University. The placement of the candidates in various programmes and institutions will be according to their choice, merit and socially determined norms.

6.4 Welfare schemes for

Teaching	Health Card, PAI , Quarters, Crèche, Medical Reimbursement, Recreation Facility, Weightage towards for admission to Professional colleges run by the University, Health Insurance
Non teaching	Same as above
Students	Hostel Facility, Insurance, Financial support through different scholarships, fee concessions, Alumni meet, grievance cell, guidance and counseling, CUTE – Cultural organization etc.

6.5 Total corpus fund generated 4,94,68,12

6.6 Whether annual financial audit has been done Yes √ No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	yes		yes	
Administrative	yes		yes	

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes √ No

For PG Programmes Yes √ No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

- University has a well planned and realistic Examination Calendar which is published before 31st December every year, for the conduct of numerous examinations in an academic year. The Calendar enables the Academic community to plan and prepare well in advance the academic affairs in the University & in the Colleges, before the commencement of examinations and eventually enable to publish all the results in time, thereby paving way for students to apply for admissions to higher education.
- Regular meetings of CSS are held to consider necessary examination reforms among otherthings.
- Credit Based Semester System has been implemented with elaborate systems for internal and externalvaluations.
- With the help of ICT enabled exam management and Automation, the University has been very prompt in conducting exams and publishing results on time. The results of final year CBCSS Examination March 2018 has been declared within 15 days from the last date of the practical examination. A Data Centre for which Rs.2 cr has been sanctioned by the Government is coming up in theUniversity.
- Online transmission of Question paper to the examination Centres for the PG Programme has already been introduced and the same is going to be introduced for the III Semester UG Programme also.

- Online Question Bank System has also been introduced in the University.
- CCTV enabled exam halls help to strengthen the examination system and reduce malpractice cases.
- Delivering answer scripts directly to nine zonal valuation camps.
- Centralised processing camps makes the entire data entry hassle-free in the computerised system.
- Immediate attention is given for the solutions of complaints in the valuation camps.
- Effective monitoring of centralised valuation camps and despatch of valued answer scripts from Additional Examiner to Chief Examiners is continuously tracked for speedy valuation.
- After valuation the mark sheets are transferred to the Central Data Entry Wing (CDEW) on an everyday basis or the next day where the mark entries are done. The mapping process and mark entry are done on a simultaneous manner.
- The CDEW make the entire data entry in the system and the software team processes the results within the prescribed time frame.
- For reducing the delay in publication of results Examination Monitoring Cell is strengthened by forming ten sections with adequate facilities.
- The Examination Monitoring Cell has been expanded to a 15 section wing from 4 sections wing with specific duties to speed up the process.
- Direction has also been given to the colleges to close the regular classes during the valuation period for the effective participation of all teachers for valuation.
- The applications for migration and condonation certificates are received through online and when the process is over the candidates can download them from the site. Digital Data Filing System is there in place in the Examination wing to make the University paperless and it will help speedy movement of files. The files relating to result publication also can be submitted to the Vice Chancellor through DDFS which enables speedy publication of results.
- Online generation of hall tickets has been introduced for several examinations conducted by the University.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

The Government of Kerala has introduced necessary legislation for establishing autonomous colleges in the State. Necessary changes have been made in the University

Act in this regard and autonomous colleges have come into being in the jurisdiction of the University.

6.11 Activities and support from the Alumni Association

Annual alumni meets are held in various departments. The alumni meets help the students to secure placements in various organizations. The alumni participate in seminars and workshops as resource persons and delegates. The alumni have instituted various Scholarships and Awards for the students. The alumni also help in guiding the students in academic activities, giving suggestions, technical and financial assistance, projects and job placements. Many of the alumni who have passed out from various departments are working in places all over the world in various positions, or as researchers etc. The alumni meet also facilitates outstanding students of the School. Interaction with present students, sharing of knowledge, experience, suggestions, and placement initiatives are materialized. Activities with social commitment, charitable activities, loyalty to the institution for the development are being done. The alumni support the department for adequate placement of the outgoing batches.

The Alumni Associations of the Schools have been functioning at different levels. The students of the Schools are found in several walks of life, engaged in a variety of professions. Apart from India, they are working/ studying in countries such as France, China, Japan, Kirgizstan, Ghana, Chad, Nepal, Kenya, Sudan, Ethiopia and Vietnam, Namibia etc. Similarly, many live and work in the United States, United Kingdom, Canada, Austria, Poland, Kenya, Saudi Arabia, China, Oman, and Switzerland. They include teachers in universities, colleges and other educational institutions, and research positions in embassies of various countries. Several of the students are pursuing research in well-known institutions. Most of the important newspapers in India and abroad have the former students of the School on their staff.

6.12 Activities and support from the Parent – Teacher Association

PTA meetings are organized by the departments. The PTA also ensures that a cordial relationship exists among the department, students, parents and teachers.

Parents and teachers meet during admission process in an open forum meeting. Parents who are from all over Kerala, share their views and initial concerns during such meetings and are given the contact details of the School for raising any concerns they may feel during the tenure of their wards here. We are happy to say that we have been able to alleviate concerns by our mode of operation

6.13 Development programmes for support staff

- A Computer training Programme is in place for University staff.
- The University campus has a Health Centre, Fitness Centre in the University Campus. Yoga, Music and tailoring Classes are arranged by the University Women's Forum for Women employees
- A Cancer awareness class was held by Dr V P Gangadharan, Oncologist, and Regional Cancer Centre Thiruvananthapuram.
- An awareness class on Heart Diseases by Dr. T K Jayakumar, Superintendent Medical College, Kottayam.
- On the job training programmes for Assistant Registrars, Section Officers and Assistant Section Officers.

6.14 Initiatives taken by the institution to make the campus eco-friendly

- The University Campus is plastic free.
- Students lead a campaign 'no flex and no plastics' campus and took initiative to plant trees and make the campus green.
- Planted medical plants, ornamental plants fruit trees and perennial plants as a part of green campus programme.
- The University insists on performing research activities in a green manner avoiding toxic synthesis routes and chemicals.
- An efficient rain water harvesting system exists in the campus.
- Celebrated World Wet Lands Day through conducting awareness class on wetlands.
- Celebrated Environment Day to create an awareness highlighting environmental issues and planted saplings in the premises to enhance the greenery.

- Celebrated Earth Day.
- The School of Environment Sciences maintains the Jeevaka Live Laboratory named after the disciple of Sree Budha, where there is a rich diversity of flora and fauna, including 12 varieties of migratory birds from the Himalayas.
- Auditing the status of solid waste generation and management in the campus.
- Conducting regularly, environmental awareness programmes among public and school children.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- **Shastrayaan - 2018**

The University has organized Shastrayaan- “Open House Programme”, a 2 Day exhibition on 26th and 27th of February 2018. The aim of Shastrayaan was to highlight the overall research contributions and other academic activities carried out in the university through the various teaching schools and centers. The Exhibition was open for students from schools and colleges and also for public. Visitors of the exhibition found this as a wonderful initiative as it made them informative about various technologies and terminologies. General public found this exhibition a great opportunity to make them familiar with new technologies that they use in their day-to-day life without knowing the background. Students from Colleges got a chance to know about the emerging trends and technologies in the field of higher education. Visitors suggested that the exhibition could have been continued for few more days.

- To equip persons with disabilities in disaster risk reduction, Inter University centre for Disability Studies is associating with Kerala State Disaster Management Authority in a project titled 'Strengthening of Emergency Response Capabilities with Emphasis on Differently Abled People in the year 2017. The objective of the project is to equip the persons with disabilities to respond to various disasters or emergencies.
- A Department blog has been started by the School of Gandhian Thought and Developmental Studies. Some of the important innovations during the academic year are:
- CLENS (Club of Environmental Students) conducted programmes on environmental awareness in the campus as well as outside. The Thursday Club of this forum conducts weekly activities for its student members aiming to improve their communicative skills.
- A School level digital repository of workshops, seminars, PhD open defences and other e-learning contents was generated for future use as a research resource in the School of Computer Sciences. The PG Students were insisted to take up research papers for

presentation in seminars for exposure to various research resources, facilities and tools of intensive research at the PG stage itself.

- With a view to train the students and improve their professional qualities and to ensure maximum intake of students to Bench, special training was organized in the School of Indian Legal Thought with the assistance of alumni and PTA. Former students of the School who are now serving in judicial service and in other respectable legal fields were roped in for the purpose.
- In the School of International Relations & Politics the faculty and research scholars collaborated in various impact assessment studies having a direct bearing on social policies and programmes. The three districts level outreach studies on the MGNREGS undertaken in collaboration with the State Institute of Rural Development (SIRD) provided opportunities to have first hand experience at the micro level. A team of students and teachers also visited Attappady region during the year, in the background of the increasing incidents of child mortality and women abuses, to study the transformation which has occurred in the region over the years. Thus, the researchers and faculties involved in these studies have benefitted from their field experience.
- The BEd trainees were given maximum opportunities to develop their potentials through life skill training, to be technologically competent, and to know the 'nature' and measures for environmental sustainability.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- The University has been successful in introducing Massive Online Open Course (MOOC). Several of its schools have taken an initiative in this regard.
- Add on courses under ASAP has been started in several Schools of the University.
- Linkages and Collaborations have been established with several national and international agencies and these have bolstered the University's research profile.
- The University has executed MoUs with research institutions of national and international repute like FIST, DST, ISRO, BARC, UGC etc. during the period.
- The Syllabi of various programmes have been updated and revisions have been made.
- Student interaction with eminent scientists and Nobel Laureates was facilitated by the

erudite programme.

- Student centric teaching learning process has been strengthened.
- The infrastructure especially on the IT front has been toned up during the period.
- PhD holders were honoured in the month of August 2017
- Edmodo, a digital online teaching learning interactive platform to enrich the teaching learning quality, crossing the barriers of time and place through its superior features like online discussions, online tests, pooling resources, online submission of assignments etc.
- Able to invite Professors from international Universities as planned to familiarize global educational practices.
- Biannual alumni meets were conducted for effective interaction with the alumni

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

Converting abandoned wetland as productive land: a “live laboratory” model for sustainable agriculture

1. **JAIVAM-** The University has implemented *JAIVAM 2017-*, a public education programme to spread organic farming in Kottayam District. It is commendable that the University has published a Handbook on organic farming and has distributed it among five lakh households. Around ten thousand National Service Scheme volunteers were selected to propagate the boons of organic farming among the public.

Project of Inter University Centre for Organic Farming and Sustainable Agriculture (IUCOFSA).

Abstract

The project aims at the conversion of abandoned paddy field to cultivable productive wetland and to sustain it as a “live laboratory” model. The neglected wetland that stretches out an area of about 6 acres in Vallakom panchayat is acquired on lease for the project. IUCOFSA plans to accomplish organic farming out there giving due importance

to sustainability and innovative wisdom in agriculture. Indigenous varieties of rice will be selected for farming. It is planned to follow the paddy-fish model as well as other methods to make agriculture ecofriendly as well as profitable. The University will provide needed scientific inputs and support. Nature friendly farming for 3 years is presumed to rejuvenate the neglected wetland that in turn shall be returned to the farmers. IUCOFSA plans to make the program participatory involving the students, researchers and the natives. The knowledge generated would help to extend the possibilities of organic farming in the fruitful conversion of neglected wetlands spread over across other areas of the state. Additional skill acquisition program (ASAP) (both online and offline) also forms an integral part of the project.

Objective

The proposed project aims to mature the deserted wet land to a fruitful farm, to design a prototype, thereby motivating the people across the state/country.

Important objectives of the proposed project include:

To convert abandoned wetland to cultivable and productive land, to implement organic farming with the techniques like crop rotation, application of green manure, compost and the use of organic pest control etc., to promote and advocate the use of indigenous varieties of seeds, fishes and animals, and to create a paradigm shift in the concept of conversion of abandoned wetland to beneficial and good earth, to effect the use of bio-pesticides and bio-fertilizers in farming, to generate a data system of the whole process of farming and to make it available to people across the country, to use this project as a study material for the students and researchers through Additional Skill Acquisition Program (ASAP). The whole project will be available both online and offline across the globe for interested students, to implement the project as a joint venture of the University, scientific community, and the native people, to evolve the project as a model programme attracting the farmers towards organic farming.

Output

IUCOFSA is very proud that the Centre has produced *Njavara* paddy worth Rs .50,000/- by implementing the principles of organic farming in the abandoned paddy field by converting it into a productive wetland .

1. MOOC

- The International Inter University Centre for Nanoscience and Nanotechnology has introduced a MOOC on ‘Global Understanding’ as a credit open course in collaboration with North Carolina State A & T University. The Centre is also developing MOOC on Introduction to Nanoscience and Nanotechnology and on Analytical Instrumentation Technique.
- The School of Pure and Applied Physics has developed the conceptual outline of a MOOC based on Astronomy.
- The School of Gandhian Thought & Development Studies has developed an online certificate programme in ‘Gandhian & Peace Studies’.
- The School of Tourism Studies has started a Diploma Course of 6 months duration on ‘Tourism Destination Services Management’.
- The School of Management & Business Studies has initiated action for starting MOOC course on General Management & Functional areas.

7.4 Contribution to environmental awareness / protection

- Celebrating environment day to create an awareness highlighting environmental issues and needs of protection.
- Students are practising a campaign ‘no flex and no plastics’ and planted trees.
- To protect and safeguard the destination we kept aloof from the usage of plastics and throwaway plastic bottles and other materials.
- Efforts were made to protect the virginity and the pristine nature of the terrain.

7.5 Whether environmental audit was conducted?

Yes

☒

No

☐

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

UNIVERSITY EMPLOYMENT INFORMATION AND GUIDANCE BUREAU

Introduction

The University Employment Information and Guidance Bureau under the National Employment Service Department, Government of Kerala is functioning in every university. The University Employment Information and Guidance Bureau of Mahatma Gandhi University commenced its activities in May 1990. The Bureau was shifted to the new building, constructed by the financial assistance received from UGC, in July 2008. The Bureau has a Chief, Deputy Chief, two Clerks and a Office Attendant. The University nominates a professor / Director of a statutory teaching department as Chief. The Deputy Chief and other staff are National Employment Service (Kerala) department employees.

1.1) Functions/Objectives of the Bureau

- To collect and disseminate Career Information.
- To highlight opportunities for higher studies.
- To disseminate information on scholarship, fellowships, financial assistance, available in India and abroad.
- To render vocational guidance to students.
- To assist students for securing employment.
- To give information on various competitive examination.
- To conduct career guidance classes, seminars and career talks and give guidance on group discussions to equip students for better performance and personality development.
- To register Post graduate degree holders in general stream and Professional degree holders for employment assistance.
- To prepare Employment Information Bulletin to help students in their Educational and Vocational Planning.

1.2) ADVISORY COMMITTEE

The Bureau functions as per the decisions of the advisory committee under the chairmanship of the Hon'ble Vice chancellor. The committee also consists of two syndicate members, the Registrar of the University, Employment Director from the state Government and other six members . The advisory committee meets once in every year

to evaluate the functions of the Bureau during the previous year and decide new programmes for the coming year.

FACILITIES

1.3) CAREER INFORMATION ROOM

The Bureau has a functional library and at present it has 854 books and other study materials. Publications like The Hindu, Malayala Manorama Daily, Kerala Gazette, Employment News, PSC Bulletin, Tozhil Vartha, Thozhil Veedhi, University News of AIU, Competitive Success Review, Banking Service Chronicle, Civil Service Chronicle, World Focus, Yojana, Competition Wizard, Prathiyogita Darpan etc are currently subscribing and are readily made available for reference to the visitors. The students from the university departments and the students of this institute are using this facility. The students opined that the atmosphere of the library is much helpful to prepare for competitive examination.



SERVICES

1) CAREER TALKS

The Deputy Chief visits at least 3 educational institutions in a month under the jurisdiction of the University for delivering career talks. Career talks mainly focus on employment trends, competitive examinations, interview techniques, job oriented courses. The techniques for attending the interview and personality development techniques are also included in the career talks. 48 career talks session conducted and 5485 students participated.

2) INDIVIDUAL GUIDANCE

Vocational counseling is a method of helping an individual in planning his career, choosing an individual in planning his career, choosing an occupation, course of education, training, apprenticeship etc. and in making, effective adjustments for a productive satisfying career. It consists of one or more interviews with the individual who has given such help. The interview is planned on the basis of the Biodata supplied by the individual.

Deputy Chief studies the Biodata and prepares himself for conducting the interview to discuss specific opportunities or aspects relevant to the problems revealed in the personal Information form. 179 candidate participated.

3) INDIVIDUAL INFORMATION

Deputy Chief or any other member of the staff entrusted with such responsibility is answering the enquiries about training facilities, job opportunities or other aspects of career planning etc. Similar enquiries made over telephone should also be attended to and answered expeditiously. In the event that the desired information is not readily available and if it is expected to be procured within a reasonable time an interim reply should be taken to obtain the information from appropriate sources and the query answered when information is obtained. 849 students get information.

4) GROUP DISCUSSION

Group Discussion is being extensively used along with personal interviews for the final selection of candidates. It plays a main role in selecting the best among the best. Having scored high marks, students who get selected for a higher/another course or employment are placed on a par - on equal footing - based on their age, qualification and experience. It becomes necessary to conduct further screening for choosing a few among many. It is here, the Group Discussion plays an important part. It helps in choosing the socially suitable candidate among the academically superior achievers. It is one of the best tools to study the behavioral and attitudinal responses of the participants. 61 group discussion conducted 327 students participated.

5) COACHING PROGRAMMES

Another major function of the Bureau is to conduct coaching classes for the competitive examinations at the state and national levels. The Bureau conducts coaching classes for UGC/CSIR - NET examinations, various competitive examinations conducted by the Kerala Public Service Commission, Banks/IBPS, Staff Selection Commission, Railway Recruitment Board etc.. These coaching classes were conducted by collecting a fee of Rs 2000/- from the participants. Fifty percent fee concession is given to Scheduled caste,

Scheduled tribe and Differently abled candidates. The honorarium granted to the resource persons is Rs 500/- per hour. Printed/Photocopies of notes and other study materials are given to each participants. If sufficient funds are available from Govt. of Kerala or Mahatma Gandhi University free coaching programmes were also conducted.

The occasion is given to the successful candidate to interact with new students and motivate them. The Students given opportunity to prepare and present interested topic of the competitive examination in the classroom

Bureau conducted various competitive examination coaching programmes as described below.

5.1 UGC/CSIR - NET COACHING PROGRAMME

The Bureau also conducts coaching classes to prepare the students belonging to Minority, SC & ST Community for the UGC- NET examinations (with the financial assistance of the UGC). The main objective of the scheme is to prepare Scheduled Castes, Scheduled Tribes and Minority Communities candidates for appearing in NET or SET so that sufficient number of candidates should become available for selection as Lectures in the University system. Admission to above courses are often limited to 50 students. These coaching programmes were conducted twice a year. (ie for the exams in June and December). The coaching classes were given for the general paper and detailed classes were given to Commerce and English subjects. 5 programmes 284 students participated.

Inauguration ceremony of UGC-NETcoaching Programme by Prof.(Dr) Sabu Thomas, Pro -Vice Chancellor,Mahatma Gandhi University





5.2 BANK/IBPS COACHING PROGRAMME

Bank Jobs are becoming the greatest encouraging and also most secure jobs in Indian occupation industry. Banking sector has grown to be probably the most selected profession alternatives by young people nowadays thinking about numerous factors, advantages and employment growth.

The Bureau conducts coaching class for banking competitive exam. Some coaching are free with aid of state government and some are paid. The coaching class is of 25 days duration and covers all topics of the exam. 7 programmes and 270 students participated.

5.3 KERALA PSC/SSC/RRB COACHING PROGRAMME

The Guidance Bureau arranged effective coaching classes given to the candidate to equip and face competitive examination conducted by Kerala PSC, SSC and Railway Recruitment Board. 2 programmes and 105 students participated.

The details of coaching programme

SI NO.	Coaching class	No. of coaching class	Participants No.
1	UGC-NET	5	284
2	Bank	7	270
3	Kerala PSC	2	105

6) SUCCESSFUL CANDIDATES

The Guidance Bureau has emerged as a successful training center in competitive examination in government sector. The notable feature of this training institute is the inclusion of economically backward candidates in such programme. Some of the successful candidates who attended the different coaching programmes like Kerala PSC Secretariat Assistant, University Assistant, Railway Recruitment Board Exam, UGC NET etc. and acknowledged here are listed below.

