

Yearly Status Report - 2019-2020

Part A				
Data of the Institution				
1. Name of the Institution	MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES TIRUVALLA			
Name of the head of the Institution	Fr. Dr. Cherian J. Kottayil			
Designation	Principal			
Does the Institution function from own campus	Yes			
Phone no/Alternate Phone no.	04692730300			
Mobile no.	9605536290			
Registered Email	principal@macfast.org			
Alternate Email	iqac@macfast.org			
Address	Mar Athanasios College For Advanced Studies Tiruvalla (MACFAST), Thiruvalla,689101, Kerala, India			
City/Town	Thiruvalla			
State/UT	Kerala			

Pincode			689101		
2. Institutional St	atus				
Affiliated / Constituent			Affiliated		
Type of Institution			Co-education		
Location			Semi-urban		
Financial Status			Self finance	d	
Name of the IQAC	co-ordinator/Directo	or	Prof. Varghe	se Abraham	
Phone no/Alternate	e Phone no.		04692730307		
Mobile no.			9446069036		
Registered Email			principal@macfast.org		
Alternate Email			iqac@macfast.org		
3. Website Addre	ss				
Web-link of the AC	AR: (Previous Acad	emic Year)	https://macfast.org/wp-content/uploads/2021/08/AQAR-2018-19.pdf		
4. Whether Acade the year	emic Calendar pre	pared during	Yes		
if yes,whether it is uploaded in the institutional website: Weblink:		https://macfast.org/wp-content/uploads/ 2021/06/Academic-Calendar-2019-20.pdf			
5. Accrediation D	etails				
Cycle	Grade	CGPA	Year of	Vali	ditv
2,0.0	2.300	2 2	Accrediation	Period From	Period To
1	A	3.08	2016	11-Jul-2016	10-Jul-2021

7.	Internal	Quality	Assurance	System

6. Date of Establishment of IQAC

Quality initiatives by IQAC during the year for promoting quality culture			
Item /Title of the quality initiative by Date & Duration		Number of participants/ beneficiaries	

04-Aug-2014

IQAC		
Annual Retreat on Personality Development and positive thinking	04-Feb-2020 1	400
Cyber Law and Security Awareness	04-Feb-2020 1	400
Quality Enhancement Workshop on Logistics of NAAC Second Cycle Accreditation	04-Feb-2020 1	60
Induction Training for Student IQAC	30-Oct-2019 1	30
MOOC training in association with The Educational Multimedia Research Centre (EMMRC)	14-Oct-2019 1	60
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8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Bioscience, Lec MACFAST Works "Cell C Cell De be hel 10th C 2019 t October Tiru School of Bioscience, India	ational ture hop on ycle and eath" to	European Molecular Biology Organization	2019 2	174150
Bioscience, India	d from October to 11th 2019 in valla	(EMBO)		
	ovt. of Expert ittee ing on metrics during	DST, Govt. of India	2020 2	812000

9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the year :	4

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<u>View File</u>
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

12. Significant contributions made by IQAC during the current year(maximum five bullets)

Quality Audits (NIRF, ISO etc.): Participated in NIRF 2020 and started the processes for ISO Certification. Preparations have started for NBA Accreditation. Formed Academic Quality Assurance Council (AQAC) to monitor the NBA Accreditation process. Commencement of New PG Programmes: The syllabus of the new PG Programme in Bionanotechnology is approved by the affiliating university and decided to commence the programme from the next academic year. The faculty team prepared the draft syllabus for M.Sc. Data science and submitted to the affiliating University for approval. Strengthen MoUs and Linkages: Signed MoU with Amity University for the purpose of faculty exchanges, Joint research programmes and publications, joint projects, organizing seminars and workshops, resource sharing and student exchange programs. Signed MoU with IIIT Allahabad for Student Exchange and Training, Research collaboration, Intellectual Property Research collaboration agreements etc. Signed MoU with Baselios College, Kottayam for academic cooperation. Seminars/Conferences/Workshops/FDPs: Organized FDPs by the college and provided financial support to the faculty members for attending Faculty Development Programmes of other institutions. The IQAC also conducted workshops on NAAC Assessment Accreditation processes, New methodologies etc. Placement and Entrepreneurship Orientation: Conducted awareness programmes and interactions with entrepreneurs, District Industry Centre and Startup Mission. IQAC also conducted frequent Alumni Interactions to develop confidence among students and to make them aware of the Industry needs, opportunities and challenges.

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13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes
Strengthen MoUs and Linkages	Signed MoU with Amity University for the purpose of Ph.D. registration for faculty, Joint research, projects, seminars & publications, resource sharing and student exchange programs. Signed MoU IIT Allahabad for Student Exchange and Training, Research collaboration, Intellectual Property & Research collaboration agreements etc. Signed MoU with Baselius College, Kottayam for academic cooperation
Home coming MACFAST Alumni Connect	Conducted frequent Alumni Interactions

	with the students to develop selfconfidence and to make them aware of the Industry needs, opportunities and challenges etc.
Seminars/Conferences/Workshops/FDPs	Organized FDPs by the college and provided financial support to the faculty members for attending Faculty Development Programmes of other institutions. The IQAC also conducted workshops on NAAC Assessment & Accreditation processes, New methodologies etc.
Commencement of New PG Programmes	Syllabus of new PG Programme on M. Sc. Bio nanotechnology is approved by the affiliating university and decided to commence the programme from the next academic year. Prepared draft syllabus for PG Programme M. Sc. Data science by the faculty team and submitted to the affiliating University for approval.
Identify the Best Practice	Identified "KisanSahay MACFAST Scheme for soil analysis" and "Homecoming MACFAST Alumni Connect" as the best practices for the reporting year.
Quality Audits (NIRF, ISO etc.)	Participated in NIRF 2020 and started processes for ISO Certification and NBA Accreditation. Formed Academic Quality Assurance Council (AQAC) to monitor the NBA Accreditation processes.
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14. Whether AQAR was placed before statutory body ?	Yes
Name of Statutory Body	Meeting Date
Core Committee	15-Dec-2020
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2020

15-Dec-2020

Yes

Date of Submission

17. Does the Institution have Management Information System ?

If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)

As part of technology upgrade, an ERP system is developed jointly by the faculty members and students of the college. The active operational modules in the ERP system are 1. Staff and student profile: a. Personal Profile b. Publications c. Additional Certifications d. Participation in Seminars e. Seminars Organized f. Resource Persons g. Projects h. Awards i. Extension Activities 2. Top Level Administration 3. Department Level Administration 4. Class Management 5. Office Administration 6. Hostel Administration 7. Admissions 8. Applications Management 9. Time Table Management System 10. Attendance Management System 11. Results Management System 12. Human Resources 13. Careers 14. Leave Management 15. Placement 16. Parent Portal

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 - Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Mar Athanasios College for Advanced Studies Tiruvalla (MACFAST) is a premier postgraduate research institute offering programmes in Business Administration, Computer Applications and Biosciences. The college being affiliated to Mahatma Gandhi University have limited flexibility in the design of curriculum. The college has effectively implemented the curriculum using ICT enabled Learning Management System such as Google Classroom and online platforms like Zoom, Google Meet etc., so as to transform the students into value driven and professionally competent change agents. The curriculum delivery system adopted is to awaken curiosity in the minds of the student, train them to think rationally and scientifically, enabling them to face the unfamiliar. For the effectual curriculum delivery and documentation, the academic calendar is prepared at the beginning of the academic year. The lesson plan, add on courses and the certificate courses are designed at the beginning of each semester so as to equip students for better employment / higher education. Faculty members who are members of the syllabus revision committee have actively participated in the curriculum - planning workshops organized by the University.

1.1.2 - Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
Android	nil	21/08/2019	60	Employabil ity	Programming Skill Development
ASP.Net	nil	27/03/2019	60	Employabil	

				ity	Programming Skill Development
Java Web Technologies	nil	05/08/2019	72	Employabil ity	Programming Skill Development
Marketing Practice	nil	19/03/2020	40	Employabil ity	Technical Skill
Advanced Corporate Finance	nil	20/03/2020	36	Employabil ity	Technical Skill

1.2 - Academic Flexibility

1.2.1 - New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction		
Nill	nil	Nill		
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
MSc	Biotechnology	03/06/2019
MSc	Bioinformatics	03/06/2019
MSc	Food Technology & Quality Assurance	03/06/2019
MSc	Biochemistry	03/06/2019
MSc	Phytomedical Science & Technology	03/06/2019
MSc	Plant Biotechnology	03/06/2019
MCA	Regular	03/06/2019
MCA	Lateral	03/06/2019
MBA	nil	03/06/2019

1.2.3 - Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	748	Nil

1.3 – Curriculum Enrichment

1.3.1 - Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Communication/ Soft Skill Training	10/06/2019	180
Tech Review Sessions	12/06/2019	180
Communication/ Soft Skill Training	01/08/2019	106
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1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships	
MCA	Regular	21	
MBA	nil	115	
MSc	Biotechnology	9	
MSc	Bioinformatics	8	
MSc	Food Technology & Quality Assurance	24	
MSc	Biochemistry	16	
MSc	Phytomedical Science & Technology	1	
MSc	Plant Biotechnology	8	
MCA	Lateral	70	
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1.4 - Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained

The feedback is collected from all the stakeholders and are analyzed on regular basis. Feedback from students and parents are evaluated and corrective measures are taken by each department. Analyses of the feedback from the faculty members revealed academic capabilities, attitudes and general behavior of the students. The class in-charge communicates the same to the parents. The feedback from the faculty members are also used to design training programs to support placement activities. The recruiting companies appreciate these efforts as it enables them to identify the quality and ability of the students. The feedback from alumni are used to identify and evaluate the requirements of the corporate sector. This enables the institution to frame add-on courses / certificate courses and to organize appropriate training programs for the students.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 - Student Enrolment and Profile

2.1.1 - Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
MBA	nil	120	175	106
MCA	Lateral	42	60	37
MCA	Regular	120	45	34

MSc	Phytomedical Science & Technology	20	Nill	Nill
MSc	Biotechnology	16	18	13
MSc	Plant Biotechnology	20	23	14
MSc	Bioinformatics	20	24	14
MSc	Biochemistry	20	26	14
MSC	Food Technology & Quality Assurance	32	46	32
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2.2 - Catering to Student Diversity

2.2.1 - Student - Full time teacher ratio (current year data)

Year	Number of	Number of	Number of	Number of	Number of
	students enrolled	students enrolled	fulltime teachers	fulltime teachers	teachers
	in the institution	in the institution	available in the	available in the	teaching both UG
	(UG)	(PG)	institution	institution	and PG courses
			teaching only UG	teaching only PG	
			courses	courses	
2019	Nill	571	Nill	50	Nill

2.3 - Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
50	50	11	17	1	8

View File of ICT Tools and resources

View File of E-resources and techniques used

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

MACFAST Mentoring Groups (MMGs) are formed in the college to address the academic, social and mental stress of the students. Each faculty member is assigned with an average of 10 to 12 students. Training programs are arranged for the faculty mentors to properly respond to the counselling requirements of the stressed students. The students who need special attention are referred to the professional counsellor. A Mentoring Diary is issued to each faculty mentor to record the interactions with the individual mentees maintaining the confidentiality of the interactions. The report submitted by the faculty mentor is scrutinized by the academic administrator to ensure the effective implementation of the mentoring system. The mentoring system of the college enables a healthy teacher – student relationship besides addressing academic and other issues of the students.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
571	50	1:11

2.4 - Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
50	50	Nill	3	15

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Elizabeth Thomas Professor India Topper Awin the Course of NPTEL Jul-Dec 2 Examination of Dairy and Food Process and Products Technol 2019 Ms Beena Cherian Dean Second prize paper presentation the National Seminar on Enriching Reseathorizons conduction by St. Teresa college, Ernaku on 5-12-2019 2020 Dr Terry Jacob Associate Professor Certificate of Excellence as reviewer of "As Journal of Reseathorizons and Reports in the National Seminar on Enriching Reseathorizons conduction on the National Seminar on Enriching Reseathorizons conduction of the National Seminar on Enriching Reseathorizons conduction on the National Seminar on Enriching Reseathorizons conduction on the National Seminar on Enriching Reseathorizons conduction of the National Seminar on Enriching Reseathorizons conduction on the National Seminar on Enriching Resea	Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
paper presentat in the National Seminar on Enriching Reseat Horizons conduct by St. Teresa' college, Ernaku on 5-12-2019 2020 Dr Terry Jacob Associate Professor Certificate of Excellence as reviewer of "Ast Journal of Reseat and Reports in	2019			Received All India Topper Award in the Course on NPTEL Jul-Dec 2019 Examination on Dairy and Food Process and Products Technology
Professor Certificate of Excellence as reviewer of "As. Journal of Reseating and Reports in the control of the	2019	Ms Beena Cherian	Dean	Enriching Research Horizons conducted by St. Teresa's college, Ernakulam
2020.	2020	Dr Terry Jacob		Awarded with Certificate of Excellence as reviewer of "Asian Journal of Research and Reports in Ophthalmology" June 2020.

2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semesterend/ year- end examination
Msc	Phytomedical Science and Technology (BS02)	4	08/07/2020	06/02/2021
MCA	Regular	6	19/01/2021	27/07/2021
MCA	Lateral	4	19/01/2021	27/07/2021
MBA	nil	4	25/09/2020	24/03/2021

MSc	Biotechnology	4	22/07/2020	10/09/2021
MSc	Plant Biotechnology	4	02/07/2020	02/09/2021
MSc	Bioinformatics	4	30/06/2020	03/02/2021
MSc	Biochemistry	4	30/06/2020	05/03/2021
MSc	Food technology Quality Assurance	4	06/07/2020	10/09/2021
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

As the college is an Affiliated Institution it has only limited flexibility in initiating reforms in Continuous Internal Evaluation System. The college has followed the CIE as per the parameters set by the Mahatma Gandhi University. The parameters include attendance, performance in internal examinations, seminars, assignments and class participation. Apart from the normal examination pattern, online MCQ examinations are also administered. Plus certification: The college has followed a practice of issuing a Plus certificate (MBA Plus, MCA Plus and Bioscience Plus) on completion of the PG Programme. In addition to student's academic performance, the college evaluates specific attributes of students during their period of study and a Cumulative Grade Point Average (CGPA) is awarded to each student. The parameters are: 1. Communication - Oral 2. Communication - Written 3. Leadership 4. Analytical abilities 5. Interpersonal skills 6. Decision making skills 7. Self-confidence 8. Creativity 9. Hard work 10. General awareness 11. Social commitment 12. Punctuality and Regularity

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

At the beginning of the academic year, the college prepares and publish the academic calendar in accordance with the University guidelines. The academic calendar includes the proposed dates of commencement and closing of semesters, internal and external examinations, major events related to curricular, co-curricular and extra-curricular activities. It also includes proposed dates of Industrial Visits, Arts festivals, Intercollegiate Student fest, Annual Athletic Meet etc. The unexpected loss of working days is compensated by arranging special classes with prior permission from the Principal so as to ensure that the college is functioning in tune with the academic calendar already prepared. Efforts have been made for strict adherence to the academic calendar.

2.6 - Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://macfast.org/wp-content/uploads/2021/06/PO-PSO-CO 2019 20-1.pdf

2.6.2 - Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
			examination		

PHYTOM	MSc	Phytomedical Science & Technology	6	6	100
FT	MSc	Food Technology & Quality Assurance	30	24	80
вс	MSc	Biochemistry	18	8	44.44
BIF	MSc	Bioinforma tics	10	7	70
PBT	MSc	Plant Biot echnology	8	8	100
BTPG	MSc	Biotechnol ogy	9	5	55.55
nil	MBA	nil	115	77	66.95
nil	MCA	Lateral	70	62	88.57
nil	MCA	Regular	21	20	95.23
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2.7 - Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://macfast.org/wp-content/uploads/2021/07/Student-Satisfaction-Survey -19-20.pdf

CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 - Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year	
No Data Entered/Not Applicable !!!					
No file uploaded.					

3.2 - Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Life Sciences and Career by Dr. Smitha Jain, Executive Director of India Biosciences, NCBS	School of Biosciences	05/07/2019
Webinar on the topic PENTAHO - BIG DATA TOOL - UST Global	Department of Computer Applications	28/05/2020

3.2.2 - Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category

nil	nil	nil	Nill	nil
No file uploaded.				