SI NO.	NAME	Coaching class attended	Qualified rank list
1	Dhanya Balachandran	PSC	Office Attendant
2	Athira Ravisankar	Co-op Bank	Co-op Bank Jr.clerk
3	Pranav P S	Co-op Bank	Co-op Bank Jr.clerk
4	Abin K Thomas	Bank	Kerala police
5	Anila Biswas	PSC	H.S.S.T
6	Lakshmi O J	Bank	IBPS- Probationary Officer
7	Joyal George	UGC- NET	NET+JRF Commerce
8	Sharu P John	UGC- NET	NET+JRF Psychology
9	Minu Joseph	UGC- NET	NET+JRF English
10	Fathima Shirin Shaji	UGC- NET	NET- Commerce
11	Anju Theresa Saji	UGC- NET	NET- Commerce
12	Shimmi Rosy P A	UGC- NET	NET- Education

13	Jithin Johnson	UGC- NET	NET-English
14	James George V	UGC- NET	NET-Commerce
15	Feba Saimon	UGC- NET	NET-Commerce
16	Mariya Shaji	UGC- NET	NET-Home science
17	Jithin Thomas Abraham	UGC- NET	NET-Physical Education
18	Kishor K	UGC- NET	NET-Mass communication & Journalism
19	Devu S Babu	UGC- NET	NET-Commerce
20	Deepa Kuruvila	UGC- NET	NET-English
21	Athulya K Sodaran	UGC- NET	NET-Commerce
22	Reshma Elsa Reji	UGC- NET	NET-Mass communication & Journalism
23	Aparna Merin Mathew	UGC- NET	NET-Commerce
24	Neethu Mohan	UGC- NET	NET-Commerce
25	Rajani Alex	UGC- NET	NET-Education
26	Dona Babu	UGC- NET	NET-Management
27	Abhijith M S	UGC- NET	NET-English

28	Thomas Sabu	UGC- NET	NET- Commerce
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7) CAREER INFORMATION ACTIVITY

Bureau prepared poster on **Vacancies of Indian Military** and distributed to various educational institutions.

8) CAREER SEMINAR AT COLLEGES

Career guidance and counseling contributes to greater efficiency in the labor market, which is reflected in a greater employability and mobility of the workforce and the increased percentage of successful education.

The Guidance Bureau conducted a series of Career Seminars in various colleges under the jurisdiction of the University by using University fund. The purpose of such seminars was to train and equip the students to perform better in job interviews and also for their overall personality development. Bureau conducts one day Career Seminar in colleges to create awareness among the students on career opportunities and soft skill development. Seminar would focus mainly on career trends in India and abroad, opportunities for higher studies, how to face an interview and also on Personality development. University is granting funds for the conduct of these programmes. Eminent resource persons are invited for the purpose. 15 programmes conducted at different colleges.

9) VOCATIONAL GUIDANCE ACTIVITIES & CAREER EXHIBITION

Vocational guidance and counseling programs aim to help students make more informed about better educational and career choices. Among other things, programs offer information on higher Secondary school course offerings, career options, the type of academic and occupational training needed to succeed in the workplace, and postsecondary opportunities that are associated with their field of interest.

Programs also often provide teachers, administrators, and parents with information they can use to support students' career exploration and postsecondary educational opportunities. Recognizing the importance of career guidance and counseling programs for student's postsecondary success, the National Employment Service(Kerala) Department plays a key role in supporting State's efforts to build and implement the career guidance and counseling activities.

Bureau also conducts career seminars and Career Exhibitions in Higher Secondary Schools in Kottayam District. The career seminars are having half day duration and experienced resource persons are invited for the purpose. The career seminar focuses on motivating the students for higher studies, how to select a course, various courses after plus two. Bureau prepared more than 100 charts about higher studies and courses and these are also exhibited along with the career seminar.

10) SOFTSKILL DEVELOPMENT PROGRAMME

Soft skills are a combination of interpersonal people skills, social skills, communication skills, character traits, attitudes, career attributes, social intelligence and emotional /intelligence quotients among others that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals with complementing hard skills. A person's soft skill is an important part of their individual contribution to the success of an organization.

The Bureau conducted soft skill training programmes. The duration is 3-5 days. Group discussion and mock interviews are conducted.

11) EMPLOYMENT INFORMATION BULLETIN

The Guidance Bureau collects details of job opportunities through Kerala Public Service Commission, Railway Recruitment Board, Staff Selection Commission, Union Public Service Commission etc. and publishing a fortnightly Bulletin named **“Thozhil Avasarangal Otta Nottathil”**. This Bulletin is forwarded to various Public Libraries, Employment Exchanges and interested career seekers. 12 employment information bulletin published.

12) JOB FAIR

The National Employment Service Department conduct mega jobfair name ‘NIYUKTHI’ to help job seekers in finding better employment in private sector. The location is often Ernakulam district . The Guidance Bureau give wide publicity in university about the programme. A large number students of this University has participated in this programme.

NATIONAL SERVICE SCHEME

Activities

- World Population Day- July 11th , 2017
- Free Medical Camp – July 15th, 2017
- National service Scheme, Mahatma Gandhi University conducted a Free Medical Camp on July 15th, 2017 at KE College, Mannanam.
- Volunteer Secretary Training Camp- Mahatma Gandhi University

- 30th June, 2017- 2nd July, 2017
- National Service Scheme, Mahatma Gandhi University conducted the inauguration of Jaivam 2017 at BPS College, Piramadam.
- Free Medical Camp – July 15th, 2017 at KE College, Mannanam.
- Volunteer Secretary Training Camp at BK College Amalagiri from 30th June, 2017- 2nd July, 2017
- Inauguration of Jaivam 2017

National Service Scheme, Mahatma Gandhi University conducted the inauguration of Jaivam 2017 at BPS College, Piramadam.



NSS Awards 2017-18

Mahatma Gandhi University bagged the following awards instituted by the Govt. of Kerala for the activities of National Service Scheme during 2017-18.

- St. George's College Aruvithura (Best NSS Unit)
- Pooja P.B. (Baselius College Kottayam) & Navya Yesudas (St. Xavier's College for Women, Aluva) (Best NSS Volunteers)
- Siny Jacob (Best Programme Officer)

8.Plans of institution for next year

School of Behavioural Sciences

- Conduct of 4 National and one international seminar on topics related to psychology, rehabilitation, special education and research
- Conduct of poster exhibition and awareness classes on disability prevention and rehabilitation in the community
- Establish academic and research collaboration with palliative care centres and institutions working in the area of disability prevention and rehabilitation
- Establish more academic and Research collaborations with National and International agencies
- Submit research project proposals and obtain sanction for the same
- Expand the activities of the Vocational Rehabilitation Centre and Counselling Centre of the School
- Utilize the facilities available in Inter University Centre for Disability Studies (which is a part of the School) to strengthen the academic, Research and extension activities of the School

School of Chemical Sciences

- Purchase and installation of Sophisticated instruments for research
- Organizing seminars/workshops/invited lectures/lecture series by research students
- Construction of a P. G. laboratory block.
- Implementing short-term courses

School of Computer Sciences

- Promote the use of MOOC Courses through SWAYAM.
- Enhance the overall research output by making the HPC (High Performance Computing) facility operational. The School has plans to strengthen research in big data analytics contributing to various data intensive scientific computational requirements using high performance computing.
- Enhance the existing Cloud Computing Facility by adding more servers utilizing the funding of DST-PURSE scheme for second year.
- Conduct National/International conferences and workshops.
- Conduct more Capacity Building and Knowledge Upgradation programmes for faculty members and M Sc/M Tech/M Phil and Research students of the School.
- Enhance activities of the placement cell by continuing the practice of conducting skill development programmes and remedial programmes in a regular manner.
- Enhance the overall infrastructure of the School.

School of Gandhian Thought & Development Studies

- Introduction of Open Screener courses in special fields of knowledge
- Audio visual documentation of history of national movement
- Publication of Monographic and Occasional paper in Kerala
- Publication of journals
- Development of e-learning materials
- International exchange Programme

School of Management & Business Studies

- Submitted annual plan proposal to the Govt for starting Centre for contemporary Management Research and Skill Development.

School of Pedagogical Sciences

- Buying new books to the library of the School.
- Strengthening of Infrastructure Facilities.
- Campus cleaning and Beautification.
- Time bound assessment and declaration of results.
- Workshops on innovative themes like Life skills.
- Providing more number of computers to the Technology Lab.
- Conducting guest talks on research methodology
- Renovation of the Technological Lab.
- Conduct of orientation programmes
- Innovations in Research programmes.

School of Physical Education & Sports Sciences

- Inter collegiate tournaments for 2018-19 will be commenced from September 2018 onwards. Players for MGU team for AIJU competition will be selected from the Inter collegiate tournaments.

Department of Lifelong Learning & Extension

- Pooling UBA fund for the implementation of the Tribal farmers organic farming project.
- Aims to start the newly sanctioned courses
- Planning to start another civil service coaching institute at Maharajas College

Advanced Centre of Environmental Studies and Sustainable Development

- Enhancement of research activities in the various research divisions of the Centre
- To strengthen the linkages already established with various institutions within the country and abroad
- To conduct 1 international conference, 1 national conference and 1 workshop
- To conduct environmental awareness programmes to school students and teachers
- To extend environmental consultancy services to various groups
- To carry out short term courses
- To start a certificate programme on waste management

Inter University Centre for Disability Studies

- Proposed to start vocational training centres with the support of various extension centre of IUCDS.
- Training programme for the parents and teachers of children with special needs (CWSN) especially guidance and counselling
- Proposed conduct short term courses in IUCDS in Counselling, Autism, Down syndrome and Learning Disabilities.
- Awareness classes will be conducted for the parents CWSN.
- Training and research work in the field of special education to enhance the capacity of resource teachers in the field of special education..

Advanced Molecular Materials Research Centre

- To establish a well equipped materials research lab at CAC
- Diversification of research activities (Research networking)
- Offer research fellowships
- Procuring more equipments which can be shared for other depts:
- Induction of new research personnels
- International conference in every year
- Bringing out more research publications in high impact journals
- Publishing books and Reviews
- Submission of more research proposals useful for industries

Centre for Yoga and Naturopathy

Going to start courses on Yoga

Institute for Contemporary Chinese Studies

- **Semester Abroad Study Programme:** Semester Abroad Study Programme whereby students from Mahatma Gandhi University will spend one semester in China and specialize in course modules related to China. On the other hand, Chinese students shall spend one semester in Mahatma Gandhi University, focusing on India studies;.
- Initiate MPhil/PhD programmes on Chinese studies in association with SIRP during the academic year 2018-19
- Visiting Faculty and Lecture series
- Chair on Chinese Studies
- To initiate collaborative research programmes in the areas of higher education reforms, development models, local governance, urbanization, Chinas global engagements etc. with Chinese and other foreign universities;
- Organize an international conference on China during October 2018 in association with National and International Partners;
- Initiate certificate and language courses in Chinese language for the Students, Faculty, Researchers and the Public.
- Initiate various programmes for creating awareness on China and Chinese Studies;
- Organize seminars/workshops during 2018-19 in association with national agencies and various centers of Mahatma Gandhi University
- Institute Post-Doctoral/Research fellowships on China/China-India Studies to the students and scholars from India and abroad.

Databank on china

The ICCS shall set up an authentic and reliable database on China. The Database shall provide knowledge and information on all aspects of Chinese Society, Polity, Economy, Environment, International Relations etc that will be useful to students, research scholars, academics and policy makers. Besides, the Database will be beneficial to all stakeholders such as industries, researchers, NGO's and media.

University Centre for International Co-operation

- International seminar on “e-learning opportunities in global Education” during October under Seminar/Syposium/Conferences
- International Students Meet during September under Extension Programme
- Initiation of India Study Programme
- Conduct of International Faculty Development Programme during December 2018
- MOOC course on “Understanding India” under India Study Programme
- Preparation of Guidelines for Semester Abroad Programme
- Initiating steps for the Construction of International Hostel
- Possibility of a new Office space with a modern front office

School of Tourism Studies

- The Government of Kerala has sanctioned Rs. 10 Crores for the construction of a customized building for the School of Tourism Studies. The amenities, labs etc planned according to the specifications of the national bodies like NCHMCT will cater to the requirements of all tourism management, hospitality management and doctoral students and will help the institution to develop and enhance academic collaboration and exchange programmes with the leading institutions in the world.
- Resource mobilization through Tourism Business Incubation and Consultancy Cell.
- To continue pioneering studies on Barrier Free Tourism in the various Destinations of Kerala.

*Name: Prof (Dr) C T Aravindakumar Name: Prof (Dr) Sabu Thomas,
Vice Chancellor(i/c)*

*Sd/
Signature of the Director, IQAC*

*Sd/
Signature of the Chairperson, IQAC*

Priyadarsini Hills,

31/12/2018

ANNEXURE

School of Behavioural Sciences

General academic/extension activities

- Organized a number of training programmes for different sectors of the society to empower them in the area of disability prevention, detection and rehabilitation.
- Organized seminars and workshops in the area of mental health and disability and facilitated active participation of students from Nursing, Physiotherapy, Medicine, Education and other allied disciplines to have a team approach in rehabilitation
- Organized and conducted home visits to identify the problems of persons with disabilities and their care givers in the actual family situation
- Organized and conducted debates and discussions in connection with the observance of various relevant national and international days of importance.
- Field visits to palliative care centres, special schools and various rehabilitation centres were arranged to enhance knowledge and develop positive attitude for working among persons with various disabilities
- Rendered extension services in the community through a series of knowledge generating skill building seminars and workshops named Jyothirgamaya and Naipunya
- Conducts a vocational Rehabilitation Centre for adult mentally challenged adults
- Has a guidance and counselling centre which provide psychological assessment and services to the needy free of cost
- Orukkam2017 initiated through NSS Campus unit to extend academic support to students from weaker sections residing in a neighbouring colony. The students of the department who are active NSS volunteers visited bedridden patients in low income group residing in the neighbouring panchayat and distributed food kit during Onam festival season.
- There is a Guidance and Counseling Centre through which counseling services are imparted. In addition to these, students of each batch have a faculty coordinator to mentor, supervise and counsel.

Books published by faculty through reputed publishers

- Sign Language :Connecting Minds by Dr.K.M.Mustaffa & Anagha M.M

Published by: Department of Indian Sign Language

Research papers published by faculty in peer reviewed journals

- Functional abilities of adults with intellectual disability, Dr.P.S.Sukumaran, School of Behavioural sciences, Disabilitis and impairment, Vol.32,
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- Asim M., Rajesh E, et.al., (2018) Influence of Genetic Susceptibility in Visual Impairment Journal of Bio Medical Sciences.

Participation in seminars/conferences/committees of faculty members

- Dr.K.M.Mustaffa, Hon.Director, Institute of Research in Learning Disabilities (IRLD), &Asst.Professor, School of Behavioural Sciences Organized Ten days Advanced Certificate Course in Counselling, at the School from 1st to 10th January 2018.
- Dr.Rajeev Kumar N, Associate Professor, School of Behavioural Sciences Organized two days continuing rehabilitation education programme for rehabilitation professionals

in collaboration with CRC Kozhikode and Rehabilitation council of India on 6th and 7th February 2018

- Dr.K.M.Mustaffa, Hon.Director ,Instistute of Research in Learning Disabilities,& Assistant Professor, School of Behavioural Sciences Organized two days National Seminar on ‘Trends and Developments in the Education and Rehabilitation of children with hearing impairment on 26th· 27th February 2018 in association with AWH college of special education ,Kozhikode and Rehabilitation council of India ,New Delhi at AWH College , Kozhikode.
- Dr.Rajeev Kumar N, Associate Professor, School of Behavioural Sciences Organized an Invited talk by Dr.John Baby on ‘Psychology of Nutrotrion’ at the school on 08.03.2018.
- Mrs. Rincy mol Mathew , Associate Professor, School of Behavioural Sciences Organized One Day seminar in connection with the observation of International Womans Day on 08.03.2018, in collaboration with Department of Life Long Learning M.G.University
- Dr.K.M.Mustaffa, Faculty in charge, Department of Indian Sign Language
- & Asst. Professor, School of Behavioral Sciences, Organized two days National Conference on Indian sign language in collaboration with indoor Deaf Billilingual Academy, and Rehabilitation council of India, New Delhi on 16th and 17th March 2018.
- Organized an International Seminar on Higher Education of Persons with Disabilities- Cross Cultural perspective, in collaboration with School of Pedagogical Sciences, Mahatma Gandhi University, on 05.07.2017 at School of Pedagogical Sciences Auditorium.
- Organized two days National Workshop School of Pedagogical Sciences, Mahatma Gandhi University, on 05.07.2017 at School of Pedagogical Sciences Auditorium.on Clinical Hypnotherapy at School of Behavioural Sciences on 24-25, July 2017
- Organized a general body meeting of the Research Scholars of the school on 04.08.2017
- Organized one day seminar and a Panel Discussion on Blue Whale – suicide game’ in the school , on 23.08.2017
- Organized two days International workshop on Qualitative Research methods for Behavioral sciences, in collaboration with The University of Northampton, UK 26-27 September 2017 at School of Behavioral Sciences.

- Organized one day International workshop on Understanding and Supporting Children with Autism, in collaboration with The University of Northampton, UK on 28.09.2017 at School of Behavioural Sciences.
- Dr.K.M.Mustaffa, Asst.Professor, School of Behavioural Sciences Organized a One Day Seminar on Research Methodology on 08.11.2017
- Dr.Rajeev Kumar N, Associate Professor, School of Behavioural Sciences Organized a Three Days workshop on Psychological Assessment: Rorschach, from 09.11.2017 to 11.11.2017.
- Institute of Research in Learning Disabilities of the School, in collaboration with the AWH college of Education, and the Council for Research and Management of Learning Disorders Kozhikode Organized Two Days International Seminar on Educational and Psychological Perspectives of Learning Disorders , ISLD, 2017 at EMS Seminar Complex , University of Calicut on 17-18 November 2017
- The School observed The International Disability Day with Essay Competition, Quiz poster Exhibition, and Seminar on 04.12.2017.
- As a part of the Annual Day celebration of the Behavioural Sciences Students, Staff and Teachers Association (BESTA) One Day Seminar was organized in the School on Trends and Issues in the Rehabilitation of Persons with Disabilities on 20.12.2017.

School of Bio Sciences

General academic/extension activities

Seminars and workshops conducted/ organized by the School:

- Two day seminar on “New Avenues in Bioscience Research” conducted at School of Biosciences, M.G.University, Kottayam from 19th& 20th March 2018.Supported by DST-PURSE.

- -One day seminar “DAYA-2018” jointly organized Animal husbandry dept .Kottayam & School of Biosciences in connection with animal welfare week conducted at School of Biosciences, M.G.University, Kottayam on 29th January 2018.
- -National seminar on “MISSION 3A –Awareness Against Antibiotic Resistance conducted at School of Biosciences , M.G.University, Kottayam from 16th-17th November 2017.
- National seminar on “Ecotechnological Perspective for Sustainable Development conducted at School of Biosciences , M.G.University, Kottayam from 27-28th July 2017
- The school offers Bridge courses as required, Mentoring students on lab to field process, Research Lab visit for MSc.Students aiming Research familiarization.

Books published by faculty through reputed publishers

Book Chapters:

- Sunil M.A.,Sunitha V.S.,E.K.Radhakrishnan and Mathew Jyothis Boook Chapter entitled “Immunomodulatory effects of common indian traditional medicinal plants: A review in Plant Science Technology for sustainable development ISBN No.978-93-82845-00-3
- Keerthi Thalakkattil Raghavan &Glindya Bhagya Lakshmi. “Formulation of Probiotic Based Functional Fish Feed: An Environment Friendly Approach”. Book name: Fish for Human Health. Apple Academic Press.