3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start- up	Date of Commencement
0	nil	nil	nil	nil	Nill
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3.3 - Research Publications and Awards

3.3.1 - Incentive to the teachers who receive recognition/awards

State	National	International
0	0	0

3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
School Of Bioscience	1

3.3.3 - Research Publications in the Journals notified on UGC website during the year

Туре	Department	Number of Publication	Average Impact Factor (if any)
National	School of Biosciences	1	0
National	Department of Management Studies	13	4.3
International	School of Biosciences	5	1.7
International	Department of Management Studies	1	0
International	Department of Computer Applications	3	2
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3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication		
Department of Management Studies	6		
School of Biosciences	5		
Department of Computer Applications	1		
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3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/Web of Science or PubMed/Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
	Manjunat	Heat and	2019	0	Mar	Nill

Modelling the kinetics of mass transfer and change in colour during deep fat frying of green peas (Pisum sativum L.) at different frying tem peratures.	ha, S. S., Mathews, A. T., Patki, P. E.	Mass Transfer			Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India	
Optimizing air-frying process conditions for the de velopment of healthy fish snack using response surface me thodology under correlated observatio ns.	Joshy, C. G., Ratheesh, G., Ninan, G., Kumar, K. A., Rav ishankar, C. N.	Journal of Food Science and Technology	2020	0	Mar Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India	Nill
Historical and current pe rspectives on therape utic potential of higher basidiomyc etes: an overview.	Varghese R, Dalvi YB, Lamrood PY, Shinde BP, Nair C.K.K.	3 Biotech	2019	33	MACFAST, Tiruvalla, Kerala, India	2
New dimensions in communi cating science in a digital society.	Dharmapa lan, B., Mahesh, G.	Journal of Scientific Temper	2019	0	Mar Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India	Nill

					-	
Mitigating Acetaminop hen- Induced He patotoxici ty by Using a Wa ter- Alcohol Extract of Phellinus caryophyll i (Agarico mycetes) in a Murine Model	Dalvi YB, Varghese R, Lamrood PY, Nair C.K.K.	Internat ional journal of Medicinal Mushrooms	2019	33	MACFAST, Tiruvalla, Kerala, India	Nill
Reduction of Gamma R adiation-I nduced Damage by Hydro- Alcoholic Extract of Nardostach ys jatamansi	Menon, A., Chacko, T., Nair, P. R., Majeed, T., Nair, C. K. K.	Journal of Environ mental Pathology, Toxicology and Oncology	2019	33	Mar Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India	Nill
Sustaina ble Supply Chain Mana gement: A Hybrid Method To Assess The Drivers	Saji S. S, N. Ramasamy, Sudeep B. Chandraman a	Internat ional Journal of Advanced Science and Technology	2020	2	MACFAST	Nill
A Modified Approach for the Removal of Impulse Noise from Mammogram Images.	Terry Jacob Mathew	Internat ional Symposium on Signal Processing and Intell igent Reco gnition Systems	2019	6	MACFAST, Tiruvalla, India	Nill
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3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Fuzzy soft	Sreeleks hmi C	Journal of Intelli	2020	6	Nill	Department

matrices on fuzzy soft multiset and its ap plications in optimiz ation problems.	Warrier Terry Jacob Mathew	gent Fuzzy Systems				of Mathema tics, MACFAST, Tiruvalla, Kerala, India
A Modified Approach for the Removal of Impulse Noise from Mammogram Images.	Terry Jacob Mathew	Internat ional Symposium on Signal Processing and Intell igent Reco gnition Systems	2019	6	Nill	MACFAST, Tiruvalla, India
Sustaina ble Supply Chain Mana gement: A Hybrid Method To Assess The Drivers	Saji S. S, N. Ramasamy, Sudeep B. Chandraman a	Internat ional Journal of Advanced Science and Technology	2020	2	Nill	MACFAST
New dimensions in communi cating science in a digital society.	Dharmapa lan, B., Mahesh, G.	Journal of Scientific Temper	2019	Nill	Nill	Mar Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India
Reduction of Gamma R adiation-I nduced Damage by Hydro- Alcoholic Extract of Nardostach ys jatamansi	Menon, A., Chacko, T., Nair, P. R., Majeed, T., Nair, C. K. K.	Journal of Environ mental Pathology, Toxicology and Oncology	2019	33	Nill	MACFAST, Tiruvalla, Kerala, India
Mitigating Acetaminop hen- Induced He patotoxici ty by Using a Wa	Dalvi YB, Varghese R, Lamrood PY, Nair C.K.K.	Internat ional Journal of Medicinal Mushrooms	2019	33	Nill	MACFAST, Tiruvalla, Kerala, India

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ter- Alcohol Extract of Phellinus caryophyll i (Agarico mycetes) in a Murine Model						
Historical and current pe rspectives on therape utic potential of higher basidiomyc etes: an overview.	Varghese R, Dalvi YB, Lamrood PY, Shinde BP, Nair C.K.K.	3 Biotech	2019	33	2	MACFAST, Tiruvalla, Kerala, India
Optimizing air-frying process conditions for the de velopment of healthy fish snack using response surface me thodology under correlated observatio ns.	Joshy, C. G., Ratheesh, G., Ninan, G., Kumar, K. A., Rav ishankar, C. N.	Journal of Food Science and Technology	2020	Nill	Nill	Mar Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India
Modelling the kinetics of mass transfer and change in colour during deep fat frying of green peas (Pisum sativum L.) at different frying tem peratures.	Manjunat ha, S. S., Mathews, A. T., Patki, P. E.	Heat and Mass Transfer	2019	Nill	Nill	Mar Athanasios College for Advance Studies, T hiruvalla, Kerala, 689101, India

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3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Semi nars/Workshops	47	141	39	85
Presented papers	24	10	Nill	Nill
Resource persons	Nill	5	4	13
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3.4 - Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Medical Camp on World Heart Day	School of Biosciences and NSS, unit MACFAST	2	102
Train the Trainer Programme with Online Tools	Dept of Computer Applications, MACFAST and Vikas, Thejus School Vallamkulam, MGM Bethany, Home of Providence Kunnamthanam, Assisi Convent	2	35
Outreach Programme - Training on PHP MySql	Dept of Computer Applications, MACFAST, UIT Adoor and Assumption College Changanachery	1	32
Outreach Programme - Training on PHP MySql	Dept of Computer Applications, MACFAST and UIT, Adoor	З	20
Essential Commodity Distribution for Flood Relief at Kavalappara, Wayanad	NSS unit, MACFAST	1	35
Distribution of essential commodities, clothes and food to Njavanamkuzhi,	NSS unit, MACFAST	1	35

adopted village					
Distribution of Onam kit and food to Old Age home, Kunnamthanam	NSS unit, MACFAST	1	35		
Stem Cell Donation Camp	NSS unit, MACFAST	1	250		
Youth empowerment through Physical and mental well being	MACFAST and Art of Living Foundation	5	43		
Arivum Athijeevanavum (Awareness program local public in surviving the COVID 19 pandemic)	Mar Athanasios College For Advanced Studies Tiruvalla and Radio MACFAST 90.4	5	7		
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Coronavirus Outbreak Management by developing COVID-19 Monitoring System (CMS) ALAPPUZHA 1.0 Android app for District Administration, Alappuzha	Letter of Appreciation	District Administration, Alappuzha	1
Developing of Thirike Android App for collecting information of returning immigrants for District Administration, Alappuzha	Letter of Appreciation	District Administration, Alappuzha	1
Developing of Alappuzha Disaster Management (ADM) Android app for District Administration, Alappuzha	Letter of Appreciation	District Administration, Alappuzha	1
COVID-19 Geo Fencing Alert System (CGFAS) Android app for District Police	Letter of Appreciation	District Police Force, Kottayam	1

Force, Kottayam					
Coronavirus Outbreak Management by developing Migrant Labour Registration COVID-19 (MLRC) Android app District Police Force, Kottayam	Letter of Appreciation	District Police Force, Kottayam	1		
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme Medical Camp	Organising unit/Agen cy/collaborating agency School of Bioscience and NSS unit MACFAST	Name of the activity World Heart Day Celebrations Free Medical	Number of teachers participated in such activites	Number of students participated in such activites
Outreach Programme	Dept of Computer Applications, MACFAST and Vikas, Thejus School Vallamkulam, MGM Bethany,	Camp - October 2019 Train the Trainer Programme with Online Tools- November 2019	2	35
	Home of Providence Kunnamthanam, Assisi Convent	Outro		20
Outreach Programme	Dept of Computer Applications, MACFAST, UIT Adoor and Assumption College Changanachery	Outreach Programme - Training on PHP MySql-August 2019	1	32
Outreach Programme	Dept of Computer Applications, MACFAST and UIT, Adoor	Outreach Programme - Training on PHP MySql-May 2020	3	20
Social compassion	NSS unit, MACFAST	Essential Commodity Distribution for Flood Relief at Kavalappara, Wayanad	1	35

		•		
Social compassion	NSS unit, MACFAST	Distribution of essential commodities, cloths and food to Njavanamkuzhi, adopted village - August 2019	1	35
Social compassion	NSS unit, MACFAST	Distribution of onam kit and food to Old Age home, Kunnamthanam - 4th and 6th Sep 2019	1	35
Social compassion	NSS unit, MACFAST	Stem Cell Donation Camp - 24th Sep 2019	1	250
Awareness Programme through Campus Community Radio	Mar Athanasios College For Advanced Studies Tiruvalla and Radio MACFAST 90.4	Arivum Athijeevanavum : building awareness among the local public in surviving the COVID 19 pandemic	5	7
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3.5 - Collaborations

3.5.1 - Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration		
Publication of	Council Of	nil	3		
Conference	Scientific And				
proceedings of	Industrial				
International	Research-National				
Conference on	Institute Of				
Advances in Food	Science				
and Industrial	Communication And				
Biotechnology	Information				
organized by the	Resources				
college	(CSIR-NISCAIR)				
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Project	Understand	National	09/01/2020	18/03/2020	1

work	ing Rice (Oryza Sativa L.) Tissue culture for transgenic generation.	Institute of Plant Genome Research and Science, Delhi (NIPGR)			
Project work	Analysis of Stress Associated Protein 1(SAP-1) in Arabidopsis using overex pression approach	Delhi University, South Campus.	09/01/2020	17/03/2020	1
Project work	Analysis of Arabidopsis thaliana ove rexpressing AtSRG gene	Department of Plant Molecular Biology, Delhi University South campus.	09/01/2020	30/06/2020	1
Project work	Determinat ion of Antioxidant properties of pigmented and non pigmented rice bran of Indian variety.	School of Life Science, University of Hyderabad	15/01/2020	20/03/2020	1
Project work	Cloning and sequencing of potato apical leaf curl resistance gene	ICAR- Central Potato Research Institute, Shimla	16/01/2020	15/04/2020	1
Advanced Technology Training	MACFAST Innovation Corporate Synergy	CDAC, Trivandrum	02/03/2020	07/03/2020	46
Advanced Technology Training	MACFAST Innovation Corporate Synergy	CDAC, Trivandrum	24/02/2020	29/02/2020	42
Advanced Technology Training	MACFAST Innovation Corporate Synergy	CDAC, Trivandrum	23/09/2019	28/09/2019	44

Advanced Technology Training	MACFAST Innovation Corporate Synergy	CDAC, Trivandrum	05/08/2019	10/08/2019	48
Advanced Technology Training	MACFAST Innovation Corporate Synergy	CDAC, Trivandrum	24/06/2019	06/07/2019	57
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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Amity University	22/08/2019	Ph.D. registration for faculty, Joint research, joint projects, joint seminars, joint publications, resource sharing, student exchange programmes	2
Baselius College, Kottayam	18/09/2019	Development of academic cooperation in computer education Activity- Conducted Workshop 19th November 2019	52
IIIT Allahabad	11/02/2020	Education, Student Exchange and Training, Research collaboration, Intellectual Property Research collaboration agreements	3

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 - Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development	
3048000	2787901	

4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Number of important equipments purchased (Greater than 1-0 lakh)	Newly Added

during the current year	
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Video Centre	Newly Added
Seminar halls with ICT facilities	Existing
Classrooms with LCD facilities	Newly Added
Seminar Halls	Existing
Laboratories	Existing
Class rooms	Existing
Campus Area	Existing
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4.2 - Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
кона	Fully	20.05.07	2003

4.2.2 - Library Services

Library Service Type	Exis	ting	Newly Added		To	tal
Text Books	23926	9276286	2034	1119256	25960	10395542
Reference Books	10618	1860768	260	375295	10878	2236063
e-Books	Nill	Nill	180000	259728	180000	259728
Journals	85	Nill	6	114861	91	114861
e- Journals	Nill	Nill	35505	783776	35505	783776
CD & Video	1015	Nill	66	Nill	1081	Nill
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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e- content
Dr. Jenny Jacob	ONLINE -FDP - Creating and Managing Online Classes	Google Sites	17/06/2020
Tiji Thomas	MCA - Sem II: Analysis Design of Algorithms (Module 1 -2)	Google Classroom	22/03/2020
Dr. Nishad P.M	MCA - Sem V: E	Google Classroom	22/03/2020

	Commerce (Module 4 - 5)		
Ashokraj R	MCA - Sem V: Advanced Java Programming - Direct (Module 1 - 2)	Google Classroom	22/03/2020
Ashokraj R	Sem II: Object Oriented Programming through Java	Google Classroom	22/03/2020
Stephen James	MCA - Sem V: Advanced Java Programming -Regular (Module 1 - 2)	Google Classroom	22/03/2020
Phijo J Cherickal	MCA - Sem V: Enterprise Resource Planning (Module 4 - 5)	Google Classroom	22/03/2020
Ranjini Mariam Philipose	MCA - Sem II: Data Communication And Networks	Google Classroom	22/03/2020
Ranjini Mariam Philipose	Sem II: Analysis Design of Algorithms (Module 3-5)	Google Classroom	22/03/2020
Vidhya V Kumar	MCA - Sem V: Knowledge Management Business Intelligence	Google Classroom	22/03/2020

4.3 – IT Infrastructure

4.3.1 - Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	231	180	3	7	0	7	7	55	30
Added	4	0	0	0	0	3	1	0	1
Total	235	180	3	7	0	10	8	55	31

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

55 MBPS/ GBPS

4.3.3 - Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
MACFAST Media Room	https://www.youtube.com/watch?v=RR33h D

iw3w

4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
27900000	27567429	11000000	12003984

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The college has framed a set of policies and procedures for maintenance and utilization of physical, academic and support facilities Administrative Council: The Administrative Council with the Principal as the Chairman and, the Manager, Academic Administrator, Office Superintendent and Chief Accounts Officer as members take major decisions pertaining to the maintenance and utilization of physical, academic and support facilities. All the repairs and renovation work is reported to the Administrative Council and executed through appropriate agencies. The major works are executed by inviting quotations or tenders. Maintenance Team: Maintenance team is headed by the Manager and assisted by the Supervisor. The Supervisor is in charge of undertaking the maintenance of infrastructure facilities, furniture repairs, masonry and plaster works, painting, carpentry, plumbing, electrical works, gardening and housekeeping. Adequate in-house staff is employed to maintain hygiene and cleanliness on the campus to provide a clean, green and congenial learning environment. Classroom Maintenance: The rooms are cleaned daily, and the repair and maintenance of assets are undertaken on need basis. Library Maintenance: The library is maintained by the library committee headed by the Librarian. The periodical maintenance of the library is done by the maintenance team as per the requirements put forward by the Librarian. Laboratory Maintenance: The Laboratory equipment is procured and augmented as per the curriculum and student's strength. The faculty in-charge of the laboratory is responsible for reporting the requirements periodically. Timely maintenance of the backup system and standby power generator are ensured by the maintenance team. Sports facilities: The sports equipment are maintained under the supervision of the faculty-in-charge. The sports committee periodically assess the requirements for daily practices, conducting tournaments and Annual Athletic Meet. Based on the report, the Administrative Council takes steps for timely maintenance and purchase of additional sports equipment, if required. Restrooms: The restrooms for boys and girls are cleaned twice a day. Security Measures: The campus is widely covered through 128 CCTV surveillance cameras which are maintained by the IT wing of the college. Security guards are deployed on campus and hostel 24x7 to ensure the safety of students, staff and physical assets. Fire Extinguishers: Fire extinguishers are placed near to potential fire hazard. Overhead water tanks are connected to hoses which are available to use in emergency situations. Power supply: A generator of 81 kVA power and 390 Solar panels which generates 130 kVA power is installed to ensure uninterrupted power supply. The maintenance is undertaken through AMC (Annual Maintenance Contract). Maintenance of Air Conditioners, Biogas plant, Elevators and Computers/Networking equipment are done at regular intervals.