Research papers published by faculty in peer reviewed journals

- Polyphenol rich ethanolic extract from Boerhavia diffusa L.mitigates angiotensin II induced cardiac hypertrophy and fibrosis in rats, A.Prathapan, Mathews V Varghese, R.Harikumaran Nair, S.Abhilash, P.Salin Raj, Anil K.Mathew, Anupama Nair, 26 12 2016
- Attenuation of arsenic trioxide induced cardio toxicity through flaxseed oil in experimental rats, , Mathews V Varghese, , M.Abhilash, Manju Alex, M.V.Sauganth Paul A .Prathapan , K.G.Raghu & R.Harikumaran Nair 17 feb 2017 ISSN 1351-0002

- Studies on curative efficacy of monoterpene eugenol on anti-leukemic drug arsenic trioxide induced cardiotoxicity, R.Harikumaran, R.C.Vineetha 599-566, 19.04.2017
- Betulinic acid, natural pentacyclic triterpenoid prevents arsenic – induced nephrotoxicity in male Wistar rats, R.C.Vineetha, , R.Harikumaran, Binu Praksh, Abhilash Surendran , 2018, 37-44
- Eugenol , a plant –derived phenolic nutraceutical, protects thiol (SH)group in myocardium from ROS –mediated oxidation under chemotherapeutic stress induced by arsenic trioxide – a in vivo model study , P.Binu, K.Gifty, R.C.Vineetha, S.Abhilash, P.Arathi, & R.Harikumaran Nair, ISSN 0148-0545, 26 01.2018,
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- Edna Mary Varghese, M.S. Jisha (2018). In situ Bioremediation of Chlorpyrifos by *Klebsiella* sp. isolated from pesticide contaminated agricultural soil. International Journal of Current microbiology and applied sciences (IJCMAS). *Int.J.Curr.Microbiol.App.Sci* (2018) 7(3): 1418-1429. doi: 10.20546 /ijcmas.

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- Aswani P., Tijith K.George and Jisha M.S.(2017) Characterization of bioactive metabolites of endophytic *Fusarium solani* isolated from *Withania somnifera*. Journal of Biologically Active Products from Nature
- Linu M.S and Jisha M.S (2017).In vitro control of *colletotrichum capsici* induced chilli anthracnose by fungicides and biocontrol agent. International journal of applied and pure Science and agriculture.Vol.3 (5) 27-33
- Production and optimization of extracellular l-asparaginase by *fusarium solani* isolated from *withania somnifera*.Journal of biologically active products from nature .Pages 81-88
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- Vysakh A, Kuriakose Jayesh, Lal Raisa Helen, Mathew Jyothis, MS Latha. Acute oral toxicity and anti-inflammatory activity of methanolic extract of *Rotula aquatica* Lour. roots in Wistar rats. Journal of Ayurveda and integrative Medicine.(Article in press).(2018). <https://doi.org/10.1016/j.jaim.2017.09.007>. (Elsevier)
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- Suma D, Vysakh A, Latha MS, Molecular pathways in non-alcoholic fatty liver disease an emerging menace: A mini review. *Austin Hepatology*. 2017; 2(1): 1005.

Participation in seminars/conferences/committees of faculty members

- Anjana George, Haritha V H, Anie Y. Characterization of citrullinated histones. . In the proceedings of 27thSwadeshi Science Congress at Amrita Viswavidyapeetham from 7-9 Nov, 2017.
- Anjitha Ajith, Anie Y. 6-Shagaol and piperine inhibit peptidyl arginine deiminase- 4 enzyme. . In the proceedings of 27th Swadeshi Science Congress at Amrita Viswavidyapeetham from 7-9 Nov, 2017.
- Haritha V H, Binchu V Shaji, Hazeena V N, Anie Y. Neutrophil extracellular traps influence atherosclerotic events. . In the proceedings of 27th Swadeshi Science Congress at Amrita Viswavidyapeetham from 7-9 Nov, 2017
- Maya Rajan, Unnimaya S L, Rakhi Rajan R S, Anie Y, Linu Mathew. Evaluation of anti-diabetic activity of callus culture of vernonia anthelmintica (L.). . In the proceedings of 27th Swadeshi Science Congress at Amrita Viswavidyapeetham from 7-9 Nov, 2017.
- Binchu V shaji, Haritha V H, Anie Y. Calcium depletion favors vesicular NETosis. . In the proceedings of National seminar on recent trends in Zoological research at department of zoology, university of Kerala from 19-21 Feb, 2018
- Haritha V H, Binchu V shaji, Anie Y. Effect of citrullinated histone on blood clotting. . In the proceedings of National seminar on recent trends in Zoological research at department of zoology, university of Kerala from 19-21 Feb, 2018
- Jyothilakshmi M.,Jyothis Mathew, Lal Raisa Helen and M.S.Latha cyclooxygenase,lipoxygenase,Myeloperoxidase and nitric oxide synthase inhibiting activity of zeumbone-An invitro study using THPI cell line International conference on traditional and alternative medicine Organized by department of Biochemistry.St.Thomas College ,Pala on 18&19 Sept 2017 (Abstract)
- Soumya das ,Radhakrishnan E.K. and Jyothis Mathew Diversity, Virulence factors and antibiotic resistance of Bacterial isolates from diseased *Xiphophorus helleri* 27th Swadeshi science congress organized by Swadeshi Science Movement-kerala in

association with Amrita Viswa vidyapeetham, Amrita University, kollam 7-9 November, 2017 (Abstract)

- Vysakh A., Jayesh Kuriakose, Jyothis Mathew and M.S. Latha. Phytochemical screening and in vitro antioxidant evaluation of methanolic extract of *Rotula aquatica* Lour roots at 27th Swadeshui science congress organized by Swadeshi Science Movement-kerala in association with Amrita Viswa vidyapeetham, Amrita University, kollam 7-9 November, 2017 (Abstract)
- Jyothilakshmi M., Jyothis Mathew, Helen Raisa Lal and M.S. Latha “Flowers of *Mikania micrantha* Kunth-A pharmacological study in relation with dermatophytosis Proceedings of International Conference on Advances in degenerative diseases and molecular interventions (ADDMI 2017) organized by society for research on degenerative diseases on 23-24 Nov. 2017 (Abstract)
- Vysakh A., Sebastian Jose midhun, Mathew Jyothis and M.S. Latha Identification of virulence factors of *Escherichia coli* isolated from patient with acute Pyelonephritis Proceedings of two day international conference on frontiers in Bioscience, organized by department of Bioscience, SNGIST Arts and science college, N. Paravur on nov 15-16 2017 (Abstract)
- Sebastian J. Midhun, Sahadevan Neethu, A Vysakh, Damodaran Arun E.K. Radhakrishnan, Mathew Jyothis Probiotic characterization of autochthonous *Paenicillus polymyxa* isolated from *Anabas tesudineus* (Bloch, 1792) Proceedings of two day international conference on frontiers in Bioscience, organized by department of Bioscience, SNGIST Arts and science college, N. Paravur on nov 15-16 2017 (Abstract)
- Sebastian J. Midhun, Sahadevan Neethu, A Vysakh, M.A. Sunil and Mathew Jyothis
- Bactericidal activity and invitro probiotic characterization of autochthonous bacteria isolated from *Anabas testudineus* (Bloch, 1792) Abstracts 30th Kerala Science Congress organized by KSCSTE CWRDM at Government Brennen College, Thalassery on 28-30 January 2018

- Jisha M.S (2018) Role of Plant microbiomes in sustainable agriculture. Key Note Address for Second International Seminar on “Emerging trends in organic farming and sustainable agriculture” organised by Inter University Centre for Organic Farming and Sustainable Agriculture (IUCOFSA), Mahatma Gandhi University at CMS College Kottayam on 22-24 April 2018.
- Edna Mary Varghese, Aswani P. and Jisha M.S (2018) *In situ* Biodegradation studies of Chlorpyrifos pesticide using *Pseudomonas putida* isolated from pesticide contaminated agricultural soil. Oral presentation for Second International Seminar on “Emerging trends in organic farming and sustainable agriculture” organised by Inter University Centre for Organic Farming and Sustainable Agriculture (IUCOFSA), Mahatma Gandhi University at CMS College Kottayam on 22-24 April 2018.
- Karthika S. and Jisha M.S (2018) multifarious potential of rhizobacteria against tomato pathogens. Oral presentation for Second International Seminar on “Emerging trends in organic farming and sustainable agriculture” organised by Inter University Centre for Organic Farming and Sustainable Agriculture (IUCOFSA), Mahatma Gandhi University at CMS College Kottayam on 22-24 April 2018.
- Smitha Vijayan and Jisha.M.S (2018) Characterization and Antioxidant, Antibacterial, Antibiofilm Efficacy of biogenic Silver-Chitosan Nanoconjugates. Best paper award in BIOCONSORTIUM 2018 (National conference on microorganisms in human welfare, organised by Department of Microbiology, Madras Christian College on February 27-28, 2018.
- Smitha Vijayan and Jisha.M.S (2018) Aantioxidant, antibacterial and antibiofilm activity of biogenic silver chitosan nanoconjugate. Contest paper for 30th Kerala Science Congress on January 28-30, 2018.
- Edna Mary Varghese and Jisha.M.S (2018) Bioremediation of chlorpyrifos, an organophosphate pesticide, using *Pseudomonas putida*. Oral presentation for 30th Kerala Science Congress on January 28-30, 2018.
- Karthika and Jisha.M.S (2018) Isolation and identification of potential rhizobacteria from tomato rhizosphere against soil borne diseases of tomato Poster presentation for 30th Kerala Science Congress on January 28-30, 2018.

- Tijith K George “Characterization of antibacterial metabolites from *Penicillium* sp” at ICMS 2017, School of Environmental sciences on Dec 11-14.

Ongoing projects

- Jisha.M.S. Bioremediation of Chlorpyrifos by autochthonous microbial consortia funded by KSCSTE (25 Lakhs)
- Keerthi.T.R. ‘Exploration of honey bee gut microbiota for industrial and therapeutic applications’ (SB/EMEQ-137/2013) DST-SERB, New Delhi. 2013-2017.Amount: 30,36,400
- Dr. Radhakrishnan E.K. (Co-ordinator) SARD Programme support from KSCSTE to School of Biosciences, Mahatma Gandhi University (21.25 Lakhs) (2014-2017).
- Dr. Radhakrishnan E.K. (Principal Investigator) and Prof. (Dr.) Jyothis Mathew (Co-Investigator) Major Project from KSCSTE, 25 Lakhs, “Studies on molecular and chemical basis of plant growth promoting and anti-phytopathogenic properties of rhizosphere microorganisms” (2015 - 2018).
- Dr.J.G.Ray. KCSTE Major Project (26.6 lakhs): Collection, identification and screening of green algae from bloomed water bodies of Kerala for quality of lipid (2015-2018) KCSTE No. 229/2015/KCSTE dated 23-06-2015
- Dr.Aniey.Y Back to lab programme (13 Lakhs) Immunomodulatory effect of beta – glucan on neutrophil functions in Diabetes mellitus (NO 1368/2014/KSCSTE).
- Dr.Jayachandran.K. Back to lab programme entitled “Identification, isolation and characterization of Acyl Homoserine Lactone-mimic compounds from selected plants”Kerala State Council for science, Technology and Environment (KSCSTE) for an amount of Rs. 6.9 lakhs (2015-2017).

Research awards/ recognitions received by faculty and research fellows

- Mr. Sreejith S has got the The Student entrepreneurship award 2018 by Business Innovation and Incubation Centre, Mahatma Gandhi University on 17th March 2018 at the launching of BIIC-IUCOFSA student start-up programme (BIS2018)

- Best Paper Award National seminar on recent trends in Zoological research at department of zoology, university of Kerala. Feb 19-21, 2018 - Haritha V.H.
- Best paper presentation award for Divya R. at the National seminar SYMBIOSIS 18 organised by SAFI institute of advanced studies, Vazhayoor on .March 15 to16, 2018.
- Best paper presentation award for Smitha Vijayan at the National conference on microorganisms in human welfare (BIOCONSORTIUM 2018), organised by Department of Microbiology, Madras Christian college on February 27-28, 2018.

Faculty served as experts, chairpersons or resource persons

Keerthi.T.R

- Member Academic Council-Mahatma Gandhi University
- Chairperson,PhD Doctoral Committee of Biosciences
- Governing Body Member(University nominee)St Albert Autonomous college,Ernakulam
- Co-Ordinator-DST –PURSE(PII),Mahatma Gandhi University(2016-2020)
- Co-Ordinator DST-FIST(L-I),School Of Biosciences,Mahatma Gandhi University.
- Chairperson, Institutional Animal Ethical Committee, Mahatma Gandhi University
- Former Convenor,Expert committee of M.Sc.Biotechnology,Mahatma Gandhi University
- Member, Board of Studies, (Biosciences), Mahatma Gandhi University.
- Member, Board of studies Microbiology (PG) Mahatma Gandhi University
- Member Board of Studies, Microbiology (PG&UG), Kannur University(Former & Present).
- Member Board of Studies Microbiology (PG & UG),Calicut University.
- Subject Expert Women back to lab programme KSCSTE Thiruvananthapuram
- Member,(former & present) Anti harrasment Cell Mahatma Gandhi University.
- Member (Former & Present) SC/ST monitoring cell of Mahatma Gandhi University
- Member Institutional Biosafety Committee, Mahatma Gandhi University
- Former Convener expert committee of B.Sc., Biotechnology, Mahatma Gandhi University
- Former Warden, Ladies Hostel, Mahatma Gandhi University.

- Member, Board of question paper setters and examiner in Biotechnology, Kannur University.
- Member, Board of question paper setters and examiner in Biotechnology and Microbiology (B.Sc.,M.Sc and MPhil), Calicut University.
- Member, Board of question paper setters in Biotechnology (M.Sc&B.Sc) KeralaUniversity.
- Member, Board of question paper setters and examiner in Biotechnology (MSc,Mphil&Ph.D. qualifying), Cochin University of Science and Technology.

Membership in Scientific Societies

- International Probiotics Association (IPA), Zurich, Switzerland
- Asian Federation of Biotechnology (AFOB), Korea
- Indian Dairy Association (IDA), New Delhi
- Society for Biotechnology (India)
- Association of Microbiologist in India (AMI), India
- Kerala Science Academy.

Reviewer

- Iranian Journal of Biotechnology
- Biotech
- Brazilian Journal of Microbiology

Dr.Jisha

- Coordinator National Institute of Plant Science Technology
- Member – Board of Studies in Microbiology, Calicut University
- Subject Expert – Board of Studies in Microbiology, SB College, Changanassery
- .Member, Board of Studies, (Biosciences), Mahatma Gandhi University.
- Member, Board of studies Microbiology (PG&UG) Mahatma Gandhi University
- Member Board of Studies, (Microbiology PG&UG), Kannur University

- Subject Expert Women back to lab programme KSCSTE Thiruvananthapuram
- Member Institutional Biosafety Committee, Mahatma Gandhi University
- Member, Board of question paper setters and examiner in Biotechnology, Kannur University.
- Member, Board of question paper setters and examiner in Biotechnology and Microbiology (B.Sc.,M.Sc), Calicut University.
- Member, Board of question paper setters in microbiology (M.Sc&B.Sc) Kerala
- Member, Board of question paper setters and examiner in Biotechnology (MSc), Cochin University of Science and Technology.

Membership in Scientific Societies

- Society for Biotechnology (India)
- Association of Microbiologist in India (AMI), India
- Kerala Science Academy.
- Member Society for Fisheries Technologist (India)
- Member Indian Science Congress Association

Dr.Aniey

- Member- Board of studies, M.Sc Microbiology, Mahatma Gandhi University
- Member- Expert committee, M.Sc Biochemistry, Mahatma Gandhi University
- Member- Board of studies, Biotechnology, Kannur University
- Member – Board of question paper setters Kannur University.
- Member – Board of question paper setters, University Of Calicut.
- Member – Board of question paper setters University Of Kerala.
- Member- Board of examination, M.Sc Biochemistry, Mahatma Gandhi University.
- Member – Animal ethical committee, M G University, Kottayam.
- Member – Biosafety committee, M G University, Kottayam
- Faculty –in-charge of Animal House, M G University, Kottayam

Dr.,Jyothis Mathew

- Chairman,Board of Studies (UG) in Microbiology Mahatma Gandhi University, Kottayam
- Chairman,Board of Studies (PG) in Microbiology Mahatma Gandhi University, Kottayam
- Member, Board of Studies in Biosciences, Mahatma Gandhi University, Kottayam
- Chairman, Core Committee in Medical Microbiology (UG&PG Combined)

A. Ph. D. Awarded by Faculty

Dr..Jyothis Mathew

Immunomodulatory effects of traditional thirst quenchers in Kerala by Sunitha V. S.in March 2018

Dr.Keerthi.T.R.

“Biotechnological Application of Probiotics in Aquaculture”by Glyindya Bhagyalakshmi

Dr.Jisha

- Bioremediation of chlorpyrifos, an organophosphate pesticide by autochthonous bacterial consortium (Elizabeth Mary John), 2017
- *Pseudomonas taiwanensis* (MTCC 11631) mediated control of Anthurium blight caused by *Xanthomonas axonopodis* pv. *dieffenbachiae* (Dhanya S), 2017
- Chitosan nanoparticles synthesized from *Penaeus monodon* as a plant defense elicitor against rice sheath blight pathogen *Rhizoctonia solani* (Divya K), 2018

Dr.Aniey.Y

- Hazeena V.N. (SRF, DBT-MSUB, IPLSARE) - Aldose reductase inhibitory potential of *Vernonia anthelmintica* (L.) Willd- Thesis submitted
- Surya P. Rajendran (Research fellow)-)- Fibrinolytic enzyme from *Bacillus* species: Characterization and application studies –PhD awarded

Dr.M.S.Latha

- Hemand Aravind (2017) Biochemical studies on *Heracleum candollenaum* (Wight et Arn.) Gamble
- Binil Eldhose (2017) Evaluation of anticancer and antioxidant activity of *Plumbago*

indica.

- Sagi T.M (2017) Natural Rubber Latex Allergy: Occupational Exposure to Latex Gloves among Clinical Laboratory workers.
- Jayesh Kuriakose (2018) Thesis submitted

Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Visit to Najeewan trust a house for mentally ill.
- Conducted an awareness programme Bodhani about Healthy Life Style. Awareness programme on Cyber Crime, A public seminar on prevention on cruelty against animals.

School of Chemical Sciences

Research papers published by faculty in peer reviewed journals

- Applications of Pybox complexes in asymmetric catalysis, S.A. Babu, K. Keerthi Krishnan, S.M. Ujwaldev, G. Anilkumar, Asian J. Org. Chem, 2018, 7, 1033 (IF.2.496)
- Recent Developments and perspectives in the asymmetric Mannich reactions, S. Saranya, N.A. Harry, K. Keerthi Krishnan, G. Anilkumar, Asian J. Org. Chem, 2018, 7, 613 (IF.2.496)
- Zinc catalysed etherification reaction of aryl iodides with phenol, N.A. Harry, K. Keerthi Krishnan, S.M. Ujwaldev, G. Anilkumar, Chemistry select, 2018, 3, 3984, (I.F.1.505)
- Recent Developments and perspectives in the Zinc catalysed Michael addition, K.R. Rohit, S.M. Ujwaldev, K. Keerthi Krishnan, G. Anilkumar, Asian J. Org. Chem, 2018, 7, 85 (IF.2.496)
- Recent advances and perspectives in the zinc-catalysed nitroaldol (Henry reaction), S. Saranya, N.A. Harry, S.M. Ujwaldev, G. Anilkumar, Asian J. Org. Chem, 2017, 6, 1349 (IF.2.496)
- Recent advances in the chemistry of Masked ortho-Benzoquinones and their Applications in Organic Synthesis, S. Saranya, N.A. Harry, K. Keerthi Krishnan, G. Anilkumar, Asian J. Org. Chem, 2017, 6, 945 (IF.2.496)

- G.Elssa, R.Remyasree, P.R.Sruthi, J.Jomon, S.Anas. Synthesis characterization and studies of Chemically modified poly(Acrylonitrile –Butadiene styrene)through nit rile functionalization , Sanathanam academic review. 2017, p.1-6
- Low band gap donor-Acceptor phenothiazine copolymer with Triazine segment: Design,Synthesis and Application for optical limiting devices :Sona narayanan, Anshad Abbas, C.Sudha Kartha, Rani Joseph, K.S.Devaky and KrishnapillaiSreekumar, Journal of Luminescence, 198(2018)449-456. ISSN0953-4075, if 2.686
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- Geometrical effect of 3D-Memory cavity on the imprinting efficiency of transition state analogue built artificial hydrolases: Divya Mathew, Benny Thomas and K.S.Devaky, Polymer Bullettin, 75. (2018) 3883-3896. ISSN: 0170-0839, if 1.430
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- Jisna Jose and Suresh Mathew Thermal decomposition and evolved gas analysis of Ammonium Nitrate /g C₃N₄ mixtures : : Poster Presented at International conference on Advanced Materials Science and Technology (icamst-2017), BIT, Sathyamangalam , TN 17-19 Aug 2017
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- Akash Chandran, Divya K.S, & Sureshmathew “A comparative study on the antibacterial activity of Ternary nanocomposites Ag/Gr/TiO₂ and AgGrZnO”. a paper presented at Indian analytical science congress 2018 organised by Indian society of analytical scientists kerala chapter and school of chemical sciences, M.G.University, Kottayam held at kumarakom , Kottayam on February 08 to 10 2018# Absno: 23, page no.55 of the abstract proceedings
- Synthesis of pyrimidines derivatives:Aparna E.P and K.S.Devaky,15th International conference on Science and Technology, engineering at VIT University Velloore, India , November 6-7, 2017
- Ashly Thomas and K.S.Devaky, Poster presentation in International conference on advances in new material on June 2018 and abstract no: AB-164(ICAN2018)
- Effect of Blend ratio and mixing techniques on carbon black filled NR/SBR/blends”, Abitha VK, Sabu Thomas, Malaysia Polymer, International conference (MPIC2017)July 19-20, 2017, University of Kebangsaan Malaysia.

Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Conducted a workshop on “Safe Handling of Chemicals and Management of Chemical Wastes in Laboratories
- Conducted workshop on Microscale Experiments

School of Computer Sciences

General academic/extension activities

The School of Computer Sciences is offering Degrees under the Faculty of Science and Faculty of Engineering and Technology, to encourage research culture into the minds of the students, the School organizes Conferences/ Workshops/ Seminars frequently on relevant and advanced technologies. Students are instructed to conduct seminars on latest research problems. The School library, fully computerized, has a very good collection of carefully selected reference books, periodicals and research journals (National & International).

Research papers published by faculty in peer reviewed journals

Handwritten Malayalam Compound Character Recognition system using Neural Networks	Sherin Mathew G , Dr.Vijayakumar R	International Journal “PESQISA “,Published by Pavanathma College , Murikkassery .(ISSN(print) -2455-0736) , ISSN(Online) -2456-4052) ,Vol:3; Issue : 2 , May 2018
Feature selection using Ant Colony optimization –A review on Heuristic Information Measurement	Leena C Shaker, M K Sabu , R.Vijayakumar	International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 3 (2018) Spl.
A Survey on Improving Cloud Security using Data Integrity	Naveen. N, R.Vijayakumar	International Journal for Scientific Research and development (IJSRD), September 2018, Vol:6; Issue : 7
Smart Environment Monitoring system	Neeraja P, R.,Vijayakumar, Affrin Pinhero	International Journal for Scientific Research and development (IJSRD), September 2018, Vol:6; Issue : 7

Internet of Things (IOTS) in Automated systems	Kiran V.K , R.Vijayakumar	IT GLIMPSE , December 2017 , SOCS, MG Uty.
Multilinear Principal Component analysis with Neural Network for Disease diagnosis on Big Data	Juby Mathew R.Vijayakumar	International conference on Recent Advances in Engg and Technologies(ICRAET_17), December 2017
A review on Graphical Models of Complex Network	Archana V Kumar , Jincy Elizhabath Varugese, R.Vijayakumar	International Journal of innovative research in Science, Engg and Technology, 9IJIRSET); V:6,Issue:8, August 2017 Impact factor : 7.089
Two Player Security Game Approach Based co-Resident DOS attack Defense Mechanism for Cloud Computing	Retheeshkumar S, R.Vijayakumar	Journal of Scientific research in Computer Science, Engg Information and Technology, 9IJIRSET); V:2Issue:2, August 2017, ISSN:2456-3307 Impact factor : 7.089
A review on Event Detection Techniques in Wireless Sensor Network	Mehanas Shahul, Sanu Thomas Vijayakumar,R,	International Journal of Innovative Implementation Research in Science , Engineering and Technology ; Vol.6,Issue :7,July 2017 Impact factor : 4.16
An Efficient co-Resident DOS attack Defense Mechanism for Cloud Computing using Two-Player Security Game Approach	Retheeshkumar S, R.Vijayakumar.	Journal of Inventive Engineering and Sciences (IJIES), Vol:4 ,Issue:7, December 2017, ISSN:2319-9598. Impact factor : 4.13
Principal Component analysis for Diseases Diagnosis	Juby Mathew R.Vijayakumar	International Journal on Information Technology (JIT'2017), I'Manager Publication, DOI : STTPS://doi.ord/10.26634/JIT.6.2.1356 9Impact factor : 0.725

- Smitha Anu Thomas and V.R. Bindu, 2017, “An Overview of Software Process Improvement Initiatives Promoting to the Growth of an Organization”, Journal of Engineering and Applied Sciences, Vol 12: Issue 24, pp.7525-7528, ISSN 1816-949X. (SJIR - 0.16) Scopus Indexed. DOI: 10.3923/jeasci.2017.7525.7528 URL: <http://medwelljournals.com/abstract/?doi=jeasci.2017.7525.7528>
- Devi Raveendran, Dr. Bindu V. R., “A Review on Cluster Based Architecture in Wireless Sensor Networks”, International Journal of Innovative Research in Science, Engineering and Technology, pp: 14664-14669, Vol. 6, Issue 7, July 2017, ISSN(Online): 2319-8753, ISSN (Print): 2347-6710. (IF- 6.209)
- Smitha Anu Thomas and Bindu V. R., “Assessing the Role of Software Process Improvement Efforts in Improving the Quality of Software”, Science and Society, Vol.15 No.1 Jan-June 2017, pp. 77-82, ISSN 0973-0206.
- Leeja Mathew, Bindu V. R., “An Overview Of Sentiment Analysis Based On Twitter Data”, Two Day State Level Conference on Deep Neural Networks In Bioinformatics, Vol. 5, Special Issue Oct 2017, pp. 26-29, ISSN: 2320-6985.
- Nimmol P. John, Bindu V. R., “Load Balancing of Virtual Machines in Cloud Data Centers – A Review ”, Two Day State Level Conference on Deep Neural Networks In Bioinformatics, Vol. 5, Special Issue Oct 2017, pp. 6-8, ISSN: 2320-6985.
- Nishad A, Sajimon Abraham, “Spatio Temporal Analysis of Moving Objects in Supply Chain Networks using Semantic Clustering”, **International Journal** of Research in Engineering and Applied Sciences (IJREAS), ISSN(O): 2249-3905, ISSN(P): 2349-6525 , Open Access Peer Reviewed journal, **Impact Factor: 7.196**, (July 2017)
- Saritha K, Sajimon Abraham, “Big Data Challenges and Issues: Review on Analytical Techniques”, **Indian Journal** of Computer Science and Engineering (IJCSE), ISSN(o) 0976-5166,ISSN(p) 2231-3850, Vol.8 No.3, Open Access Peer Reviewed Journal, **Impact Factor: 2.15** (Jun-Jul 2017)

- Benymol Jose, Sajimon Abraham, “Query Performance Analysis in NoSQL and Relational Databases: MongoDB Vs MySQL”, **International Journal** of Computer Sciences and Engineering ,Vol-6, Special Issue-4, E-ISSN: 2347-2693, Open Access Peer Reviewed journal, **Impact Factor: 3.022**, (May 2018)
- Pushpalatha.K.P, Raju,G Text Document Retrieval through Clustering using Meaningful Frequent Ordered Word Patterns, International Journal of Applied Engineering Research (IJAER) ISSN 0973-4562 Volume 13, Number 7 (2018) pp. 4822-833.
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- Natural language processing and artificial intelligence , Pushpalatha K.P, ITGLIPMS, 2017.18,
- Handwritten Malayalam Compound character recognition system using neural networks , Sherin Mathew G, AND Dr.R.Vijayakumar, ISSN: 2455-0736 ol.3, issue2,may 2018
- Feature selection using Ant colony optimization – A review on heuristics information measurement , R.Vijayakumar, 06.2018, issn- 0973-4562 Smart environment monitoring system , Dr.R.Vijayakumar ISSN: 2321-0613, Smart environment monitoring system , vol.6, issue.7,IF. 4.396, Dr.R.Vijayakumar
- Internet of things in automated systems ; Dr.R.Vijayakumar

Participation in seminars/conferences/committees of faculty members

- Greeshma M S, Bindu V. R., “Single Image Super Resolution using Fuzzy Deep Convolutional Networks”, Proceedings of 2017 IEEE International Conference on Technological Advancements in Power & Energy, TAPEnergy 2017, 21-23 Dec 2017, organised by the Department of Electrical And Electronics Engineering, Amrita VishwaVidyapeetham, Amritapuri Campus, pp. 300-305. Scopus Indexed

- Greeshma M. S, Bindu V. R., “Single Image Super Resolution: An Efficient Approach using Auto-learning and Filter Pooling”, Proceedings of the IEEE International Conference on Intelligent Sustainable Systems ICISS 2017, 7-8 Dec 2017, organized by SCAD Institute of Technology, Coimbatore, pp. 23-30, ISBN: 978-1-5386-1959-9. Scopus Indexed
- Manu John, Bindu V R, Arya B Nair, “Analysis of Different Clustering Algorithms”, Proceedings of the National Conference on Computational Intelligence in Social Science, Funded by ICSSR, MHRD and organized by Dept.of Computer Applications, MES Marampally, 2-3 March 2018.
- Greeshma M S, Bindu V. R., “Deep Self Trained Learning for Single Image Super Resolution”, 30th Kerala Science Congress organized by KSCSTE,CWRDM at Govt. Brennen College, Thalassery, 28-30 January 2018.
- Leeja Mathew, Bindu V. R., “An Overview Of Sentiment Analysis Based On Twitter Data”, Two Day State Level Conference on “Deep Neural Networks In Bioinformatics” Co-Sponsored by KSCSTE and organized by Department of Computer Applications, MES College, Marampally on 23rd& 24th August 2017.
- Nimmol P. John, Bindu V. R., “Load Balancing of Virtual Machines in Cloud Data Centers – A Review ”, Two Day State Level Conference on “Deep Neural Networks In Bioinformatics” Co-Sponsored by KSCSTE and organized by Department of Computer Applications, MES College, Marampally on 23rd& 24th August 2017.
- Smitha Anu Thomas and Bindu V. R., “Software Process Improvement Efforts as a Way to Improve the Quality of Software”, National Conference on Advanced Computing and Communication Technology 2017, ISBN 9789 3528 86869.

Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- The School collaborating as a nodal department with the Business Incubation and Innovation Centre (BIIC), Mahatma Gandhi University, conducted reviews of the student

start-up projects attached to the School on 13.7.17 & 27.9.17. The faculty of the School serve as mentors for the student start-up projects of BIIC.

- The School as part of Shasthrayaan- “Open House Programme” of the University, conducted a 2 day exhibition on 26th and 27th of February 2018. The aim of Shastrayaan was to highlight the overall research contributions and other academic activities carried out in the university through the various research and teaching schools and centers.
- INTERFACE 2017 - an annual IT Meet (IT competitions for PG students), organized by the School provided a platform for students in Computer Science and Technology from various Universities and Colleges in South India to exhibit their technical talents and also served as a forum for information interchange in the field.
- An annual technical publication ‘IT Glimpse’ is compiled and published by the students of the School includes research articles from Faculty, researchers, students and alumni of the School and both printed and online versions are published..
- The School organized a Quiz competition on “Socially and Educationally Inspired Women” at School on 9.3.2018 as part of International Women’s Day Celebrations.
- The School conducted many Seminars and Workshops for providing training to the Faculty and students of the School.

Computerization of Library

Library has been automated and all the books have been catalogued digitally using an open source software called KOHA. The library uses Web based Online Public Access Catalogue powered by KOHA to retrieve information about the available resources. Towards getting to complete automation, all the books in the library have been barcoded. To continue extending the e-services to various user community, the library has renewed the subscription to 169 IEEE e-journals for the year 2017 through university central library.

Computer, Internet access, training to teachers and students and any other programme for technology upgradation

- Well-equipped computer labs with a student machine ratio 1:1 are facilitated for all students. The campus wide network with broadband connectivity is accessible to the students in the lab throughout working time. A well-furnished smart class room with video conferencing facility is available in the School. School also conducts e-learning for students through Spoken Tutorial Project of MHRD.
- The School organized a 2-day DST-PURSE supported workshop on “Network Simulator-3” from 19.12.17 to 20.12.17.
- As part of strengthening the activities of the Placement Cell of the School, a 3-day Employment Readiness Foundation Programme for the students of School was conducted on 3,4 and 5,October,2017.
- The School organized a 5-day National Workshop on “Digital Image Processing, Pattern Recognition and Computer Vision using MATLAB” by Dr. Mahesh Anand, Founder and CTO, Scientific Computing Solutions India under the DST-PURSE (Phase-II) scheme from 8.1.2018 to 12.1.2018
- **Add-on courses**
As part of the Spoken Tutorial project(an initiative of NMEICT, MHRD, Govt. of India) students of the school are given short add on courses on different software and scientific and computational tools.

Industry Interaction / Collaboration

The School continuously keeps collaboration with various industries and other technical institutions. The students of the School are instructed to do their main projects in any of these industries or institutions. This enables the students to develop a solution to a fairly large problem in a real environment. This also helps the students to improve their self-reading, understanding and analyzing capabilities and to solve a complicated technical problem. The main project work enables the completion of a transition from a novice computer science student to a sophisticated computer professional.

Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- Submitted a proposal for starting a new Postgraduate programme “**Internet Programming and Web Technologies**” under Directorate for Applied Short Time Programmes.
- The setting up of the High Performance Computing Facility (HPC lab) of the School is nearing completion.
- One national workshop and three regional workshops were conducted as part of Capacity Building and Knowledge Upgradation programmes.
- As part of strengthening the activities of the Placement Cell of the School, a one-day workshop on “Enhancement of Softskills” was organized for students of the School on 21.7.17 and a 3-day Employment Readiness Foundation Programme for the students of School was conducted on 3,4 and 5,October,2017.
- Setting up of a new full-fledged smart class room is progressing.
- Collaborated with the Business Innovation and Incubation Centre of the University and K N Raj Centre for Economics in organizing a Special Lecture on “Innovation Lead Development in India and Africa: Prospects, Challenges and Grounds for Cooperation”, by Prof. Mammo Muchie, Research Chair at Tshwane University of Technology, Pretoria, South Africa on 1.8.2017.
- The School collaborating as a nodal department with the Business Incubation and Innovation Centre (BIIC), Mahatma Gandhi University, conducted reviews of the student start-up projects attached to the School on 13.7.17 & 27.9.17.
- As part of strengthening the activities of the Placement Cell of the School, a 3-day Employment Readiness Foundation Programme for the students of School was conducted on 3,4 and 5,October,2017.

- The School as part of Shasthrayaan- “Open House Programme” of the University, conducted a 2 Day exhibition on 26th and 27th of February 2018. The aim of Shastrayaan was to highlight the overall research contributions and other academic activities carried out in the university through the various research and teaching schools and centers.
- Organized International Women’s Day Celebrations at School with a Quiz competition on “Socially and Educationally Inspired Women” on 9.3.2018.
- The 19th edition of the annual technical publication of the School “**IT Glimpse**” was also released, both the printed and online versions, during the inaugural function of Interface 2017 on 8th Dec 2017.
- Organised a special Alumni Meet on 9th December 2017. The School, on this occasion honoured the founder director of the School Dr.K N Ramachandran Nair and the alumni of three batches 2001 to 2003.
- All other actions planned for the year 2017-18 has been achieved to a remarkable extent.

School of Distance Education

Books published by faculty through reputed publishers

- Dr.Sandhya R.S, **Elderly Widows**, APH Publishing Corporation .
ISBN : 978-81-7648-006-2
- Ageing Gracefully A multi Disciplinary perspective, Book Edited by Dr.Sandhya R.S,
Southern Book Star ISBN- 978-81-86660-30-0

Research papers published by faculty in peer reviewed journals

- An International Journal of Education & Humanities: Gender identity crisis – A sociological analysis of transgender in Kerala, Dr.sandhya R.S, Vol 6 Issue. 1, ISSN : 2278-232X, Jan-Dec 2017,

- An International Journal of Education & Humanities: Bereavement and isolation: emotional challenges experienced by elderly widows in kerala. Vol 6 Issue. 1, ISSN : 2277-2405 , Jan-Dec 2017, Dr.sandhya R.S,
- A peer reviewed journal of Education and Humanities: Peril of displacement and its potential solutions, Vol 6 Issue. 1, ISSN : 2319-8265 , Jan-Dec 2017, Dr.sandhya R.S,
- International multilingual research journal; socio economic and psychological problems of Home Nurses Dr.sandhya R.S, ISSN: 2394-5303, I.F. 4..002 SEP 2017

School of Environmental Sciences

Books published by faculty through reputed publishers

- Water: From Pollution to Purification. Edited By C.T.Aravindakumar
29/April/2018, Springer Publication

Research papers published by faculty in peer reviewed journals

- P.R. Manoj, U.K. Aravind and C.T. Aravindakumar, Photocatalytic Degradation of Lignocaine in Aqueous Suspension of TiO₂ Nanoparticles: Mechanism of Degradation and Mineralization, *Journal of Environmental Chemical Engineering*, **2018** (in press)
- Jain Thomas, R. Vishnu, C.T. Aravindakumar, and Usha K. Aravind,
Polyelectrolyte Functional Bilayers for the Removal of Model Emerging Contaminants, *Industrial Engineering Chemistry Research*, **2017**, 56 (46), 13874–13884
- K.K. Nejumal, D. Dineep, Mahesh Mohan, K.P. Krishnan, U.K. Aravind, C.T. Aravindakumar, Presence of Bisphenol S and Surfactants in the Sediments of Kongsfjorden: A Negative Impact of Human Activities in Arctic?, *Environmental Monitoring and Assessment*, **2018**, 190, 22

- Subha Sasi, P.R. Manoj, C.T. Aravindakumar and U.K. Aravind, Identification of surfactants and its correlation with physico-chemical parameters at the confluence region of Vembanad Lake in India, *Env Sci Pollut. Res.*, **2018** (in press)
- Mohanachandran Nair Shyleshchandran, Mahesh Mohan, Eswara Venkatesaperumal **Ramasamy** (2017) Risk assessment of heavy metals in Vembanad Lake sediments (south-west coast of India), based on acid-volatile sulfide (AVS)-simultaneously extracted metal (SEM) approach. Environmental Science and Pollution Research, <https://doi.org/10.1007/s11356-017-0997-8>
- Mohanachandran Nair Shyleshchandran, Mahesh Mohan, Eswara Venkatesaperumal Ramasamy (2017) Risk assessment of heavy metals in Vembanad Lake sediments (south-west coast of India), based on acid-volatile sulfide (AVS)-simultaneously extracted metal (SEM) approach. Environmental Science and Pollution Research, <https://doi.org/10.1007/s11356-017-0997-8>
- K.K. Nejmal, **Mahesh Mohan**, K.P. Krishnan, D. Dineep, U.K. Aravind, C.T. Aravindakumar (2017) Presence of bisphenol S and surfactants in the sedimentsof Kongsfjorden: a negative impact of human activities in Arctic? Environ Monit Assess. 190:22.
- M.P. Krishna and M. Mohan. (2017) Evalution of Phytoconstituents of Syzygium arnottianum Leaves. International Journal of Pharmacognosy and Phytochemical Research 2017; 9(10); 1380-1385
- Sabu Rohini, R. Aswani, M. Kannan, V. P. Sylas and E. K. Radhakrishnan (2017). Culturable Endophytic Bacteria of Ginger Rhizome and their Remarkable Multi-trait Plant Growth-Promoting Features. Current Microbiology. <https://doi.org/10.1007/s00284-017-1410-z>. (Springer)
- Jerry Mechery, B. Biji, Daniya M. Thomas and V. P. Sylas (2017). Biohydrogen production by locally isolated facultative bacterial species using the biomass of *Eichhornia crassipes*: effect of acid and alkali treatment. Energy, Ecology and Environment 2(5): 350–359. (Springer)
- Sajithkumar KJ and **EV Ramasamy**“Generation of electricity from cattle urine using low cost single chambered microbial fuel cells”, submitted to *Energy*.