https://macfast.org/wp-content/uploads/2021/08/Maintanence-Policy-2019-20.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees			
Financial Support from institution	Scholarship for socially and economically backward community, Merit Scholarship, Community and Loyalty grant, Scholarship for students from backward districts, etc.	77	1644500			
Financial Support from Other Sources						
a) National	E- Grants	31	3054700			
b)International	nil	Nill	0			
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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Personal Counselling and Mentoring	20/08/2020	126	Department of Computer Applications
Mentoring	20/08/2020	221	Department of Management Studies
Outbound Experiential Learning	07/01/2020	106	LEAP learning academy, Coimbatore
Aptitude training (MCA)	03/02/2020	115	Corporate Relations Department and Pragmatix
Aptitude training, pre placement training and test (Phase 2, 3 and 4) (2018-2020)batch MBA	07/02/2020	115	Corporate Relations Department and Pragmatix
Aptitude training, pre placement training, and test (Phase 2, 3 and 4) (2018-2020)batch MBA	25/02/2020	115	Corporate Relations Department and Pragmatix
Business Protocol and Dining Etiquette training	29/02/2020	115	Ramada Alleppy Beach Resorts and Department of

			Management studies, MACFAST		
Aptitude training, pre placement training, and test (Phase 2, 3 and 4) (2018-2020 batch MBA)	19/03/2020	115	Corporate Relations Department and Pragmatix		
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2019	Placement training MCA (2018-2020) Batch on 3rd August 2019	Nill	93	Nill	21
2020	Phase 2 compulsory placement training to MBA(2018-202 0 Batch) on 6th to 10th January 2020	Nill	115	Nill	59
2020	NET/GATE/A RS/BET	34	Nill	4	Nill
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
2	2	3

5.2 - Student Progression

5.2.1 – Details of campus placement during the year

	On campus			Off campus	
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
Techsmith Software Pvt Ltd.	46	3	Manjilas Food Tech Pvt. Ltd	8	1
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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2019	1	MSc Biochemistry	School of Biosciences	CFTRI, Mysore	Doctoral Degree
2019	1	Master of Business Adm inistration	Department of Management studies	Mahatma Gandhi University Kottayam	MPhil
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5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
NET	1
GATE	3
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5.2.4 - Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants		
MACFIESTA	College	350		
Sports meet	College	450		
Dakshina	College	250		
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5.3 - Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2020	Awarded 240 hours outstandin g service completion from Mahatma Gandhi University National Service Scheme	National	Nill	1	180448	Jibu Sunny
2020	Online Quiz on In ternationa l day for biological diversity, DBT-FIST	National	Nill	1	19001102 1851	Renjitha Rajeev

2019	supported (FASH) and Eco club, Karpagam Academy of Higher education on 28th May 2020 First Prize in Innovative mind compe tition conducted	National	Nill	1	3538	Gison Tom Mathew
	by Vishwab rahmana college on 4th September 2019					
2019	First Prize in Debug Your Soul compe tition conducted by Vishwab rahmana college on 4th September 2019	National	Nill	1	3545	Nibu Cherian
2019	IASC- INSA-NASI Summer Research Fellowship in 2019 at Rajendra Memorial Research Institute of Medical Sciences, Patna April -June 2019	National	Nill	1	18001101 4410	Soumya Thomas
2019	Selected for NAHEP sponsored Training on Plant Genetic Resources Management	National	Nill	1	19001102 1842	Anju Alexander

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The Student council in the college is constituted with elected representatives of the students of the college and the Staff Advisor nominated by the Principal as per the guidelines of the affiliating university. The council meet regularly and discusses about scheduling various curricular, co- curricular and extracurricular activities of the college. The student representatives of the Internal Quality Assurance Cell is actively involved in providing suggestions on conducting co-curricular activities and overall development of student community. The major activities of students council includes . Coordination of 'Macfiesta'(fest) and Dakshina (graduation ceremony) • Organizing programmes of National Service Scheme (NSS) • Thiruvalla Mini Marathon (public awareness programme) • Organizing students representation in outside fests/events, seminars, paper presentations etc. • The student council is also partaking in all social responsibilities along with MACFAST-community radio and green and clean initiatives of the institution • Placement related activities • Constituting student committees for organizing International and National conferences, seminars, workshops • Conducting webinar series on COVID-19 pandemic and its impact in business and society Students representation in academic committees/bodies include: • G N Ramachandran Science Club • Entrepreneur Development Club(EDC) • Steve Jobs club • Peter Drucker Club • Literature Club • National level college fest 'Macfiesta' • Satgamaya -orientation and bridge course for freshers • Placement committees Representation of students in administrative committees/bodies includes: • Women's Cell • National Service Scheme (NSS) • Internal Quality Assurance Cell (IQAC) • Incubation Centre

5.4 - Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Institution has a registered Alumni Association with former students of MBA, MCA and Biosciences as its members. Alumni Association conduct meeting on regular intervals on matters of common interests, enhancing effectiveness of academic and co-curricular activities. Alumni association has given suggestions on curricular and co-curricular enrichment. Alumni association of the college has been contributing for quality enhancement through industry interactions, soft skill training, and career counselling. Their support in admission procedures, social responsibility activities of the institution are commendable. During COVID-19 pandemic the alumni interactions are shifted to online mode and conducted the Alumni meets using virtual platform. The association has a chapter in UAE also.

5.4.2 - No. of enrolled Alumni:

350

5.4.3 – Alumni contribution during the year (in Rupees) :

0

5.4.4 – Meetings/activities organized by Alumni Association :

Alumni meetings are conducted using virtual and physical facilities. Department wise Alumni meetings are conducted at regular intervals. Alumni of MBA, MCA and Biosciences often visit the college and interact with existing students, teachers and college authorities. Informal get-togethers and meetings with the members of the Alumni association are also organized. The activities of Alumni Association also include: • Orientation Programme • Seminars and Webinars/Interactions • Career Counselling • Placement Support • Soft Skill Training • Invited Talks by reputed resource persons of the Alumni Association

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The institution practices decentralization and participating management as part of good governance, leadership and management as is reflected in the vision and mission of the college. The Existing Principals Advisory Committee has been redesignated as Administrative Council with Principal as chairperson and, Manager, Academic Administrator, Office Superintendent and Chief Accounts Officer as members. This council is the top level administrative body for taking the major decisions. The college encourages participative management by incorporating the suggestions of the council of heads of departments in its decision making process. The two practices of decentralization and participative management effectively implemented during the reporting year are - in managing the admission process and in recruitment and selection of teaching and non-teaching staff. 1. Admission process: The Core Committee constituted with the Principal as the chairperson and, the Academic Administrator and heads of the departments as members has, in its meeting nominated a senior faculty member as the admission officer of the college. Accordingly, the Principal delegated the Admission officer to constitute an Admission Monitoring committee to complete the admission process of the current year. The Admission officer, who is also the convener of the Admission Monitoring Committee, is given the authority to delegate the different stages involved in the admission process to its members and to form Department- wise sub-committees for the successful completion of the admission process ensuring the transparency in admissions as per the rules and regulations of the affiliating university. 2. Recruitment and Selection of Teaching and Nonteaching Staff: The Principal delegates the authority and responsibility to carryon on the process of recruitment and selection of both teaching and Nonteaching staff to the Academic Administrator who is currently in charge of the HR Manager. The HR Manager shall proceed the recruitment and selection process following the provisions of the HR Police of the college. The Heads of Departments, in the case of teaching faculty and the office superintendent in the case of non-teaching staff shall report the vacancies through the Principal. The HR Manager shall initiate the recruitment and selection process by giving advertisements in leading newspapers, Campus community radio and Online media. The vacancies are also publishes in college websites. After shortlisting the candidates applied for various post, the HR Manager shall, in consultation with the Principal, authorize the concerned heads of the

department/Office Superintendent to constitute the Interview board. The arrangement to be done for the interview is delegated to the Public Relations Officer of the college. The selected candidates are informed by the PRO to Report the Principal through the HR Manager with relevant Documents for joining duty.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

6.2 - Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Admission of Students	The admission process in the college is carried on by the Admission Monitoring Committee as per the admission Rules and Regulation framed by the affiliating University. The details of the programmes offered are published in the college website and in the prospectus. The college has offered the facility of online submission of applications for admission and to appear for online interview. The college ensure transparency at all the level of the admission process and strict adherence to the admission rules and regulation of the University.
Industry Interaction / Collaboration	The College has entered into collaborations and industry interaction with a view to enhance the academic and placement potential of the students. The collaboration with Sami Labs Ltd. Bangalore is for undertaking internship by students with C-DAC Thiruvananthapuram to train the students of Computer Applications regarding the recently introduced Application in the Industrial Sector with Amity University Noida Delhi and IIIT Allahabad for faculty/student exchange, research programmes and joint publications with CFTRI Mysore for student internship and training.
Human Resource Management	The recruitment and selection process is done by the HR department based on the policy of the college. The vacancy of the teaching faculty shall be reported by the concerned Heads of the Departments and that of non-teaching staff by the Manager. The recruitment is done through career notifications on the college website and advertisements in leading newspapers, RadioMACFAST 90.4, and social media. The candidates are also provided with the facility of applying online. The candidates

	shortlisted after preliminary screening are called for personal interview.
Library, ICT and Physical Infrastructure / Instrumentation	The College has well-maintained infrastructure facilities. The classrooms are well furnished and the laboratories are equipped with the requirements of the syllabus and research needs. The Library of the college has subscribed adequate number of e-journals, journals, e-books and has procured more than 3000 textbooks during the year. The college library is linked to the websites of Mahatma Gandhi University, Kottayam, and AICTE through the online software KOHA 20.05 so that easy access to information from these sites is made possible for the students and faculty members. ICT resources are maintained and used for teaching-learning purposes.
Research and Development	College management motivates faculty members and students to participate in conferences, seminars, workshops and to publish their research papers in Indexed Journals. Monetary incentives are given to faculty members and students for their publications. The IQAC monitors the research publication of the faculty and recommends due incentives. The students and faculty members are encouraged to contribute articles in the Journal of Science, Technology Management (JSTM) published by the college. Signed MoUs with top institutes for collaborative research. Faculty members are provided with sabbatical leave for research work and provide incentives for undertaking minor and major projects funded by various agencies.
Examination and Evaluation	A separate examination hall with modern infrastructure facilities and CCTV is earmarked for conducting the examinations. The semester-wise Internal Examinations are scheduled in advance and the responsibility of conducting the examination is vested with the concerned heads of the Departments. The evaluation of the answer books is based on the answer key. The college has insisted on timely evaluation of the answer books in a transparent and unbiased manner. The end-semester examinations are conducted as per the timetable fixed by the University. All the teachers are actively involved in the conduct and

	evaluation of exams.
Teaching and Learning	Participative method of Teaching and Learning process is adopted in the college. Based on the evaluation of the learning capabilities, the students are identified as Slow Learners, Average Learners and Fast Learners. Slow learners are given Remedial Coaching, Average Learners are encouraged to have constant interactions with the concerned faculty members and Fast Learners are given additional challenging assignments for progression to higher levels of learning. The tools used in the teaching-learning process include presentations, hands-on exercises, brain storming sessions and case studies. Well-equipped laboratories and Wi-Fi facilities are provided for making the teaching learning-process more effective.
Curriculum Development	Being an affiliated institution, the college adheres to the curriculum developed by the University. The members of the Board of Studies nominated from this college are actively involved in the process of curriculum development and designing the syllabus of different programmes. The syllabus for the new PG Programme Bionanotechnology was prepared and submitted by the faculty team of the college and was approved by the University. The syllabus of another PG Programme M.Sc. Data Science was prepared and submitted to the University for approval. Appropriate plans and strategies are developed for the implementation of the curriculum.

6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Planning and Development	Implemented e-governance in the areas of Administration, Finance and Accounts, Student Admission and Support, and Examinations. E-mails and WhatsApp groups are also used for effective governance.
Administration	The biometric attendance system is implemented in the college for recording and monitoring the attendance of both Teaching and Non-teaching staff. Monthly attendance reports and other official notifications are communicated to the employees through email. The entire campus is under CCTV

	camera surveillance. The major financial transactions are through the e-banking system.
Finance and Accounts	A computerized accounting package is used to record all financial transactions. An online facility is provided by the college to the students for remitting their fees. The college uses an e-payment system for remittances to the University, contributions to ESI and PF, and payment of Income Tax.
Student Admission and Support	The details of the programmes offered are published on the college website. The students can submit their applications for admission through the online portal available on the website. All the admission process is done as per the schedule published by the University. The admission process facilitates online mode for conducting interviews and payment of fees.
Examination	Online platforms are used for conducting Internal examinations in the context of the pandemic situation. The Internal Examination marks are submitted to the University through online. The fee for the end semester examination is remitted to the University through online. The hall tickets and question papers are downloaded for conducting the examinations as per the directions of the University. Facilities are also provided for conducting online Viva voce examinations. All the examinations are conducted under CCTV surveillance.

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2020	Dr. Neethu Ann Georgie	National Conference on Global Scale Re cession-Impact on Management Systems	Viswajyothi College of Engineering and Technology, Vazhakulam	1300
2019	Dr.Terry Jacob Mathew	5th International Symposium on Signal	SIRS	9808

		Processing and Intelligent Recognition System		
2019	Mrs.Beena Cherian	National Seminar on Enriching Research Horizons	St.Teresa College, Ernakulam	740
2019	Dr. Sudeep B Chandramana	International Association of Jesuit Business School (IAJBS)	Xavier University, Bhubaneshwar	8000
2019	Mrs.Pinchu Elizabeth Thomas	Role of HPLC in Food Analysis (CFTRI)	CFTRI Mysore	16522
2019	Dr.Treesa Varghese	Bioradiance 2019 At Pushpagiri Hospital	Pushpagiri Research Centre	1710
2019	Gijin P Pullenkunnel	Bioradiance 2019 at Pushpagiri Hospital	Pushpagiri Research Centre	1500
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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	Gamifica tion for Learning and develo pment	nil	03/05/2019	04/05/2019	50	Nill
2019	MDC(Qual ity Enhanc ement Program)	nil	15/06/2019	15/06/2019	55	Nill
2019	MDC(Qual ity Enhanc ement Program)	nil	12/06/2019	12/06/2019	55	Nill
2019	Institut ional Coll aboration for teaching	nil	22/07/2019	22/07/2019	48	Nill

	and Research					
2019	Training on ERP software	nil	03/10/2019	03/10/2019	42	Nill
2020	Quality Enhancemen t Workshop	Quality Enhancemen t Workshop	04/02/2020	04/02/2020	45	10
2020	Training on managing online classes in virtual platform	nil	20/03/2020	20/03/2020	31	Nill
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6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
FDP series on Learning, Pedagogy and Effective Use of Case Methodology	1	17/05/2020	21/05/2020	5
FDP on "Cyber Forensics and Crime Analysis	2	08/07/2019	12/07/2019	5
5 Day FDP at Summer School on Deep Learning,	1	17/05/2019	21/05/2019	5
Advanced data Analysis	1	13/05/2019	19/05/2019	7
General Course on Intellectual Property	1	17/05/2019	29/06/2020	44
FDP on Moodle Learning Management System	2	01/05/2020	06/05/2020	6
FDP on Managing Online Classes and Co- creating MOOCS : 2.0	1	18/05/2020	03/06/2020	17
Biotechnika- Schrodinger	1	22/07/2019	02/08/2019	12

Joint Workshop		
on Computer		
Aided Drug Discovery		
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6.3.4 - Faculty and Staff recruitment (no. for permanent recruitment):

Teac	hing	Non-te	aching
Permanent	Full Time	Permanent	Full Time
3	3	4	4

6.3.5 - Welfare schemes for

Teaching	Non-teaching	Students
PF, Medical Insurance	PF, Medical Insurance	Merit Scholarships,
Scheme, Free	Scheme, Free	Scholarship for socially
Accommodation, Interest	Accommodation, Interest	and economically backward
free loan facility,	free loan facility,	community, Community and
Festival Allowances,	Festival Allowances,	Loyalty grant,
Transport Facility, Free	Transport Facility, Free	Scholarship for students
medical check-up,	medical check-up,	from backward districts,
Maternity Leave with	Maternity Leave with	medical check-up,
benefits, Loyalty	benefits, Loyalty	subsidised canteen
benefits for the children	benefits for the children	facility, Transportation
of Teaching and Non-	of Teaching and Non-	facility, Special rooms
Teaching staffs, etc.	Teaching staffs, etc.	and Rest rooms for
		differently abled, etc.