- Sruthi S Nair and **EV Ramasamy** , “Enrichment of soil organic carbon by native earthworms in a patch of tropical soil, Kerala, India: First report” submitted to *Soil Biology and Biochemistry*.
- Shylesh Chandran, Sruthi S Nair, Mahesh Mohan, Ramasamy E.V. Organochlorine Pesticides and Heavy Metals in the Sediments of a Tropical Estuary, Peninsular India. submitted to *Marine Chemistry*
- Binish Mechirackal Balan, Sruthy Shini, Kottekkattu Padinchati Krishnan and Mahesh Mohan. Mercury tolerance and biosorption in bacteria isolated from Ny-Ålesund, Svalbard, Arctic. *Journal of Basic Microbiology* (first review completed)
- Mahesh Mohan, U. Sreelakshmi, M.K. Vishnu Sagar, V.G. Gopikrishna, G.G. Pandit, S.K. Sahu, M. Tiwari, P.Y. Ajmal, V.M. Kannan, M. Abdul Shukkur, K.P. Krishnan. Rate of sediment accumulation and historic metal contamination in a tidewater glacier fjord, Svalbard. Submitted to *Marine Pollution Bulletin*
- Mahesh Mohan, Tresa Nimmy K., Kannan V.M., Gopikrishna V.G., Abdul Shukkur M., Binish M.B., Arun Babu V., Rakesh P.S. Metal accumulation in Zooplanktons of two Arctic fjords, Ny-Ålesund, Svalbard. Submitted to *Marine Pollution Bulletin*

Participation in seminars/conferences/committees of faculty members

- ICMGP 2017, 13TH International Conference on Mercury as a Global Pollutant, July 16-21, 2017. Mahesh Mohan
- ICMS 2017- 3RD International Conference on Frontiers of Mass Spectrometry Dec.11-14, 2017, School of Environmental Sciences, Mahatma Gandhi University, Kerala, organised by Environmental Sciences, Mahatma Gandhi University & Inter University Instrumentation Centre (IUIIC), Kottayam, Kerala, India **Mahesh Mohan** Analysis of Bioactive compounds in leaves of *Mastixia arborea* using GC-MS
- International conference on Photochemistry and its applications (ICPA2017) November 10-13, 2017, Venue. Hotel Excalibur and School of Environmental sciences, organised

by Inter University Instrumentation Centre (IUIIC), Kottayam, Kerala, India and ACESSD, MGU, Kottayam Kerala

- Biosorption of Mercury by metal tolerant Bacteria from effluent using FT-IR Spectroscopy, Mahesh Mohan
- ICMS 2017, 3rd International Conference on Frontiers of Mass Spectrometry, Dec.11-14, 2017, organised by Environmental Sciences & Inter University Instrumentation Centre (IUIIC), Kottayam, Kerala, India **Mahesh Mohan** Heavy metal contamination in the sediments of Vembanad lake, India an ICP-MS approach Ramasamy EV, Mahesh Mohan
- ICMGP 2017, 13TH International Conference on Mercury as a Global Pollutant, July 16-21, 2017. Mahesh Mohan Mercury Geochemistry in a unique Tropical agricultural wetland ecosystem, India, Mahesh Mohan
- International conference on Photochemistry and its application 2017 UV/H₂O₂ Oxidation of Hydroxynaphthoic Acids, Usha K.Aravind and C.T.Aravindakumar
- International conference on Photochemistry and its application UV/H₂O₂ Oxidation of 6-chloropurine Usha K.Aravind and C.T.Aravindakumar
- International conference on Photochemistry and its application c degradation of Indigo Carmine in water using ZnO Usha K.Aravind and C.T.Aravindakumar
- International conference on Photochemistry and its application Oxidative degradation of Benzene sulfonic Acid by Hydroxyl Radical; a sonochemical and pulse Radiolysis study, C.T.Aravindakumar
- International conference on Photochemistry and its application Photodepletion of Labetalol Induced by Sunlight, , C.T.Aravindakumar
- UV-C Induced Degradation of Ranitidine and structural characterization of Transformation products using LC-Q-ToF-MS, C.T.Aravindakumar
- Enhanced degradation of Metoprolol using a coupled system of zero valent iron nanoparticles and UV light

School of Gandhian Thought & Development Studies

Books published by faculty through reputed publishers

- Arabi-Malayalam :Linguistic Cultural Traditions of Mappila Muslims of Kerala by Dr. M.H.Ilias ,ShamsadHussain, Gyan Publishing House, ISBN: 978-81-212-1338-7

Research papers published by faculty in peer reviewed journals

- Does globalization explain the crisis in European welfare states?
- Dr.Biju Lakshman, Page: 251-254, year2018, ISSN: 2455-4197, IF:5.22
- Politics of media and cotemporary capitalism, Dr.Biju Lakshman, Page: 49-51, year 2018, ISSN: 2455-4197, IF:5.12, vol.3 issue1, International journal of advanced educational research
- Tribal development :An enigma , Manjusha KA, Muhammed Shahdab.P.P, ISSN 2231-5780, Vol 8(2)01.02.2018, 30-37
- Human Rights and Tribal Development: A case study of Malai Pandaram Tribes in Kattathi Tribal Settlement , Pathanamthitta, Kerala , Vol.7Issue 8, 2245-2496, 01.08.2017, KA, Muhammed Shahdab.P.P, I.F.7.081
- Designing of Ecosophic generations: An experiment with eco pedagogical model: Journal of advances and scholarly researches in allied education IF: 1.6, VOL xv, issue iv , ISSN 2230-7540, 11.06.2018, Dr. Noushad P.P.
- Jasna P.Varijan , Dr. Noushad P.P., “concept of planetary citizenship in the scholarly Indian Tradition” in vol. 5, issue 9sep. 2017 in scholars journal of arts , humanities and social sciences
ISSN 2347-5374, 28.09.2017
- Memories and Narrations of “Nations”past;Accounts of Early migrants from kerala in the gulf in the post –oil era , M.H.ILIAS2018, VOL.2, ISSUE.1,

- Journal of parliamentary studies ; ISN: 2231-0355, VOLUME9, Issue1, January 2017, Dr.Biju Lakshmanan

Participation in seminars/conferences/committees of faculty members

- Prof.M.H.Ilias, for his participation in the sixth International Conference “Oman’s Relationships with the Countries of the Indian Ocean and Gulf, held in the State of Kuwait 11-13 December 2017,
- Prof.M.H.Ilias has delivered a Lecture on the topic “Gaveshanathinte Rashtreeyam” as part of the One day seminar conducted by the Dept.of Malayalam K.K.T.M.Govt.College, Pullut, on 19.07.2018.
- Dr.Noushad.P.P, International seminar on Woman; Privacy, Profession and Position, 04.01.2018, held at Malabar Christian College, Kozhikode, Excluding the excluded; The phenomenon of invisibility in the seminar
- Certificate of Appreciation , Dr.Noushad.P.P delivered a lecture on “Recent trends in Pedagogy of Higher Education” during the conduct of the Orientation programme on “Innovative pedagogical Strategies” at college Veterinary and Animal sciences , Mannuthy, organized by Academic staff college, 3-30th Jan 2018
- Certificate of Appreciation , Dr.Noushad.P.P delivered a lecture on “Interpersonal Communication” during the conduct of the Orientation programme on “Strategic management of Human resources among academia” at college Veterinary and Animal sciences , Mannuthy, organized by Academic staff college, 20th July 16th August 2018
- Dr.Noushad.P.P handled session ‘pedagogy and Constructive methodology’ on 27/11/2017 to 22/12/2017 at MHRD –TLC , Dept.of Education , University of Calicut
- Dr.Noushad.P.P has acted as a resource person in the UGC-NET coaching programme organized by the Department of education , University Calicut in collaboration with alumni association from 23.10.17 to 25.10.17
- Dr.Biju Lakshmanan delivered a plenary talk one day National seminar sponsored by institute of parliamentary affairs, Govt.of Kerala organized by the post graduate department of Malayalam, Govt.college Kattappana on 6th March 2018

- Dr.Biju Lekshmanan has presented a paper on The Philosophy of Sree Narayana & Mahatma :A comparative Analysis in the Two Day International Seminar on “SREE NARAYANA GURU SAGARAM” Sponsored By Sreenarayana Dharma Sngham Trust, Sigaviri organized by the post graduate department of Malayalam, Govt.college kattappana on 8th and 9thMarch 2018
- Dr.Biju Leshmanan participated one Day Seminar on “Democracy and good governance and Human Rights sponsored by institute of parliamentary affairs, Govt.of Kerala organized by the post graduate department of Political Science N.S.S Hindu College Changanasserry, 20thDecember, 2017
- Dr.C.R.Harilakshmeendra Kumar has successfully completed Hand on MOOC Workshop Under Research Project “Innovative research in Pedagogy for Mini-Moocs blended with instruction strategies to Enhance quality of Higher Education” sponsored by Royal Academy of Engineering (UK) and Thapar University ,Patiala at Amrita University, Amritapuri Campus held on 16th&17th September 2017
- Ms.Manjusha K.A, Has Inaugurated the History day celebrations of the P.G. Department and Research centre in History of this College and delivered a lecture entitled ,Social relevance of the Discipline History on March 10, 2018 in the afternoon, Union Christian college, Aluva.

School of Indian Legal Thought

Research papers published by faculty in peer reviewed journals

- Journal of Mar Gregorios College of Law , Dr.Sheeba Pillai, Volume.1, 2017
- Media as the ‘Fourth Estate ;Myth or reality, Dr.Sheeba Pillai
- Migrant labourers-Need for protection from health hazards, Dr.Gigi P.V.
- Senior citizen act, 2007- an overview- need for changing dimension of law , Dr.Gigi P.V

School of International Relations & Politics

Books published by faculty through reputed publishers

- U S Occupation and Human Rights Issues : Special Reference to Iraqi Woman, C.Vinodan, Kalpaz Publications
- Good Governance and Development : Challenges in India

Chapter IX Edited By C.Vinodan, New Century Publications New Delhi, India.

ISBN: 978-81-7708-446-7

- Defense and National Security of India: Concerns and strategies

Edited By C.Vinodan

New Century Publications New Delhi, India

ISBN: 978-81-7708-440-5

- Good Governance and Development : Challenges in India

Chapter VII Edited By C.Vinodan

New Century Publications New Delhi, India

ISBN: 978-81-7708-446-7

- India's Foreign Policy and Diplomacy :Emerging scenario and challenges

Edited By C.Vinodan

New Century Publications New Delhi, India

ISBN: 9788177084368, 210 pages

- Democracy , Inequality and Economic Development

Edited By C.Vinodan

New Century Publications New Delhi, India

ISBN: 9788177084450, pages 218

- Globalisation and Indian Innovation System :Dr: Gireesh Kumar R; MGU Publication

- Pamba- ParisthithiyumSamskaravumParipalanavum;Dr: Gireesh Kumar R, Dr: Ajay M.G, DC Books and MGU Publication

Research papers published by faculty in peer reviewed journals

- Environmental Governance and Human rights in India Anju Lis Kurian and C.Vinodan
- Indian journal of politics and International relations vol.10.no.1, 2017
- ISSN: 0973-5011

School of Management & Business Studies

Books published by faculty through reputed publishers

- Customer relationship Management in Housing Finance Sector by Santhosh P. Thampi, Abhijeet Publications ISBN- 978-93-5074-297-6, 2017
- Mobility Mining in Moving Object Trajectories by Dr.Sajimon Abraham And Dr.P.SojanLal & Dr.Dais George, Roshmi Book Publication.ISBN- 978-1-387-86863-6

Research papers published by faculty in peer reviewed journals

- RenjithK.P & Zacharias,S (2018),"HRM Practices with Employee Performance in Banking Sector with Special Reference to Ernakulam District, Kerala"Open Journal System (OJS), Journal of Human Resource and Customer Relationship Management Vol.2, No.2(2018)ISBN: 978-81-929777-2-0
- Uvais & E. Sulaiman, Influence of Service Quality on Customer Patronage Intensions in Commercial Banks: An Empirical Evidence. IOSR Journal of Business and Management, Vol.19 (6), June 2017, ISSN 2319-7668, pp 62-66.
- Dr.E. Sulaiman, "A Comparative Study on the Risk-Return Analysis of Islamic Mutual Funds with Conventional Mutual Funds: An Empirical Evidence from Indian Capital Market", *Consortia: smbs mgu journal of Management*, 3(2), 2017, pp 1-5
- Saritha K, SajimonAbraham,Big Data Challenges and Issues: Review on Analytic Techniques, *Indian Journal of Computer Science and Engineering (IJCSE)*,e-ISSN: 0976-5166, ISSN : 2231-3850

- Nishad A, Sajimon Abraham, Spatio Temporal Customer Analysis of Bigdata Generated from GPS traces of moving objects for personalized Customer Relationship Management, *Rajagiri Management Journal*, Dec 2017, ISSN-972-9968
- Lumy Joseph, Sajimon Abraham, Significance of Web-Enabled Psychometric Testing Tools for Health Care Management, *Deep Neural Networks in Bioinformatics*, 23-24 August, 2017, ISSN 2320-6985
- Deepa Mary Mathews, Sajimon Abraham, Extraction and Evaluation of Patients' Standpoints Pertaining to Ayurvedic Health Treatment, *International Journal of Research in Engineering and Applied Sciences (IJREAS)*. ISSN(O): 2249-3905, ISSN(P) : 2349-6525
- Nishad A, Sajimon Abraham, Spatio Temporal Analysis of Moving Objects in Supply Chain Networks using Semantic Clustering, *International Journal of Research in Engineering and Applied Sciences (IJREAS)*, ISSN(O): 2249-3905, ISSN(P) : 2349-6525
- Dr Biju MK, "A Study on the Expected Compound Annual Growth Rate of Indian Organic Food Industry in Comparison with Global Organic Food Industry". *International Journal of Multidisciplinary (e-ISSN 2455-3085)*, Vol 3, Issue 08, August 2018
- Dr Biju. MK, "Financial Inclusion in India: Major Initiatives" Consortia published by School of Management and Business Studies, Mahatma Gandhi University, Kottayam, Vol. 3, No. 2 on January – June 2017.
- Tijo Thomas, Johny Johnson, (2017), The Role of Celebrity Attractiveness & Celebrity Trustworthiness on Effectiveness of Social Advertising, *Vilakshan: The XIMB Journal of Management*, Vol 14(2), pp 1-14.
- Johny Johnson, Tijo Thomas (2018), What is beautiful is good: An evaluation of Effectiveness of Attractiveness in Celebrity Endorsements, *Indian Journal of Marketing, SCOPUS*, Vol 48, pp 24-36.
- Tijo Thomas, Johny Johnson, (2017), The impact of celebrity Expertise on Advertising Effectiveness- The mediating role of Celebrity brand fit, *VISION- The Journal of Business Perspective. SAGE Publications*, Vol 21(4), pp 367-374.
- Radhika P.C, Johny Johnson (2017), Identifying Governments role towards developing sustainable strategies in Tourism Industry. *Pacific Business Review International*, Vol 10(6), pp 67-72.

- Sonia katherin Mathew & Johnney Johnson, (2017), A study on the influence of attitudinal and environmental factors on Entrepreneurial Intention, *International Journal Of Research in COMMERCE, IT & MANAGEMENT*, Vol 7, pp 64-69
- Biju B & Johnney Johnson(2017), The Persuasive Effect of Green Advertisement: An Analytical Enquiry, *International Journal of Management and Social Sciences Research (IJMSSR)*, June 2017, Vol 6,pp. 36-49.
- Johnney Johnson & Radhika P C(2018), Structural Equation Modeling Of Perceived Impacts Of Tourism – A Study In Residents Perspective, *Abhigyan - Quest For Excellence*, Vol 36(2), pp 51-60.
- Sonia katherin Mathew & Johnney Johnson, (2017), Entrepreneurial attitudes and their influence on the Entrepreneurial Intention, *Asian Journal Of Research In Business Economics And Management*, Vol 7, pp 261-274.
- Johnney Johnson & Radhika P C(2017), Structural equation modeling of role of government in sustainable developmentof tourism – a study in residents perspective, *Indian Journal of Commerce & Management Studies*, Vol. 8, pp. 100-106.
- Johnney Johnson & Radhika P C (2017), Ecotourism initiatives in Kerala- A study with special reference to Thekkady, *International Journal of Management and Social Science Research Review*, Vol. 1, pp. 157-162.
- Johnney Johnson & Radhika P C(2017), Developing Sustainable Development Strategies in Tourism Industry, *International Journal of Business and Administration Research Review*, Vol. 1,pp. 199-207.
- Tijo Thomas and Johnney Johnson (2017) The Role of Celebrity Attractiveness and Trustworthiness on Social Advertising Effectiveness, *KICMA Reach Journal of Management*, Vol.3 No.1, ISSN: 2395-0293. Pp. 23-31
- Big Data Handling using In memory and cloud computing approaches
Sajimon Abraham, Rajesh N, ISSN: 2320-6985, oct.2017
- Privacy preserved methods and Anonymization approaches for moving objects trajectories , Rajesh N, Sajimon Abraham, Shyni Das
- Analysis of customer feelings using gender aspect and sentiments, Deepa mary Mathew, Dr.Sajimon Abraham issn: 2320-6985, oct.2017

- Prediction with partitioning:Big Data analytic using regression techniques , Sajimon Abraham, Saritha K, 22.07.2017
- An adaptive learning system for slow learners in an E learning environment, Sajimon Abraham, Lumy Joseph
- Instructional Design for learning Path Identification inan E-Learning environment using felder –silverman learning styles model
- Exploring the merits of Nosql ; A study based on Mongo DB, Sajimon Abraham, Benymol Jose, 22.07.2017,
- Preprocessing the sentiment of thesocial users expressed in malayalm language , sajimon Abraham, Deepa mary Mathews, 2018
- Analytic thinking of patients viewpoints pertain to SPA Treatment, Sajimon Abraham, 22.07.2017
- International Journal of Computer sciences and Engineering Open access ; Query performance analysis in Nosql and relationship databases: Mongo DB Vs MySQL, Sajimon Abraham
- Big data challenges and Issues; Review on analytic thechniques, Saritha K, Sajimon Abraham
- International Journal of Research in Engineering and applied Science (IJREAS) ;Spatio temporal analysis of moving objects in supply chain networks using semantic clustering , Sajimon Abraham, issn; 2249-3905, pp.21-29, vol7.issue7, july 2017

Participation in seminars/conferences/committees of faculty members

Dr.Santhosh.P.Thampi

Agrotourism as a tool for Sustainable Agriculture (Co-Authored by Tiny Maria Mathew)	Second International Seminar on Emerging Trends in Organic Farming and Sustainable Agriculture	Mahatma Gandhi University	22-24 April 2018
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Training Initiatives for farmers in Organic Farming: Experiences from Kerala (Co-Authored by Meghana.C.Mohan) *Won the Best Paper Award	Second International Seminar on Emerging Trends in Organic Farming and Sustainable Agriculture	Mahatma Gandhi University	22-24 April 2018
The Role of Information and Communication Technology (ICT) in Agribusiness (Co-Authored by Dileep. V. Viswan)	Second International Seminar on Emerging Trends in Organic Farming and Sustainable Agriculture	Mahatma Gandhi University	22-24 April 2018
The role of Kudumbashree in managing Labour related issues of Organic farming in Kerala (Co-Authored by Dhanya Ajayaghosh)	Second International Seminar on Emerging Trends in Organic Farming and Sustainable Agriculture	Mahatma Gandhi University	22-24 April 2018

- Hazeena. P.E, & Dr.E.Sulaiman.E, “Work Life Balance of among Women Teaching Faculties with Reference to Kottayam District of Kerala”, International Conference on Commerce and Management in the Changing Times (ICCMCT 17), PG Dept of Commerce, Maharaja’s College, Ernakulam, on 23rd December 2017.

- Hazeena. P.E & Dr.E. Sulaiman.E, “Work Life Balance of Nursing Staff in a Hospital: A Case Study”, National Conference on Commerce, Management and Social Sciences”, PG Dept of Commerce, Maharaja’a College, Ernakulam, on 26th August 2017.
- National University Singapore (NUS Joice, Jominy, & Zacharias, S. (2017). “Career Orientations and strategies of Indian IT Professionals: An exploratory study”, ICIRSTM-17, National University Singapore (NUS), 16-17 September 2017
- Sebastian, R. T., & Zacharias, S. (2017). The Role of E-Mentoring in Protégé Personal Learning, Career Satisfaction and Job Involvement, Fifth PAN IIM World Management Conference on “The Making of Digital India: Management Perspectives.” organized by IIM Lucknow, DECEMBER 14-16, 2017
- Renjith, K.P., & Zacharias, S., (2018), HRM Practices and Sustainable Competitive Advantage in Agribusiness. Acceptance of Organic Products by Youth customers: an exploratory Study, Mahatma Gandhi University, Global Organic Meet, 22-4-2018
- Arundev, P.R., & Zacharias, S., (2018) Acceptance of Organic Products by Youth customers: an exploratory Study Customer-Based Brand Equity: A Study On Consumer Perception Towards Innovation In Agribusiness; Mahatma Gandhi University, Global Organic Meet, 22-4-2018
- Ms. Anna A. V & Zacharias, S., (2018) Customer-Based Brand Equity: A Study On Consumer Perception Towards Innovation In Agribusiness; Mahatma Gandhi University, Global Organic Meet, 22-4-2018
- Dr. Biju. M.K, “Establishing Relationship between Employee Competencies and Job Performance in the Banking Sector: A Literature Review” .Dr Seena Memorial National Paper Presentation Competition 2018 on February 21st, 2018 at Bharata Mata College, Thrikkakara, Kochi
- Dr. Biju. M.K, “Technical Analysis of Share Price Movements of Select Public Sector Banks and Private Sector Banks in India” .International Conference on Financial Inclusion (ICF – 2017) on November 21st, 2017 by the SCMS School of Technology and Management, Kochi
- Johnney Johnson & Tijo Thomas (2017) “Impact of Celebrity Trustworthiness on Purchase Intention: Mediating role of Celebrity Brand Fit” (2017) proceedings of

7thIIMA conference on Marketing in Emerging Economies, ISBN: 978-81-920800-6-2, pp. 09-214

- Johnney Johnson & Tijo Thomas (2017) "What is beautiful is good': Impact of Celebrity Attractiveness on Advertising Effectiveness" (2017) Reaching Consumers of Emerging Markets, Proceedings of the 2017 Annual Conference of the Emerging Markets Conference Board, ISBN: 978-81-928560-2-5, pp. 164
- Uvais, and Dr.E.Sulaiman "Customer Satisfaction in Commercial Banks: Exploring the Symmetrical Impact of Demographic Variables to the Patronage Intentions" Joint paper by, National Conference on New Paradigms in Business and Management, Organized by School of Management Studies, Cochin University of Science and Technology, April 20-21, 2017.
- Arundev, P.R., & Zacharias, S., (2018) "A study on the impact of "Happy Customer" in spreading word of mouth communication with special reference to hospitality Industry" in the Berchmans National Conference 2018 on "*HAPPINESS EDGE: The Holistic Business Management Mantra*" Sponsored by the Mahatma Gandhi University, Kottayam, organised by the Berchmans Institute of Management Studies, SB College, Changanassery, held on 16th February 2018 at Avenue Center, Cochin
- Renjith, K.P., & Zacharias, S., (2018) "HRM Practices and Employee performance happiness in Private Banking Sector" in the Berchmans National Conference 2018 on "*HAPPINESS EDGE: The Holistic Business Management Mantra*" Sponsored by the Mahatma Gandhi University, Kottayam, organised by the Berchmans Institute of Management Studies, SB College, Changanassery, held on 16th February 2018 at Avenue Center, Cochin
- Benymol Jose, Sajimon Abraham, Query Performance Analysis in NoSQL and Relational Databases: MongoDBVs MySQL, First International Conference on Computer Vision, Networks and Informatics (Supported By UGC), 22-23 March 2018, Gandhigram Rural Institute, Gandhigram.
- Benymol Jose, Sajimon Abraham, Exploring the storage issues related with Supply Chain Data in Mining knowledge: A NoSQL Perspective, Two day State Level Conference on Deep Neural Networks in Bioinformatics, 23,24 August 2017,

ISSN:2320-6985

- Benymol Jose, Sajimon Abraham, Exploring the merits of NoSQL: A study Based on MongoDB, IEEE Conference International Conference on Networks & Advances in Computational Technologies, 20-22, July 2017.
- Benymol Jose, Sajimon Abraham, Big Data Analytics: A NoSQL Perspective to mine knowledge from Supply Chain Data, International Conference on Science, Engineering, Technology and Management, 8,9 March 2017.
- Deepa Mary Mathews, Sajimon Abraham, Pre-processing the Sentiments of the Social Users' expressed in Malayalam Language, International International Conference On Sustainable Advance Computing(ICSAC 2018).
- Deepa Mary Mathews, Sajimon Abraham, Analysis of Customer Feelings Using Gender Aspect and Sentiments, Two day State Level Conference on Deep Neural Networks in Bioinformatics, 23,24 August 2017, ISSN:2320-6985
- Deepa Mary Mathews, Sajimon Abraham, Analytic Thinking of Patients' Viewpoints Pertain to Spa Treatment, IEEE conference Proceedings of the International conference on Networks and Advances in Computational technologies-NetAct17, 20-22 July 2017.
- Deepa Mary Mathews, Sajimon Abraham, Sexual Category Feature Extraction of Sentiments about Ayurvedic Health Treatment, International Conference on Current Trends in Engineering, Science and Technology ICCTEST - 2017, 5-7 Jan , 2017, ISBN: 978-81-931119-5-6
- Lumy Joseph, Sajimon Abraham, An Adaptive Learning System for Slow Learners in an E Learning Environment, International Conference On Sustainable Advance Computing(ICSAC 2018)
- Lumy Joseph, Sajimon Abraham, Instructional Design for Learning Path Identification in an E-learning Environment using Felder-Silverman Learning Styles Model, IEEE conference Proceedings of the International conference on Networks and Advances in Computational technologies-NetAct17, 20-22 July 2017
- Lumy Joseph, Sajimon Abraham, Role of Algorithms in Computer Technology, E-learning Instructional Designs for Short Learning Objects, ISBN 978-93-80419-29-9

- Lumy Joseph, SajimonAbraham, Web- Based Psychometric Testing Tool for Identifying Patient's Genetic Variations in Health-Care Management, 29th Kerala Science Congress, Mar Thoma College, Thiruvalla, ISBN 81-86366-93-98
- Nishad A, SajimonAbraham, Semantic Aware Method to find Points of Interest from the GPS traces of Moving Objects, International Conference on Information technology and Digital applications (ICITDA 2018) on 6th and 7th April 2018,
- Nishad A, SajimonAbraham, Analysis of Moving Object Trajectory; A paradigm shift in Mining of Bigdata, Deep Neural Networks In Bio Informatics, M.E.S College Marampally, 23-24 Aug 2017, ISSN 2320-6985
- Nishad A, SajimonAbraham, Semantic Trajectory Analysis for Identifying Locations of Interest of Moving Objects, IEEE conference Proceedings of the International conference on Networks and Advances in Computational technologies-NetAct17, 20-22 July 2017
- Rajesh N, SajimonAbraham, Personalized Trajectory Anonymization through Sensitive Location points hiding, International Conference on Information technology and Digital applications (ICITDA 2018) on 6th and 7th April 2018
- Rajesh N, SajimonAbraham, Big Data Handling using In-Memory and Cloud Computing Approaches, Two-day State level Conference on Deep Neural Networks in Bioinformatics – In association with FORTIS(Forum for Interdisciplinary Studies, ISSN 2320-6985
- Rajesh N, SajimonAbraham, Privacy Preserved Methods and Anonymization Approaches For Moving Object Trajectories, Two-day State level Conference on Deep Neural Networks in Bioinformatics – In association with FORTIS(Forum for Interdisciplinary Studies, ISSN 2320-6985
- Rajesh N, SajimonAbraham, Privacy preserved approach for Trajectory Anonymization through Zone creation for halting points, IEEE conference Proceedings of the International conference on Networks and Advances in Computational technologies-NetAct17, 20-22 July 2017
- Saritha K, SajimonAbraham, Prediction with Partitioning: Big Data Analytics Using Regression Techniques, IEEE conference Proceedings of the International conference

on Networks and Advances in Computational technologies-NetAct17,20-22 July 2017

- National University Singapore (NUS Joice,Jominy & Zacharias S.(2017) “Career orientations and STRATEGIES OF Indian IT Professionals :An exploratory study”, ICIRSTM-17, National University Singapor, 16-17 September, 2017
- Fifth PAN IIM World Management Conference ,IIMLUCKNOW ,Sebastian RT & Zacharias.S, (2017).Th erole of E-mentoring in protégé personal learning, career satisfaction and job involvement ,fifth pan IIM world Management Conference on “The making digital India; Management perspectives”. Organized by IIMLUCKNOW,December 14-16, 2017
- Renjith K.P, & Zacharias.S,(2018), HRM Practices and Sustainable Competitive Advantage in Agribusiness. Acceptance of Organic products by Youth customers : an exploratory study Mahatma Gandhi University, Global Organic Meet, 22.4.2018
- Arundev P.R & Zacharias.S,(2018),Acceptance of Organic products by Youth customers; an exploratory study Customer-Based Brand Equity, A study on consumer perception towards innovation in agribusiness Mahatma Gandhi University, Global Organic Meet, 22.4.2018
- Ms.Anna A.V& Zacharias.S,(2018), Customer-Based Brand Equity: A Study on Consumer Perception Towards innovation In agribusiness, Mahatma Gandhi University, Global Organic Meet, 22.4.2018
- COSMAR 2017. 17TH Consortium of students in management research , 20-21 November 2017; Geethu & Zacharias.S, (2017) Employee perceptions of training and organizational commitment – An empirical Investigation among employees of select star Classified Hotels in Kerala
- Berchmans Institute of Management studies , SB College, changanasserry and MGU, Kottayam, Kerala
- Arundev P. R & Zacharias.S (2018) “A study on the impact of “Happy Customer” in spreading word of mouth communication with special reference to hospitality Industry” in the Berchmans National Conference 2018 on “ HAPPINESS EDGE: The Holistic Business Management Mantra” Sponsored by the Mahatma Gandhi University,

Kottayam organized by the Berchmans Institute of Management studies , SB College, changanasserry held on 16th feb. 2018 at A venue centre cochin

School of Pedagogical Sciences

Research papers published by faculty in peer reviewed journals

- Jaleel, S. & Premachandran P. (September 2017). Relationship between Scientific Interest and Achievement in Chemistry of Secondary School Students.pp. 60-64 in **Pedagogics**, XII, XIII, XIV (1). ISSN: 2229-7618.
- Jyothi K.R, Sajna Jaleel (June 2017). Cognitive Neuroscience:An emerging science that need to be understood.pp.60-64 in **Edufocus** Vol.11 No.1, A peer reviewed Research Journal in Education. ISSN No. 2347-646X.
- Manju, M. S. & Asha, J. V. (September, 2017). Learning Style of Arts, Science and Language subject Student Teachers, pp. 55-59, in **Shanlax International Journal of Education**, Vol. 5 No. 4, ISSN: 23202653, IF: 3.008, UGC Approval No: 44213
- Ramalakshmy, P. & Asha, J.V. (December, 2017). Effective Communication Strategies to Foster Sustainable Behaviour pp.5-8 in **Shanlax International Journal of Education**, ISSN: 23202653, Vol. 6 No. 1, Impact Factor: 3.008, UGC Approval No: 44213
- Thadayoose, P. & Asha, J.V. (September, 2017). A Study on the Level of Social Intelligence of Coastal School Students in Kerala pp. 188-193 in **International Journal of Creative Research Thoughts** (IJCRT), Vol. 5 Issue. 3, ISSN: 23202882, IF: 5.9
- Asha J.V. (January 2018).Influence of Concept Mastery and Reasoning Ability of Higher Secondary Students on their Mathematical Capacities. Pp.01-10 in **Frontiers in Education and Research**, 7(1), ISSN: 2277-3576.
- Minikutty, A. & Sindhu, P. G. (September 2017). Role of Emotions in the Process of Learning. Pp. 53-59 in **Pedagogics**, XII, XIII, XIV (1).
- Jaise, J. & Joseph, L. (August, 2018). Insights into Reading Comprehension in English among Primary School Students of Kerala, pp. 39-40, in Peer Reviewed, Referred, Refereed & Indexed **International Journal of Scientific Research**, ISSN: 2277-8179 (Print), Impact Factor: 4.758 (SJIF – 2017), JI. DOI: 10.15373/22778179, Index Copernicus IC Value: 93.98, available online @ www.worldwidejournals.com, UGC Sr. No.: 49217

- Jaise, J. & Paul, A. (September 2017). Integrating Instructional Strategies to Improve Speaking Skill in English of Upper Primary School Students. Pp.6-9 in ***Pedagogics, XII, XIII, XIV (1)***.
- Thulasidharan, T. V. & Shyja, N. C. (September 2017). Counselling Services in Schools: Need of the Hour. pp. 27-29 in ***Pedagogics, XII, XIII, XIV (1)***.

Participation in seminars/conferences/committees of faculty members

Dr. Jaya Jaise

International:

- “Perception of Factors Contributing to Success of Women Entrepreneurs of Kottayam District” in International Seminar on *Catalyzing Women Empowerment for Egalitarian Society* organised by Council of Teacher Education (CTE) & Titus II Teachers College, Thiruvalla, from 25th to 27th October 2017.
- “Web Tools for Classroom Instruction: Awareness among Secondary School Women Teachers” in International Seminar on *Catalyzing Women Empowerment for Egalitarian Society* organised by Council of Teacher Education (CTE) & Titus II Teachers College, Thiruvalla, from 25th to 27th October 2017.

National:

- “Web Tools for Classroom Instruction: Awareness among Secondary School Teachers” in National Seminar cum Workshop on ***Teaching Learning Platforms for Digital Natives*** organised by UGC-HRDC, University of Kerala, Thiruvananthapuram; Society of Innovative Researchers and Academicians (SIRA); & St. Thomas College of Teacher Education, Pala, Kottayam, on 27th & 28th September 2018.
- “Harnessing Web Tools for Teaching English” in National Seminar cum Workshop on ***Teaching Learning Platforms for Digital Natives*** organised by UGC-HRDC, University of Kerala, Thiruvananthapuram; Society of Innovative Researchers and Academicians (SIRA); & St. Thomas College of Teacher Education, Pala, Kottayam, on 27th & 28th September 2018.

- “Gender Differences in Academic Anxiety among Secondary School Students” in 8th National Conference of Teacher Educators organised by Kanyakumari Academy of Arts & Science & RPA College of Education, Mamottukadai, Tamilnadu, on 20th April 2018.

Dr. Minikutty A.

International:

- “Information Literacy Skills: A Study among Higher Secondary School Students” in International Seminar on *Catalyzing Women Empowerment for Egalitarian Society* organised by Council of Teacher Education (CTE) & Titus II Teachers College, Thiruvalla, from 25th to 27th October 2017.

National:

- “Extent of Life Skill Mathematics among Secondary School Students: An Exploratory Study” in National Seminar on *Mainstreaming Life Skills Education in Educational Institutions: Challenges and Prospectives* organised by Centre for Life Skills Education, Kerala, & School of Education, Central University of Kerala, Kasaragod, on 19th & 20th December 2017.
- “Role of Student Police Cadet Project in Mitigating Campus Violence: Perception of Teachers” in 8th National Conference of Teacher Educators organised by Kanyakumari Academy of Arts & Science & RPA College of Education, Mamottukadai, Tamilnadu, on 20th April 2018.

Dr. Asha J.V.

International:

- “Potentiality of Graduate Level Teacher Education Curriculum in Moulding Teachers Competent in Techno-Pedagogy: An Analysis” in International Seminar on *Innovative and Neuroscience Perspectives for Science and Technology Education*, organized by Department of Education, University of Kerala, from 8th to 10th February 2018.

- “Identifying the Causal factors of Emotional Disturbance among High School students” in International Conference on *Well Being(Web2017)*, organized by M.S.University, Thirunelveli, on 6th&7thNovember 2017.
- “Inculcating Ideas of Women Empowerment through Curriculum” in International Seminar on *Catalyzing Women Empowerment for Egalitarian Society*, organized by CTE in collaboration with Titus II Teacher’s College, Thiruvalla, from 25th to 27thOctober 2017.

National:

- “Eclectic format for teaching languages through e-resources”in National Seminar on *E-Literacy for Teachers: Concerns and Challenges* organized by Department of Education, University of Kerala on 20th& 21st March 2018.
- **Poster presentation** titled “A study of the attitude of disabled students in higher education towards self, educational matters, teachers and peers”in National Seminar on *Transformation Towards Sustainable and Resilient Society for All - A Perspective focus on Differently Abled* organized by Centre for Excellence for Disability Studies (A unit under the LBS Centre for Science and Technology-A Kerala Government Undertaking) in association with Department of Electronics and Communication Engineering, LBS Institute of Technology for Women, Thiruvananthapuram, on 17th& 18th March 2018.
- “Including the Excluded: Attitude of Teachers in High Schools of Kerala towards Inclusive Education”in National Seminar on *Innovative Pedagogic Practices for Inclusive Classrooms: The context and Prospects* organized by Department of Education, University of Kerala, on 19th&21stFebruary 2018.
- “Human face of Technology in helping the Differently Abled: An analysis of English Syllabus at Higher secondary Level”in National Seminar on *Persons with Disabilities- Education and Human Rights*, organized by Department of Education, University of Kerala, on 15th& 17thFebruary 2018.
- “Role of Rights based Education in Preventing and responding to Gender Discrimination”in National Seminar on *Human Rights and Gender Issues in Teacher Education*, organized by School of Pedagogical Sciences, Kannur University, on 5th&6thMarch 2018.

- “Structuring a Research Paper” in National Workshop on *Research Sandwich for Research Efficiency in Education* organised by Department of Education, University of Kerala, on 17th January 2018.