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The college conducts both Internal and External Financial Audits. The internal financial audit is conducted by the internal auditors appointed by the Principal in consultation with the Finance Committee. All the books of accounts are verified with the invoices and vouchers provided to the internal auditors by the accounts department. The internal audit report is submitted to the Principal. The external audit is done by a firm of chartered accountants appointed by the management. Based on the observations in the reports, directions are given to the accounts department.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose		
European Molecular Biology Organization (EMBO)	174150	International Lecture Workshop on "Cell Cycle and Cell Death" to be held from 10th October 2019 to 11th October 2019 in Tiruvalla		
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6.4.3 - Total corpus fund generated

1		
1	0	
1	U	
1		

6.5 - Internal Quality Assurance System

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

Audit Type	Exte	rnal	Inte	rnal
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Dr. Jijimon K. Thomas, Principal, Mar Ivanios College Trivandrum, Fr. Dr. Giji Thomas, Dean of Studies, Mar Ivanios College Trivandrum, Accreditation Ambassador Paramarsh Scheme, UGC Peer team member	Yes	IQAC
Administrative	Yes	Dr. Jijimon K. Thomas, Principal, Mar Ivanios College Trivandrum, Fr. Dr. Giji Thomas, Dean of Studies, Mar Ivanios College Trivandrum, Accreditation Ambassador Paramarsh Scheme, UGC Peer team member	Yes	IQAC

6.5.2 - Activities and support from the Parent - Teacher Association (at least three)

1. Conducted PTA meetings regularly to communicate the student performance in academics and extracurricular activities. 2. Regular communication to the parents through WhatsApp group, SMS, emails, Telephone etc. 3. Canteen 4. Collected feedback from parents as part of the corrective mechanism. 5. Given awareness to the parents about the placement opportunities for their wards and sought support from the parents.

6.5.3 – Development programmes for support staff (at least three)

1. Orientation training programmes 2. Quality Enhancement Workshops 3. Free annual medical check-up 4. Free Accommodation and Mess facility

6.5.4 – Post Accreditation initiative(s) (mention at least three)

1.Conducted timely meetings of the IQAC. 2. Conducted a Seminar on quality initiatives 3.Timely Submission of AQAR

6.5.5 - Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes

b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	No

6.5.6 - Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	MOOC training in association with EMMRC	14/10/2019	14/10/2019	14/10/2020	30
2019	SIQAC induction training	30/10/2019	30/10/2019	30/10/2019	30
2020	Quality Enhancement workshop on Logistics of NAAC second cycle Accred itation	04/02/2020	04/02/2020	04/02/2020	60
2020	Annual Retreat for Students Cyber law and security awareness, Personality Development and positive thinking	04/02/2020	04/02/2020	04/02/2020	400

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CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Streeshakthi	08/06/2019	08/06/2019	20	15

7.1.2 - Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
43.8

7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	Nill
Provision for lift	Yes	Nill

Ramp/Rails	Yes	Nill
Braille Software/facilities	Yes	Nill
Rest Rooms	Yes	Nill
Scribes for examination	Yes	Nill
Special skill development for differently abled students	No	Nill
Any other similar facility	No	Nill

7.1.4 - Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadva ntages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	Nill	1	30/08/2 019	2	Supply of food and essen tials during flood	Relief to flood affected people	42
2020	Nill	1	27/03/2 020	65	Covid-19 Awareness through Radio MACFAST 90.4	To create awareness and clear doubts regarding Covid-19 especiall y for people staying in rural areas.	25
2020	Nill	1	16/03/2 020	76	Covid-19 Android A pplicatio n Develop ment	To help district administr ators and police force to monitor and prevent the spread of Covid-19.	12
2020	Nill	1	17/03/2 020	75	Sanitizer	To help	60

					and Mask Manufactu ring and Distribut ion	governanc e in tackling the problem of providing sufficien t materials required for mitig ating the spread of Covid-19	
2020	Nill	1	17/03/2 020	75	Educati onal Aid	To support students and nearby schools in online mode of education	10

7.1.5 - Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
Student Handbook	04/06/2019	Students are provided with a handbook which consists of the profile of the college, code of conduct, rules and regulations, faculty information, rules for the use of Library, Laboratories and hostels, Academic Calendar, details of different committees, and clubs functioning in the college, campus placements, etc. Handbook also includes the facilities provided in the campus. The handbook is given to the students at the time of admission.
Placement Handbook	06/06/2019	Students are provided with a placement handbook at the beginning of the first semester classes. The handbook includes details about the placement policy of the college, job

		opportunities for the students from different disciplines, employment categories, list of major recruiters etc. The handbook also includes the roles and responsibilities of the Corporate Relations Office, pre-placement preparations, placement procedures, eligibility criteria and registration process, grooming standards, etc.
Faculty Handbook	08/06/2019	The Faculties are provided with a handbook which consists of the code of conduct, rules and regulations, details of eligible leave, provisions for availing leaves, annual welfare measures and incentives, terms and conditions for promotions, procedures for disciplinary actions, etc.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Cyber Law and Security Awareness programme at Marthoma High School, Pathanamthitta	20/09/2019	20/09/2019	35
Cyber Law and Security Awareness programme at Sahyajothi Arts and science College, Kumily	16/12/2019	16/12/2019	62
Cyber Law and Security Awareness programme at Mar Severios College of Teacher Education	25/01/2020	25/01/2020	35
Collected and distributed materials worth Rs. 85,000/- to the households affected by natural calamities at Kavalappara,	15/08/2019	15/08/2019	40

Wayanad.				
COVID-19 related programmes by Radio MACFAST 90.4: Programmes like general awareness, daily updates regarding COVID-19, Preventive and Precautionary measures. Provided authentic information for listeners covering four Districts	23/03/2020	31/05/2020	70000	
Medi Talk: Phone- in Interview conducted by Radio MACFAST 90.4 FM - Interviews with medical professionals on- air helped in clearing doubts regarding COVID-19 especially for people staying in rural areas.	23/03/2020	31/05/2020	70000	
Cyber Law and Security Awareness programme at GHSS Thottakkonam	01/08/2019	01/08/2019	47	
Cyber Law and Security Awareness programme at Nethaji High school, Pramadam	19/09/2019	19/09/2019	327	
Cyber Law and Security Awareness programme at Catholicate High School, Pathanamthitta	19/09/2019	19/09/2019	91	
Cyber Law and Security Awareness programme at Mary Matha High school, Pathanamathitta	20/09/2019	20/09/2019	71	
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7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

^{1.} Waste Management: The college has an established waste management system.

Waste bins are kept on each floor, hostels, canteen and other specially identified spots on the campus. Special care is taken to make sure that the dead leaves and waste papers are not scattered on the campus as well as in the

Point of Generation • Transport to the Processing Facility • Resource recovery for recycling and reuse Processing for segregation of waste at source Differently colored bins are provided at the points of generation (as biodegradable and recyclable) GREEN bin for biodegradable wastes, BLUE bin for recyclable wastes, YELLOW bin for non-degradable wastes, RED bin for e-waste. These segregated wastes will be collected and removed from the points of generation on a regular basis. Bio-degradable wastes are processed by an aerobic composting method through a bio-bin which is installed in the campus and produces bio-fertilizer. The liquid and major bio-degradable wastes from both hostels are processed through the biogas plant on the campus and used for cooking. Non-bio-degradable wastes are kept in a separate container for further processing. 2. Waste Water Management: The college has installed a Sewage Treatment Plant in the premises of the boy's hostel, through which the wastewater is processed and the treated water is used for gardening. The treatment procedure includes 3 stages - Biofiltration, Aeration, and Oxidation. Tank capacity - 25000 liters 3. Rainwater Harvesting: The campus has a fullfledged rainwater harvesting and open-well recharging facility. As a part of the watershed management scheme, the institution has constructed two interlinked ponds in front of the academic block with a storage capacity of 2,25,000 liters. 4. Biogas plant: The college has installed a biogas plant in the campus. The bio-waste generated from the campus is approximately 250 kg/day. The plant installed in the campus applies different technologies for treating different types of organic wastes according to the nature and type of waste. 5. Herbal Garden: The Herbal Garden maintained by the college serves the purpose of education, research and conservation of germplasm of medicinal and aromatic plants, different endangered species, dye-bearing plants, and other species of economic and ecological interests. More than 500 indigenous medicinal plants, including rare and endangered species are maintained in the garden. The herbal garden of the college is funded by National Medicinal Plant Board. The total amount sanctioned is Rs.2.5 lakhs. 6. Solar Power Plant: The capacity of the solar power plant is enhanced from 30kW to 130kW in the reporting year. 7. Conversion of CFL lamps to LED lamps: The college has shifted 80 percentage of the CFL lamps into LED lamps.