School of Letters

Books published by faculty through reputed publishers

- *SahityalokatheNithyasanchari* (Malayalam)- Anoop K.R
- *Yuvaraj Sing- Athijeevanathinte 6 sixarukal* (Malayalam), Ebin M.N
- *MounathinteIdanazhiyil* (Malayalam), Vishal Johnson
- *OruNarupushpamayi* (Malayalam)- AnittaShaji
- *Kuttikalude M.T* (Malayalam)- AmaluShaji
- *Muhammad Ali-EdikkoottileIrattachankan* (Malayalam)- Smithalakshmi S
- *KakkattilileKathakaran* (Malayalam)-Anu James
- *Kalabhavan Mani-Vyakthijeevitham Kala* (Malayalam)-Sreekumar V.S
- *KalayudeKaalapravaham*(Malayalam)- Dr. HarikumarChangampuzha

Drishyaharsham(Malayalam)-Dr. P.S Radhakrishnan

- . Delhi Muthal Delhi Vare : Dr: Jose K Manuval
- SahithyaCharithraVijnjaaneeyam : Dr: Jose K Manuval ; Hasan Books Kottayam

Research papers published by faculty in peer reviewed journals

- “Mayyazhippuzhayude theerangalil”oru rashtreeya samskarika vishakalanam:
Dr.Jose.K.Manuval, Asend Publications
- “Sahithya charithravum Vimarshanabhavanayum; Dr.Jose.K.Manuval, jno.41569, Issn:
0974 1984, Vol.10 issu.2, may 2017, 3763-3771

- Cybernetics : oru samvadam , Malayalam research journal, vol.10 issue.2, may 2017, Dr.Jose.K.Manuval
- Kyur sidhanthavum samvadavum Keraleeya pachathalathil, Dr.Jose.K.Manuval, vinjanakairali- march 2018
- Ormmakaludeyum asosthathakaludeyum malapellapachil, Dr.Jose.K.Manuval, 2018 march, Punaravishkara sinimakal: kalayum kalapavum, Dr.Jose.K.Manuval

Participation in seminars/conferences/committees of faculty members

- “Interstitial Negotiations: Problems of identity formation” to be held on the 22nd and 23rd of March 2018, School of letters Mahatma Gandhi University, Kottayam.
- Vivekananda darsanavum samakalika Indian avasthayum, MGU,KOTTAYAM, Dr.Aju.K.Narayanan, 2017.Dec.14, Dr.K.M.Krishnan
- International conference on Images of Self and the other: Exploring identity and alterity , St Aloysius college, Thrissur,Kerala, 12,13 Jan.2018, K.M.Krishnan
- Samskruthi, Antharashtra samskaara paithrukassammelanam.March 27,28,29 (2017) Aksharam campus , Vakkad,Thirur, Dr.Aju.K.Narayanan, keraliya kalapaithrukam
- Film, Folklore & culture in the four day RUSA national seminar on the literature and cinema Art and media : Re-visioning the affective and epistemological spheres of Malayalam, Sree Sankara University Of Sanskrit, regional centre Ettumanoor, 21.02.2018,
- Jos.K.Manuval, Glokkaleekaranam bhashayilum samskarathilum, national seminar on language and culture, central institute of Indian Languages, Mysore, 5-7 Feb. 2018
- Jos.K.Manuval, Sree Sankara University Of Sanskrit, participate in the UGC-sponsored National Seminar on BHASHASASTHRAM :NAVEENA NJANASHASTHRA SAMEEPANANGAL 20,21,&22, FEB.2018, Saibar Bhashasasthram
- Sree Sankara University Of Sanskrit,Kalady, Dr.Jose.K.Manuval, presented a paper/moderated a session on the topic sahithyam, sinima, rupantharavum, padantharavum, in the four day RUSA National Seminar on Literature, Cinema, Art and Media: Re-Visioning the Affective and Epistemological Spheres of Malayalam , 21.02.2018

- Keralasahithya academy, devaswom board college, Thalayolapparambu, malayalavibhagaththinte sahakaranathode 2018 March 21,22, thiiyathikalil sagadipicha prathirodham , sthree ezhuthilum pothumandalathilum , 21.03.2018
- Two day national seminar conducted by the Govt.college Kattapana, 30-31 Jan2017
Cyber modernity and public sphere in kerala, Jose K.Manual
- Tharathamyapadanam 2017 Jan 26-28 kumaranalloor Santhinilayam, varthamanakala Malayalam , Jose.K.MANUAL
- Three day National Seminar on contribution of N.KrishnaPilla to Malayalam Language and Literature held on 20,21,22, February 2017 organized by Department of Malayalam University of Kerala, bhagna bhavanam Darsanavum silpavum
- A lecture on cinema and visual language at the Department of Malayalam , Kannur University in the refresher course organised by UGC-HRD , Kannur University on 14.02.17.
- Dr.Jose.K.Manual, Sinimaniroopana padhathi in the three day National Seminar on Malayalam criticism, held on 1,2,3, March 2017, organized Malayalam department, Kerala University
- Jose.K.Manual, Digitized technology paradigm shift in Educational scenario, International conference on Innovation in Research and pedagogy organized by Voice of teachers & crossian research forum, Holy cross college, (Autonomous)Nagercoil, in collaboration with manonmaniam Sundaranar University, Thirunelveli held on 3-4 March 2017, at holy cross college
- Dr.Jose K.Manual conducted a workshop for MA Cinema&Television (Ist Semester) on 21.07.2017 in St.Joseph's College of Communication.
- Dr.Aju.K.Narayanan, has delivered a lecture on "Cinema –Science and Art" in the study camp conducts by Kerala State chalachitra academy and kerala state sishushema samithy held at Adimali on 07.05.2018
- Dr.Aju.K.Narayanan, has delivered a lecture on "samskarapaithrukupadanam: gaveshanavum sadhyathakalum" in Thunchathezhuthachan Malayalam Sarvakalasala, Aksharam Campus 23.08.2017
- Dr.Aju.K.Narayanan was the resource person for an invited lecture in the National Workshop :Scholar Submit" for research scholars for all disciplines on the topic

“initiatives for excellence in Academic Research organized by the Internal Quality Assurance Cell (iqac) 27.07.2017 St.Joseph’s College, Thrissur

- Dr.Aju.K.Narayanan was a resource person in the seminar on recent trends in drama and cinema, “stage, screen: conception and perception”, Jointly organised by the departments of Malayalam and Hindi of our college and School of Letters , Mahatma Gandhi University , Kottayam in our college on 24th July 2017
- Dr.Aju.K.Narayanan, has delivered a lecture on “ Malayalavum Malayaliyum” in Vaikam taluk , 01.11.2017
- Dr.Aju.K.Narayanan, a paper on “Punarezhuthile Rashtreeya vivakshakal” during Sahithya Academi’s two day seminar on Socio-cultural perspectives of literary adaptation of Malayalam film held on 9-10 August 2017, Department of Malayalam &Kerala studies , Calicut University
- Dr.Aju.K.Narayanan, presented a paper on ‘Keralathile jootha kraisthava nadodi vazhakkangal’ three day international seminar on ‘Ancient songs of Syrian Christians of kerala, 24-26 august 2017, conducted by BCM college, Kottayam
- , Dr.Aju.K.Narayanan, presented a paper on ‘Nadodi parampanyangngal yahuda kraisthava paithrukathil’ three day international seminar on ‘Ancient songs of Syrian Christians of kerala, 24-26 august 2017, conducted by BCM College, Kottayam.
- Dr.Aju.K.Narayanan, delivered keynote address on International gender film Festival organised by Centre for Women’s studies and department of Languages, St.Joseph’s College for Woman. Alappuzha. Held on 12.02.2018
- Dr.Aju.K.Narayanan, has offered an invited talk on the subject”Malayalavum malayaliyum” 4thDec.2017 conducted by the department of Malayalam of St.Thomas College, Kozhencherry.
- Three day International Seminar on “Folklore Padanathinte Varthamanam” , Dr.Aju.K.Narayanan Malayala gaveshana vibhagam, Devamatha College,Kuravilangadu, 14-16 2017
- ‘Vaikhari’ Dr.Aju.K.Narayanan delivered a lecture in the Two day literature camp conducted by the Christian college union 2017-18 from 21/11/2017 22/11/2017 on behalf of vaikhari the camp week

- Dr.Aju.K.Narayanan delivered a lecture on research methodology in connection with Malayalam Research forum monthly eminent talk at the post graduate Department of Malayalam and research centre ,Govt.Brennen college, Dharmadam, Thalasserry on 28 October 2017
- Dr.Aju.K.Narayanan delivered the keynote address on the keralappiravi celebrations organized by the Department of Malayalam, Bharata Mata College, Thrikkakara Cochi, 21 on 2nd November 2017.
- Two day International Seminar “Eyarum navotdanamulyangalum”, Jose .K.Manual, Keraliya Navotdanathil Madhyamangalude Pank. Dr.Aju.K.Narayanan, Nov.8-9-2017
- National workshop sponsored by the directorate of Collegiate Education 14-15 Nov.2017 Queer Theory: Its influence in Hindi- Malayalam literature and film
- “Saibar samskaravum Global lokkaliseshanum” Dr.Jose.K.Manual, International Seminar Vision, Experience and Narration-New Trends in Literacy Discourse organized by the P.G.and research department of Malayalam, St.Thomas College, Palai in collaboration with Kerala Lalitha Kala Academy, Trissur 01-03 Feb 2018

School of Pure & Applied Physics

Books published by faculty through reputed publishers

- Tellurite Glass Smart Materials Applications in Optics and Beyond_PRBiju
- Micro and Nano Fibrillar Composites (MFCs and NFCs)from polymer Blends - Rajendrakumar Mishra , Sabu Thomas, NandakumarKalarickal
- Advanced polymeric Materials for sustainability and Innovations - S Thottathil, S Thomas, N Kalarickal, D Rouxel, CRC Press-2018
- Advanced polymeric materials :Synthesis and applications -S Thottathil, S Thomas, N Kalarickal, D Rouxel, CRC Press-2018
- Innovative Food Science and Emerging technologies , Sabu Tomas- RajendranRajakumari, Anne George , NandakumarKalarickal, CRC PRESS

- Plasma and Fusion Science: from fundamental research to Technological Applications B Raneesh, N Kalarickal, J James, AK Nair, CRC Press
- Nano Medicine and Tissue Engineering: State of the Art & Recent Trends_Dr. NandakumarKalarickal& Dr. Sabu Thomas
- Recent Trends in Nano Medicine And Tissue Engineering_ Dr. NandakumarKalarickal & Dr. Sabu Thomas
- Holistic Health Care: Possibilities and Challenges. _ Dr. Sabu Thomas
- Characterization of Nanomaterials :Advances and key Technologies ; Sneha Mohan Bhagyaraj , Oluwatobi Samuel Oluwafemi, Sabu Thomas, NandakumarKalarickal
- Nanotechnology – Driven engineered Materials: New Insights Oluwatobi Samuel Oluwafem Praveen K.M, Apple Academic Press, 2018
- Functionalized Engineering materials and their applications Sabu Thomas, NandakumarKalarickal,Pius CV, Zakiah Ahmad, JozefTadeusz , Haponiuk, apple academic press
- Advanced polymeric materials for sustainability and innovations-S Thottathil, S Thomas, N Kalarickal, D Rouxel
- Characterization of Nanomaterials : Advances and key technologies Sneha Mohan Bhagyaraj , Oluwatobi Samuel Oluwafemi, Sabu Thomas, NandakumarKalarickal, Wood head publishing
- Carbon based Nanofillers and their Rubber Nanocomposites : Carbon Nano-objects , Y S Rao, Sabu Thomas, NandakumarKalarickal, Elsevier (In press)
- Carbon based Nanofillers and their Rubber Nanocomposites: Fundamentals and Applications ; Y S Rao, NandakumarKalarickal, Sabu Thomas , Elsevier (In press)
- Nanotechnology –Driven Engineered Materials : new insights -Sabu Thomas, Y VES Grohens , NandakumarKalarickal, Oluwatobi Samuel Oluwafemi , Praveen KM, CRC Press
- Functionalized Engineering Materials and their applications: Sabu Thomas, NandakumarKalarickal, Pious C.V, Zakiah Ahmad, JozefTadeusHaponiuk CRC Press

Research papers published by faculty in peer reviewed journal

- Kukku Thomas, Dinu Alexander, S. Sisira , P. R. Biju , N. V. Unnikrishnan ,M. A. Ittyachen, Cyriac Joseph, NUV/blue LED excitable intense green emitting terbium doped lanthanum molybdatenanophosphors for white LED applications, J MaterSci: Mater Electron (2017) 28: 17702–17709.
- S. Sisira, Dinu Alexander, Kukku Thomas, P. R. Biju, N. V. Unnikrishnan, and CyriacJoseph, Effect of annealing temperature on the luminescence of $\text{Ce}_{1-x}\text{PO}_4:\text{Tbx}^{3+}$ nanocrystals: A novel theoretical model and experimental verification, J Mater Sci (2018) 53:1380–1394
- Dinu Alexander, Monu Joy, Kukku Thomas, S. Sisira, P.R. Biju, N.V. Unnikrishnan, C. Sudarsanakumar, M.A. Ittyachen, Cyriac Joseph, Efficient green luminescence of terbium oxalate crystals: A case study with Judd-Ofelt theory and single crystalstructureanalysis and the effect of dehydration on luminescence , Journal of Solid State Chemistry, 262 (2018) 68–78
- Dinu Alexander, Kukku Thomas, S. Sisira, P.R. Biju, N.V. Unnikrishnan, M.A. Ittyachen, Cyriac Joseph, Synthesis and optical characterization of sub-5 nm Terbium oxalate nanocrystals: A novel intense green emitting phosphor, Dyes and Pigments 148 (2018) 386-393
- Kukku Thomas, Dinu Alexander, S. Sisira, SubashGopi, P.R. Biju, N.V. Unnikrishnan,Cyriac Joseph, Energy transfer driven tunable emission of Tb/Eu co-doped lanthanummolybdatenanophosphors , Optical Materials, 80,2018, 37-46.

Dr.NandakumarKalarikkal

- Multifunctional nitrogen sulfur co-doped reduced graphene oxide–Ag nano hybrids (sphere, cube and wire) for nonlinear optical and SERS applications. AK Nair, KB Bhavitha, S Perumbilavil, P Sankar, D Rouxel, MS Kala, **Carbon 132, 380-393**
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- S.Prasanth, T.V. Vineeshkumar, C. Sudarsanakumar, Optical limiting applications of nanomaterials, DAE Solid state symposium (DAE SSPS-2017), BARC, Mumbai.
- S.Prasanth, C.Sudarsanakumar, ZnS quantum dots an efficient candidate for the controlled release of anti-cancer drug. International conference on Advances in biological systems and materials science in nanoworld (ABSMSNW-2017), Department of physics, IIT, Banaras Hindu University, Varanasi.
- S.Prasanth, C.Sudarsanakumar, Magnetic nanoparticles in biological medium, International meeting on Highly Correlated Systems (IMHCS-2017), School of Pure and Applied Physics and IIUCNN, Mahatma Gandhi University

School of Tourism Studies

Participation in seminars/conferences/committees of faculty members

- Presented a paper titled “Traditional farming practices for alternative tourism development in international conference on sustainable globalization ICSG – 2018 Kochi India from 11th – 13th January – 2018. (Dr. Robinet Jacob and Anita T.A)
- Presented a paper titled “Reconceptualising tourism as a tool to support organic

farming in second international seminar on emerging trends in organic farming and sustainable agriculture, CMS college, Kottayam from 22nd – 24th April 2018. (Anita T.A)

School of Social Sciences

Books published by faculty through reputed publishers

- TheyyamKettu of Kerala -The Economy and Labour of Performance – Dr. Rajesh Komath

Participation in seminars/conferences/committees of faculty members


- Dr.Rajesh Komath, has engaged two sessions on “Margin body and Subaltern life” on 27.07.18 in the Refresher course in History(24.07.18- 13.08.18) organised by the UGC-Human Resource development Centre , Kannur University, Kerala
- Dr.Rajesh Komath has invited as a Resource Person in the two day National Seminar organized by the Department of Islamic History, Maharaja’s college, Ernakulam, on 24th&25th sep.2018.
- Dr.Rajesh Komath, has served as Resource Person in the Refresher course in History and cultural studies being conducted by the Human Resource development Centre from (05.09.18- 25.09.18) at Calicut University, Kerala, Body and subaltern life,
- Dr.Rajesh Komath, has served as Resource Person in the UGC sponsored orientation programme being conducted by the Human Resource development Centre from (12.09.18- 09.10.18) at Calicut University, Kerala, 26.09.18 on the topic ‘Ritual performance , Kerala society &culture’.
- Dr.Rajesh Komath was a Resource Person in the two day National Seminar on Interrogating Communalism:Socio Political Dimensions organized by the Post Graduate




Islamic History, Maharaja's college, Ernakulam, on sep.24-25.18Title: Communalising Society and Cultural politics in India.

- Dr.Rajesh Komath has delivered felicitation lecture in Honour of Dr.K.Praksh on “History:Beyond Disciplines” organized by the Department of History, KSMDDB.College, Sasthamcottaon 26.03.2018
- Prakruti, Global Organic Meet, Second international seminar on emerging trends in Organic farming and sustainable agriculture, 22-24 April 2018
- Dr.Rajesh Komath , has presented a Keynote Address the Second International Seminar on aeamerging trends in Organic farming and sustainable agriculture held at CMS college , Kottayam, Kerala 22-24 april2018

International Inter University Centre for Nano Science & Nano Technology





Books published by faculty through reputed publishers






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- Morphological characterization of Nanomaterials, Nandakumar Kalarickal ,
- Small angle light and X-ray scattering in Nanosciences and Nanotechnology , Sabu Thomas, Nandakumar Kalarickal, 2017,
- Optical characterization of Nanomaterials , Sabu Thomas, Nandakumar Kalarickal , 2018
- Mechanical property analysis of Nanomaterials , Nandakumar Kalarickal and Sabu Thomas
- Quantum –Dot Filled Epoxy Nanocomposites with enhanced Thermal, Mechanical and optical properties , Nandakumar Kalarickal, Sabu Thomas, 2018, Elsevier , Characterization of Nanomaterials
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Advanced Centre of Environmental Studies and Sustainable Development

Research papers published by faculty in peer reviewed journals

- Sasi, S., Rayaroth, M.P., Aravindakumar, C.T., U. K., Aravinda et al. Environ Sci Pollut Res 25: 20527. <https://doi.org/10.1007/s11356-017-0563-4>. 2018
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Participation in seminars/conferences/committees of faculty members

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- R. Anuja, S. Prasanth Narayanan, S.Sathrumithra, A. P. Thomas. Diversity of earthworms in selected land use/ agricultural areas of Kottayam district, Kerala, India. Second International Seminar on Emerging Trends in Organic farming and Sustainable Agriculture. Global Organic Meet 2018. CMS College, Kottayam.22-24 April 2018.
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Advanced Molecular Materials Research Centre

Research papers published by faculty in peer reviewed journals

- Enhanced photocatalytic performance of RGO/Ag nanocomposites produced via a facile microwave irradiation for the degradation of Rhodamine B in aqueous solution” K.S. Divya , AkashChandran , V.N. Reethu, Suresh Mathew *Applied Surface Science Journal* , 2018, 444, 811(**IF. 4.3**)
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Padmanabhan, Suresh Mathew, *J. Phy. Chem. A, J. Phys. Chem. A*, 2018, 122, 328–340, (IF: 2.96)

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- Zinc-catalyzed etherification reaction of aryl iodides with phenol, K. Keerthi Krishnan, N. A. Harry, S. M. Ujwaldev, G. Anilkumar, *Chemistry Select*, 2018, 3, 3984. (IF: 1.505)
- Recent developments and perspectives in the zinc-catalyzed Michael addition, K. R. Rohit, S. M. Ujwaldev, K. Keerthi Krishnan, G. Anilkumar, *Asian J. Org. Chem*, 2018, 7, 85. (IF: 2.496)
- Recent advances and perspectives in the zinc-catalyzed nitroaldol (Henry) reaction, S. Saranya, N. A. Harry, S. M. Ujwaldev, G. Anilkumar, *Asian J. Org. Chem*, 2017, 6, 1349. (IF: 2.496)
- Recent Advances in the Chemistry of Masked Ortho-Benzoquinones and Their Applications in Organic Synthesis, N. A. Harry, S. Saranya, K. K. Krishnan, G. Anilkumar, *Asian J. Org. Chem*, 2017, 6, 945. (IF: 2.496)
- A novel Zinc-catalyzed Cadiot-Chodkiewicz cross-coupling reaction of terminal alkynes with 1-bromoalkynes in ethanol solvent, K. K. Krishnan, S. M. Ujwaldev, A. P. Thankachan, N. A. Harry, G. Anilkumar, *Mol. Catal.* 2017, 440, 140. (IF: Nil)
- A novel Zinc-catalyzed Cadiot-Chodkiewicz cross-coupling reaction of terminal alkynes with 1-bromoalkynes in ethanol solvent, K. K. Krishnan, S. M. Ujwaldev, A. P. Thankachan, N. A. Harry, G. Anilkumar, *Mol. Catal.* 2017, 440, 140. (IF: Nil)

Participation in seminars/conferences/committees of faculty members

- Syneesh P., Anu Nair.P, Anandhukrishnan, Manoj Mohan, Sachin P, Anas.S, Experimental study on the effects of Bio ethanol petrol blends in a spark ignition engine: Performance Analysis .A paper presented in the Second international conference on mechanical and manufacturing engineering (ICMME-2017) on 6-7 April , 2017, at SCSVMV University, Knachipuram, Tamilnadu# Abs P-74