hostels. Waste Management Mechanism includes: • Segregated Collection at the

7.2 - Best Practices

7.2.1 – Describe at least two institutional best practices

1. KisanSahay - MACFAST Scheme for soil analysis Introduction: The yield of any crop is determined by the adequate supply of sixteen different essential nutrients. Soil provides the base for the growth of crops, and acts as the reservoir of the essential nutrients required for them. The yield of crops is mainly dependent on the utilization of soil nutrients by plants and the replenishment of soil with nutrients. Soil analysis will help the farmers to determine the level of major nutrients and pH of the soil. By tracking the exact amount of soil nutrients, a farmer can easily adjust the fertilization and also facilitate crop nutrient management. Soil analysis is crucial because fertile soil is necessary to grow healthy crops. Objective of the practice: Soil analysis is important to improve the nutritional balance of the soil, maintain the pH balance, proper planning of fertilizer application and optimize crop production. MACFAST Scheme for soil analysis focuses on the analysis of soil collected from different localities of Tiruvalla Taluk, Pathanamthitta district. Major objectives are: 1. To determine the macronutrient profile of the soil sample 2. To estimate the micronutrient status of the soil sample 3. To evaluate pH and electrical conductivity of the soil. 4. To evaluate total organic carbon content in soil. Context: Soil analysis is a set of various chemical processes that determine available plant nutrients, chemical and physical properties of soil, which is important for plant nutrition, or soil

health. Chemical analysis of soil estimates the content of basic plant nutrients such as nitrogen, phosphorus, potassium. It also helps to determine the physical parameters important for soil health such as electrical conductivity and pH - value. In 2018, Kerala was affected by heavy floods which resulted in crop loss as well as loss of fertility of soil due to soil erosion/ soil accumulation. Tiruvalla situated in Pathanamthitta district was also affected badly by the extreme flood. It altered the nutritional status of soil along with pesticide deposition at different places in the soil and water. Pesticide deposition seems to be harmful to the total microorganisms associated with the soil. Based on this fact, the soil analysis of the corresponding place is very helpful to estimate the nutritional content of the soil by chemical and physical methods. It will be helpful in determining the amount of fertilizer required for adequate crop management. The practice: 1. A uniform portion of soil sample was collected from different places using a shovel by first making a V-shaped cut into the soil to the depth of sampling. Next, a 1-inch thick vertical slice of soil to the same depth was removed from the smoothest side of the cut and a 1-inch strip of soil with the length of the slice was removed. 2. Before collecting the sample, organic debris, rocks and trash from the soil surface were removed carefully. 3. A clean container (not zinc-coated if determining Zn) was used to collect the soil portions and mixed thoroughly. 4. Then, enough soil was removed to fill a sample box. 5. The sample was air-dried thoroughly for 36 hours when sampling for nitrate-nitrogen analysis. 6. The soil sample was then subjected to analysis for macronutrients, micronutrients, total carbon content, and pH value. Evidence of the success: Nine different soil samples from different locations were analyzed for its chemical and physical parameters like major nutrients, micronutrients, total organic carbon content, and pH. All the analyzed samples showed a below-average level of nutrients. The analysis conducted by the institute helped the corresponding farmers to design their fertilizer application pattern and better management of crops. Problem encountered and resources required: Problem encountered: 1. Inadequate soil sample for analysis 2. Difficulty in identifying the needy farmer 3. Lack of expertise to provide advice and suggestions Resources required: 1. Skilled technical assistance for full time soil analysis 2. Field assistant for collecting soil sample directly from the farmers 2. HOMECOMING-MACFAST ALUMNI CONNECT Objectives of the Practice: This practice has been started with the following objectives: a) To offer a platform where students can connect with Alumni to build a network of professional connections that can offer career advice, opportunities, mentorship, etc., b) To use the expertise and experience of the alumni for the academic activities of the college. c) To facilitate access to academics and placement opportunities in the country and abroad Context: Maintaining a good relationship with alumni is essential to the success of an institution. To understand the change in technology and equip the students with the skills they require to compete, it is essential to create a platform for alumni interactions. The present students in the college can benefit in their professional lives by learning from alumni, getting to hear the corporate experience, job opportunities, pre-requisites of employment scenario, etc., Through regular interactions students can prepare themselves for the job market. Alumni Interactions in the college will act as a bridge between the college and the outside world. Practice: The college organizes continuous alumni interactions and guest lectures to share the professional experience, tips for the present students to excel in the corporate world, changing technology, etc., Such interactions help the students to groom professionally and know the outside world better which enable them to shape their career. The students will gain insight into industries and organizations, get career advice and learn about different opportunities. The Alumni Connect will provide current students with mentors to help them learn about international career opportunities. Evidence of Success: This practice provides an opportunity to nurture relationships among alumni and current students.

Through these regular interactions, the institution is able to track alumni's progress. Such networks among alumni, students and the college increase the chances of employee referral, industry interactions, career orientation support, etc. The experiences of overseas alumni help the students to find the right path in achieving their goals. Problems encountered and resources required: Getting in touch with all the alumni was a challenge as many had changed their contact details, and migrated to different cities/countries. Different time zones and availability were the other challenges faced.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://macfast.org/wp-content/uploads/2021/08/BEST-PRACTICES-2019-20.pdf

7.3 - Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Reflect on the world around you: The focus of the College emphasizes the holistic development of the student and provides an environment to transform them as responsible global citizens. To fulfil this mission, several social programs were successfully executed, so that they are trained to be responsible as well as socially committed. The institution extends its activity to the society through broadcasting the programs of Radio MACFAST 90.4, organising awareness programs on current issues and outreach programmes. 1. Radio MACFAST 90.4- The community Radio of MACFAST, true to its punch line 'Nattukarku Koottayi' (Community's Companion), strives to be "a partner friend in all the endeavors of the local populace". The Radio gives voice to the voiceless and acts as a center for social, cultural and national integration. It intends to work towards creating a civil society with a growing sense of community values, irrespective of caste, creed, age, gender or discrimination based on education. Students are actively participating in broadcasting various programs through Radio MACFAST 90.4. The programs include Tech-Talk Digital World (Department of Computer Applications), Business Lokham, Nikshepajaalakam (Department of Management Studies), Sciencescope (School of Biosciences). Students are given the opportunity to work as Radio jockey and Program Producers. Fair remuneration is offered to students for conducting programmes in Radio to promote Earn while you Learn scheme of the college. 2. Cyber Law and Security Awareness Programme (CLASA) is an awareness programme conducted with the support of the Kerala Police Cyber Wing and Radio MACFAST 90.4 FM under the scheme of Science Popularization Programme of the Kerala State Council for Science, Technology and Environment (KSCSTE). The college has been successfully conducting this programme since 2017. The main objective of the programme is to create mass Cyber Law Security awareness among school and college students. The programme envisages women's safety and empowerment, safe Internet practices and proper ICT education. 3. Outreach programmes: The college organizes outreach programmes in other colleges for providing capacity-building training and creating awareness about career opportunities for the students.

Provide the weblink of the institution

https://macfast.org/wp-content/uploads/2021/08/Institution-Distictiveness.pdf

8. Future Plans of Actions for Next Academic Year

1. As the college completes two decades of its existence, an evaluation and rededication of its Mission, Vision, and Objectives is to be planned and implemented. 2. To apply for commencement of new Post Graduate Programme in Data Science 3. To provide infrastructure facility for fulfilling the entrepreneurial aspirations by establishing new incubation centre. 4. To build up Corporate Mentorship for improving Academia-Industry relationship and enhance employability

of the students. 5. To upgrade the Department of Computer Applications and the Department of Management Studies as Doctoral Research Centres. 6. To organize invited Lecturer series of eminent persons including prominently placed Alumni, to upgrade the knowledge base and skill of the students. 7. Building up research capabilities and initiatives of the faculty members and students by initiating MOUs with Universities and IIMs. 8. To publish the online version of the journal of the college, Journal of Science Technology Management, and upgrade the quality of Articles so as to improve the citation and indexing. 9. To explore the possibilities of academic collaboration with International Universities.