- Marilyn Mary Xavier, Marilyn Rose George , P.Radhakrishnan Nair & Suresh Mathew facile Microwave synthesis and characterization of an efficient Agdecorated g C₃N₄ , photocatalyst :Poster presented at ICAMST 2017, BIT, Sathyamangalam , Erode, TN 17-19Aug 2017(Won Best Poster Award)
- Gladiya Mani ,P.Radhakrishnan Nair & Suresh Mathew Graphitic Carbon Nitride-Cobalt Oxide Nano composite: A Novel catalyst for the thermal decomposition of Ammonium perchlorate ::poster presented at International conference on Advanced Materials Science and Technology (ICAMST- 2017),BIT, Sathyamangalam , Erode, T N 17-19 Aug 2017(Won Best Poster Award)
- Jisna Jose and Suresh Mathew Thermal decomposition and evolved gas analysis of Ammonium Nitrate /g C₃N₄ mixtures: : Poster presented at International Conference on Advanced Materials Science and Technology (ICAMST-2017) , BIT, sathyamangalam ,Erode, T N 17-19 Aug 2017
- K.S.Divya, Marilyn Mary Xavier, Akash Chandran and Suresh Mathew , “Enhanced Visible Light Photoactivity of aTernary Ag/RGO/TiO₂ Nanocomposite” in BITS Sathyamangalam , August 2017.
- Aswathy Joseph, Marilyn Mary Xavier, Suresh Mathew, “Fabrication of thin films via free radical induced thermal cross polymerization in ionogels for charge storage applications “, poster presented at “The International Conference on Advanced Materials and Processes (ADMAT 2017 Skymat) “Thiruvananthapuram , India 14-16th December 2017.
- Jomon Joy , S.Anas, “Thermo Mechanical properties of methyl methacrylate acrylonitrile butadiene styrene/epoxy blends” a paper presented at Prof.R.H.Sahasrabudhey Birth Centenary Symposium CYHOC – 2017 held at Trivandrum on 15 December , 2017
- Jisna Jose and Suresh Mathew “Synthesis of graphene oxide and thermal characteristics of Ammonium Nitrate /Graphene oxide mixtures” a paper presented at Thermans2018 (21st Seminar on Thermal Analysis conducted by Indian Thermal Analysis Society (ITAS) AND Dept. Of Chemistry , University of Goa conducted at Goa University from January 18-20, 2018
- Gladiya Mani, P Radhakrishnan Nair &Suresh Mathew “Enhanced thermal decomposition of Ammonium Per chlorate Graphitic carbon Nitride based catalyst” a

paper presented at Therman's seminar organized by Goa University, Goa from January 18-20, 2018 (won best poster award)

- Aswathy Joseph, Suresh Mathew, Jasek Fal* & Gawel Zyla (*University of Poland) "Synthesis and characterization of highly stable surfactant free iron oxide –ionic liquid nanofluids via one step microwave irradiation", a paper presented at Indian Analytical Science Congress 2018 organised by Indian Society of Analytical Scientists Kerala chapter and School of Chemical Sciences, M.G. University, Kottayam held at Kumarakom, Kottayam on February 8 to 10, 2018# Abs no: 18, page no 50 of the Abstract proceedings
- Marilyn Mary Xavier, P. Radhakrishnan Nair & Suresh Mathew, "Photocatalytic activity of Graphitic Carbon Nitrides derived from Different precursors" a paper presented at Indian Analytical Science Congress 2018 Organized by Indian Society of Analytical Scientists, Kerala chapter and school of Chemical Sciences, M.G. University, Kottayam held at Kumarakom, Kottayam on February 8 to 10, 2018# Abs no: 19, page no 51 of the Abstract proceedings (won best poster award)
- Gladiya Mani, P. Radhakrishnan Nair & Suresh Mathew "Graphitic Carbon Nitride: A green catalyst for the thermal decomposition of Ammonium Perchlorate" a paper presented at Indian Analytical Scientists Kerala chapter and School of Chemical Sciences, M.G. University, Kottayam held at Kumarakom, Kottayam on February 8 to 10, 2018# Abs no: 19, page no 52 of the Abstract proceedings

Institute for Intensive Research in Basic Sciences

Research papers published by faculty in peer reviewed journals

- Stabilization of NaBH_4 in methanol using a catalytic amount of NaOMe . Reduction of Esters and lactones at Room Temperature without solvent induced loss of hydrate. Journal of organic chemistry 17.01.2018, 1431-1440 pages, Ibrahim ibnusaoud, Prasanth C.P, Ebbin Joseph, Abhijith A, if. 4.8

Inter University Centre for Bio Medical Research & Super Speciality Hospital

Research papers published by faculty in peer reviewed journals

- Molecular Neurobiology; Can Cyclic Nucleotide Phosphodiesterase Inhibitors Be drugs for Parkinson 's disease? K.P.Mohanakumar, January 2018, vol.55 Issue 1 p.p. 822-834

K.N.Raj Study Centre for Planning and Centre State Relations

Research papers published by faculty in peer reviewed journals

- World economy –A decade after the Financial Crisis , V.Mathew Kurian, October 5-11, 2018
- Capitalism and aggravating Inequality as a Menace to Humanity , V.Mathew Kurian, August 3,9, 2018
- Globalisation as a challenge to Inclusive growth, V.Mathew Kurian, 2016
- Dr. V.Mathew Kurian, has delivered six invited lectures on 18th and 25th September and 1,4,8, & 9th October , 2018 for, English Journalism students at IIMC, Southern Regional Centre, Kottayam
- The basics of Economics for Journals
- Introduction to Indian Economics Scenario and Kerala Economy

Dr. V.Mathew Kurian as a resource person to the National Seminar on Transforming Indian Economy

Department of Life Long Learning & Extension

Research papers published by faculty in peer reviewed journals

- Published an article entitled as “Tribal Development: An Enigma” in the Zenith International Journal of Multi-Disciplinary Research, ISSN 2231-5780, Vol.8(2), February(2018), pp.30-37, SJIF Impact Factor 2018= 6.479
- Published an article entitled as “Human Rights and Tribal Development: A Case Study of MalaiPandaram Tribes in Kattathi Tribal Settlement, Pathanamthitta, Kerala”, in the International Journal of Research in Social Sciences, ISSN:2249-2496, Vol.7, Issue 8, August, 2017, Page, 252-265., Impact Factor (IJRSS) 6.278 for 2015 and 7.081 for 2016

Participation in seminars/conferences/committees of faculty member

- Presented a paper on “Tribal Development : An Enigma” in the Two Day National Seminar on “Contemporary Kerala History in Retrospect” organized by the Post Graduate Department of History and Department of Political Science, KKTU Government College, Pullut, Kodungallur, Thrissur, sponsored by the Directorate of Collegiate Education, Kerala on 25 and 26, August, 2017.
- Presented a paper on “ Rehabilitation, Resettlement and its Aftermath on MalaiPandaram Tribe with special reference to Kuriottumala, Tribal Settlement, Kollam District, Kerala” in the 22nd Annual Conference and International Seminar of Association of Third World Studies, South Asia Chapter, held at University of Jaffna, Sri Lanka, on 28,29 and 30th November, 2017
- Presented a paper on “ Songs as Soul of Culture: An Attappady Experience” in the Kerala History Congress, Third Annual Session on 9,10 and 11 December, 2017 at the Department of History, Farook College, Kozhikkode.

University Centre for International Co-operation (UCIC)

General academic/extension activities

University Centre for International Co-operation acts as a centre

- To promote academic collaboration and exchange in teaching and research;
- To identify potential international institutions of repute that shall enter into collaboration with Mahatma Gandhi University;
- To identify potential academic areas of co-operation;
- To formulate short term inter-disciplinary courses for foreign students;
- To facilitate international co-operation between University Departments and colleges with foreign academic institutions;
- To co-ordinate with national agencies such as UGC, ICCR, ICSSR, ICHR in the promotion of international co-operation;
- To facilitate the visits of students, research scholars and teachers from Mahatma Gandhi University in institutions abroad;
- To promote and host study abroad programmes of institutions from abroad;
- To provide necessary inputs to university decision making bodies so that international exchange will take place to the satisfaction of the institutions involved.

University Centre for International Co-operation has organized the following special lecture/talk

- Fellowship offered by Government of Australia for Masters, Ph.D, Post Doctoral and Executive Levels in Australian Universities by K.S. Beena (Professor, CUSAT) 24 May 2017

- Book Published titled “Instructional Design for short learning Object” published in In 24th May 2017.

The centre organized an International Students and Research Scholars meet on 6th December 2017 where 80 international students and research scholars from various Universities in Kerala were present.

The centre conducted Sastrayan Programme during 26-27 February 2018 organized by Mahatma Gandhi University. The total number of visitors was 220 and 90 percent visitors remarked very good, 8 percent remarked good and rest of the opinion of satisfactory. Overall the programme went very well and the International Students expressed their gratitude in giving good hospitality and they are ready to take up such events much more attractive way in future.

Research papers published by faculty in peer reviewed journals &Participation in seminars/conferences/committees of faculty members

Title	Author/s	Publication
“Spatio Temporal Customer Analysis of Big data Generated from GPS traces of moving objects for personalized Customer Relationship Management”,	Nishad A, Sajimon Abraham	Rajagiri Management Journal, ISBN: 9729968, December 2016
Semantic Trajectory Analysis for Identifying Locations of Interest of Moving Objects”	Nishad A, Sajimon Abraham	IEEE Conference International Conference on Networks & Advances in Computational Technologies, ISBN 978-1-5090-6590-5, July 20- 22, 2017

“Spatio Temporal Tracking an augmented tool for Supply Chain Management”	Nishad A, Sajimon Abraham	International conference on Best Practices in Supply Chain Management, December 22-23,2016
“Sexual Category Feature Extraction of Sentiments about Ayurvedic Health Treatment”,	Deepa Mary Mathews, Sajimon Abraham	International Conference on Current Trends in Engineering, Science and Technology ICCTEST – 2017, ISBN: 978-81-931119-5-6, JAN 5-7, 2017
“Extraction and Evaluation of Patients’ Standpoints Pertaining to Ayurvedic Health Treatment”	Deepa Mary Mathews, Sajimon Abraham	International Journal of Research in Engineering and Applied Sciences (IJREAS), ISSN(O): 2249-3905, ISSN(P) : 2349-6525 , May 2017
“Analytic Thinking of Patients’ Viewpoints Pertain to Spa Treatment”	Deepa Mary Mathews, Sajimon Abraham	IEEE Conference International Conference on Networks & Advances in Computational Technologies, ISBN

		978-1-5090-6590-5, July 20-22, 2017
“Big Data Challenges in Supply Chain: Review on Analysis Techniques Using Statistical Methods and Machine Learning”	Saritha K, Sajimon Abraham	International conference on Best Practices in Supply Chain Management, December 22-23, 2016
“Prediction with Partitioning: Big Data Analytics Using Regression Techniques”,	Saritha K, Sajimon Abraham	IEEE Conference International Conference on Networks & Advances in Computational Technologies, ISBN 978-1-5090-6590-5, July 20-22 2017.
“Big Data Challenges and Issues: Review on Analytic Techniques”	Saritha K, Sajimon Abraham,	Indian Journal of Computer Science and Engineering (IJCSE), e-ISSN: 0976-5166, p-ISSN : 2231-3850, 2017 June.
“Some unstructured Data Mining Methods to Mine Knowledge from Supply Chain Data: A NoSQL perspective”	Benymol Jose, Sajimon Abraham,	International conference on Best Practices in Supply Chain Management, December 22-23, 2016

“Some Big Data Analytics Methods to Mine Knowledge from Supply Chain Data”,	Benymol Jose, Sajimon Abraham	International Conference on Science, Engineering, Technology and Management, March 8-9,2017
“Exploring the merits of NoSQL: A study Based on MongoDB”,	Benymol Jose, Sajimon Abraham	IEEE Conference International Conference on Networks & Advances in Computational Technologies, ISBN 978-1-5090-6590-5, July20-22,2017
“Role of Algorithms in Computer Technology”	Lumy Joseph, Sajimon Abraham	E-learning Instructional Designs for Short Learning Objects, ISBN 978-93-80419-29-9, January 16-30, 2017
“Instructional Design for Learning Path Identification in an E-learning Environment using Felder-Silverman Learning Styles Model”	Lumy Joseph, Sajimon Abraham	IEEE conference Proceedings of the International conference on Networks and Advances in Computational technologies- NetAct17, ISBN 978-

		1-5090-6590-5, July 20-22,2017
, “Web- Based Psychometric Testing Tool for Identifying Patient’s Genetic Variations in Health-Care Management”	Lumy Joseph, Sajimon Abraham	29th Kerala Science Congress, ISBN 81-86366-93-98, January 28-30, 2017
Privacy preserved approach for Trajectory Anonymization through Zone creation for halting points”,	Rajesh N, Sajimon Abraham	IEEE Conference International Conference on Networks & Advances in Computational Technologies, ISBN 978-1-5090-6590-5, July20- 22,2017
Human Rights Violations and Post-Saddam Iraq, <i>International Journal of Management and Social Science Research Review</i>	Vinitha Varghese & C.Vinodan	Vol.1, Issue.2. PP-198-203, ISSN -2349-6738, Impact Factor: 3.029
India’s Foreign Policy and Diplomacy: Emerging Scenario and Challenges	C.Vinodan Ed.	New Century Publications, New Delhi, ISBN 978-81-7708-436-8
Defence and National Security of India: Concerns and Strategies	C.Vinodan Ed.	New Century Publications, New Delhi, ISBN 978-81-7708-

		440-5
US Occupation and Human Rights Issues	Co- Author	Gyan Books Publishers, New Delhi, ISBN : 978-93- 8022-3100
Good Governance and Development : Challenges in India	C.Vinodan Ed.	New Century Publications, New Delhi, ISBN 978-81- 7708-446-7.
Sl No.	<i>Journal Paper/Book Chapter: Author(s), Title, Journal Name, Vol, No, Month & Year, Pages</i>	
1	Co- author (2016), Human Rights Violations and Post-Saddam Iraq, <i>International Journal of Management and Social Science Research Review</i> , Vol.1, Issue.2. PP-198-203, ISSN -2349-6738, <i>Impact Factor: 3.029</i>	
2	Co- author (2017), Environmental Governance and Conservation of Western Ghats, in C.Vinodan (Ed.) Good Governance and Development Challenges in India, New Century Publishers, New Delhi. . ISBN 978-81-7708-446-7.	
3.	Co- author (2017), Local Governance and Disaster Risk Reduction , in C.Vinodan (Ed.) Good Governance and Development Challenges in India, New Century Publishers, New Delhi. . ISBN 978-81-7708-446-7.	
4.	C.Vinodan (2017), India's Maritime Challenges in the South China Sea, in C.Vinodan Ed.(2017), Defence and National Security of India: Concerns and Strategies, New Century Publications, New Delhi, ISBN 978-81-7708-440-5	

Department of Printing & Publishing

Books published

TITLE	PUBLISHER	LANGUAGE
SargaSahithi	SPCS,Kottayam	Malayalam
kaivazhikal	SPCS,Kottayam	Malayalam
SargaKanthi	SPCS,Kottayam	Malayalam
KavyaKanikakal	SPCS,Kottayam	Malayalam
KadhaParichayam	SPCS,Kottayam	Malayalam
KadhaTheeram	SPCS,Kottayam	Malayalam
GadyaKeli	SPCS,Kottayam	Malayalam
KavyaKairali	SPCS,Kottayam	Malayalam
KavyaMalyam	SPCS, Kottayam	Malayalam
Vazhipozhakal	SPCS,Kottayam	Malayalam
AdhunikaLokaKavitha	SPCS,Kottayam	Malayalam
Samanvayam	SPCS,Kottayam	Malayalam
Chandravalayam	SPCS,Kottayam	Malayalam
Nuances	Mac Millan,Noida	English
Fine Tune Your English	Orient Blackswan, Hyderabad	English
Issues That Matter	Mac Millan,Noida	English
Savouring the Classics	Cosmo Books ,Thrissur	English
Pearls from the Deep	Cambridge University Press	English
SahityaSagar	Raj Kamal Prakashan, Delhi	Hindi
GadyaSaurabh	Raj Kamal Prakashan, Delhi	Hindi
IndraDhanush	AmanPrakashan ,Kanpur	Hindi
SahityaDarpan	Rajpal and Sons,Delhi	Hindi
AksharParv	Rajpal and Sons,Delhi	Hindi
PradhinidhiLambiKavithaeim	VaniPrakashan, Delhi	Hindi

Clippings on the Achievements & Activities



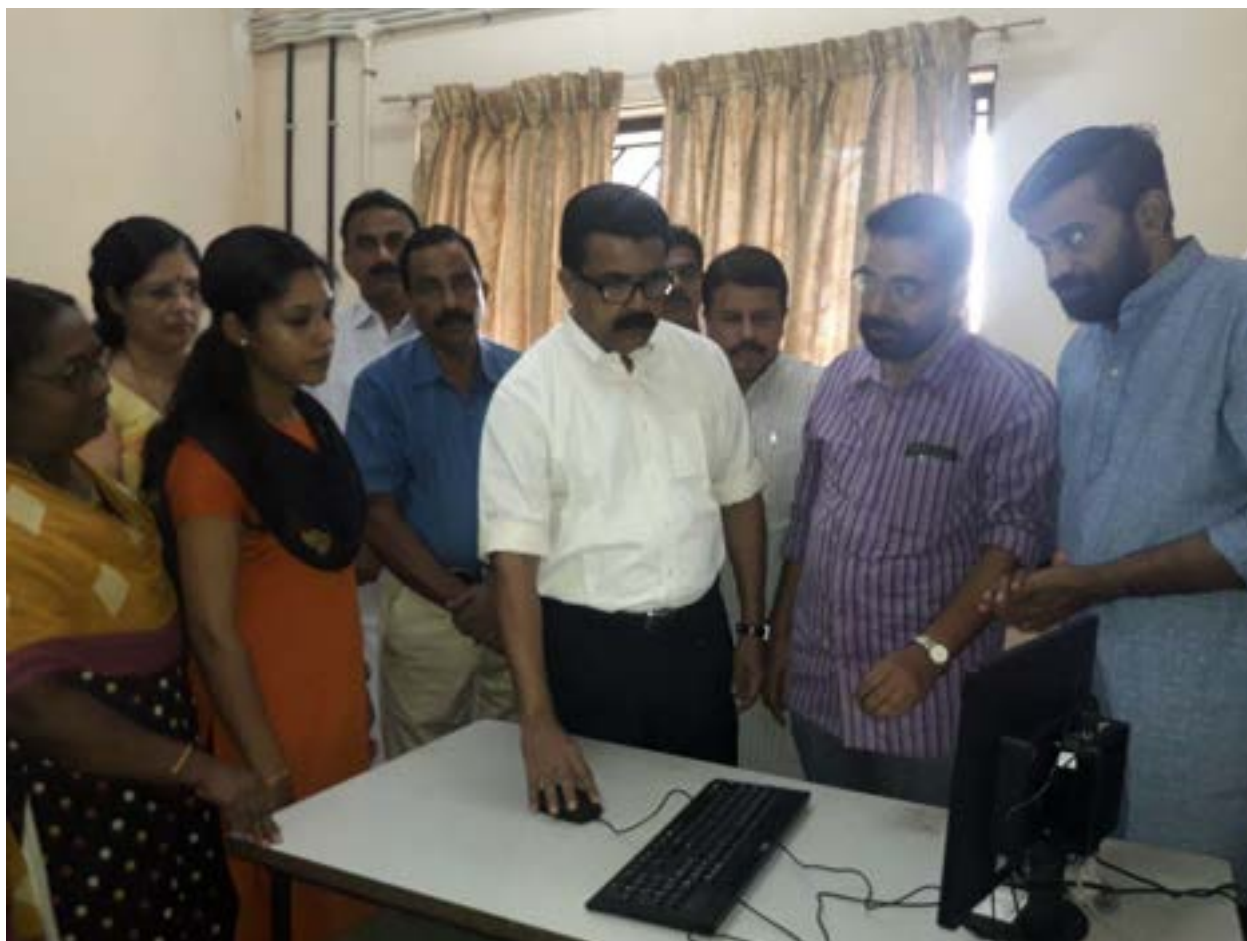
Distribution of Chancellor's Award 2015-16 to Mahatma Gandhi University



Mahatma Gandhi University bagged Chancellor's Award 2015-16 worth rupees 5 Crore



InterUniversity Athletic Championship



Online Services Inauguration – Vice Chancellor Dr. Babu Sebastian



German Scientist Petraposhka being honoured



Bharana Bhasha Prathijnja - M.R. Unni



Environmental Day - Green Protocol Planting of Trees



Jaivam Paddy Sowing



GANDHI JAYANTHI DAY



GLOBAL ORGANIC MEET



MGU Organic Student Startup inauguration



ദിനശേഷിക്കാർക്ക് സഞ്ചാരസൗകര്യമൊരുക്കാൻ എം.ജി. സർവകലാശാല ഒരുക്കിയ വീൽചെയർ സൗകര്യമുള്ള ഇലക്ട്രിക് വാഹനം.



Inauguration of Training and Placement Cell



NANO SCIENCE-meet



MGU-German meet



MGU Natakotsavam inauguration



Jaivam Student Startup Awards