

CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA



ACADEMIC ADMINISTRATIVE AUDIT (AAA)

**SELF STUDY REPORT**

**NAME OF THE DEPARTMENT:**

Environmental Science

**PERIOD:**

**2019 JUNE-2020 DEC**

**CATEGORY:**

Aided

**The Departments shall enter the necessary data in this booklet itself. For positive responses the details asked need be given only in a very brief manner. All claims must be supported by documentary evidence.**

## DEPARTMENT GRADING

The department is requested to submit a Self Study Report (SSR) of its performance during the academic year 2019 – 20 in the following format, for the purpose of department grading. The grading aims to encourage self-evaluation, accountability, research, and innovation in teaching and learning. It will also help to create healthy competition in curricular and extracurricular activities among departments. The grading will be performed based on the following six criteria.

**Criterion I – Teaching-learning Process**

**Criterion II – Research**

**Criterion III – Consultancy and extension**

**Criterion IV – Extracurricular activities**

**Criterion V – Student Support and Progression**

**Criterion VI – Supportive activities**

## SELF STUDY REPORT

### CRITERION I – TEACHING-LEARNING PROCESS

- a. Does the department Plan and organize the teaching-learning and evaluation schedules?

Yes

(10 MARKS)

(If yes; provide documentary evidence-Submit filled up Teachers Diary (2019-20)of each teacher or any other evidence)

- b. Which teaching-learning method/s is/are used by teachers?

(Put **✓** marks in appropriate boxes. Details must be given)

- |                               |     |                             |
|-------------------------------|-----|-----------------------------|
| 1. Lecture                    | Yes |                             |
| 2. Interactive method         | Yes |                             |
| 3. Project-based learning     | Yes |                             |
| 4. Computer-assisted learning | Yes |                             |
| 5. Experiential learning      | Yes |                             |
| 6. Seminars                   | Yes |                             |
| 7. Others (mention)           | Yes | ( 3 marks each max 15MARKS) |

- c. Does the department use any modern teaching aids and tools like computers, audio-visuals, MOODLE, CAL (Computer Aided Learning), internet and other information/materials, which ensure that students have effective learning experience?

Yes

Lms

Google meet

Zoom

Whatsapp

Utube vedio      3marks each      max      15

If yes, give details.

Computers and audio – visuals are used for effective learning.

- d. Department conducted any exams in MOODLE-Learning Management system?

Yes

3marks each

max

15

If yes, give details of exams.

Conducted classes, internal examinations and entrance examination for M. Sc. Environmental Science in Moodle.

- e. Does the department conduct any skill-developing programs (short-term add-on courses, soft-skill development programs etc.) for students? 05 for each – marks Yes

If yes, give details

Conducted short-term add-on course in Geographic Information System

- f. Does the department apply for any new course, by designing curricula for it, during the current year  
No 5 each max 15

If yes, give details

- g. How many teachers attended seminar/ workshop/ conference/ refresher courses etc. during the period (Use separate sheet if necessary) > 90% =10, >50=5, <50 =0 max 10

Sl. No	Name of faculty	Title of the seminar/ workshop/ conference etc.	Duration		Whether international/national/state/regional	Organizing agency
			From	To		
Dr Subin K Jose		Refresher course in Environmental science	05-10-2020	22-10-2020	National	MHRD, JAMIA MILIA ISLAMIA
		Introduction to geographic information system	Jan-march-2020		National	IIT Roorkee (NPTEL)
		Online Teaching-Learning for Beginners	25-5-2020-31-5-2020			KKTM College,
Dr Manju N J		Three day training programme on CBCSS UG regulation 2019	06/07/2020	08/07/2020	National	MHRD, TLC, University of Calicut
		Online training course on Make and edit video classes	01/05/2020	05/05/2020	National	IQAC, Christ College, IJK
		Refresher course in Environmental Science	21/08/2019	03/09/2019	National	UGC – HRDC, Pondicherry University
		Awareness programme on wetland biodiversity	27/09/2019		State Level	SWAK in collaboration with Dept. of

		with special emphasis on Ponnani Kole Wetlands				Botany, Unvty. Of Calicut & Dept. of Geology & Env'tl. Science, Christ College, IJK.
		National training programme on Sensitizing stake holders for responsible Institutional Waste management	6,7 & 9 January 2019		National	Christ College, IJK in collaboration with CPCB, Bengaluru
Dr Rekha V B		Orientation Programme (No. 105) at the UGC-Human Resource Development Centre, Calicut University Campus.	23.01.2019 19.02.2019		National	University of Calicut
		Refresher Course on "Sharpening of Soft Skills for Academic Excellence" at College of Veterinary and Animal Sciences, Mannuthy.	03-07-2019 to 16-07-2019.		Natioanl	KVASU MANNUTHI
		Refresher Course on "A Roadmap to Enhance Core Teaching Competencies in Academic Landscape" at College of Veterinary and Animal Sciences, Mannuthy.	14-02-2020 to 27-02-2020.		National	KVASU MANNUTHI

		-IN-YAS "Science Leadership Workshop" an online workshop sponsored by all four premier science academies in the country (Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi, National Academy of Sciences, India, Allahabad, and Indian National Young Academy of Sciences, New Delhi).	22-06-2020 to 28-06-2020		National	Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi
		Refresher Course on MOOC and E content Development	17-11-2020-30-11-2020		National	Pondichery Central University

- h. Give details of faculty members, if any, who are selected as resource persons for seminar/workshop/conference/refresher courses etc. during this period (Use separate sheet if necessary)

2 for each – max 10

Sl. No	Name of faculty	Title of the seminar/ workshop/ conference etc.	Duration		Whether international/ national/ state/regional	Organizing agency
			From	To		
	Dr Subin K Jose	Biodiversity and environment	5-6-2020		National	Christ college of Engineering
		Biodiversity and environment	8-6-2020		National	Christ College, IJK in association with

		Environmental pollution and bioremediation	16,17,feb2020		National	NSS Carmel college,DOECC
	Dr Manju N J	World Environment Day Celebrations 2019	13/06/2019		State Level	Morning Star Home Science College, Angamaly & KSCSTE
		Lecture Series on ' Eco Restoration of Ponnani Kole Wetlands through community participation'	19/09/2019		State Level	Dept. of Botany, Vimala College, Thrissur in association with SWAK and Dept. of Botany, Unvty. Of Calicut
		National training programme on Sensitizing stake holders for responsible Institutional Waste management	6,7 & 9/01/2020		National	Christ College, IJK in collaboration with CPCB, Bengaluru
		Webinar on ' The story of Ozone hole and Montreal Protocol'	31/10/2020		State Level	Chinmaya Arts and Science College for Women, Kannur
	Dr Rekha V B	National training programme on Sensitizing stake holders for responsible Institutional Waste management	6,7 & 9/01/2020		National	Christ College, IJK in collaboration with CPCB, Bengaluru

i. Does the department introduce any innovations in teaching/ learning/ evaluation during the current year? (like online tests, video lectures from out station resource persons)

Yes

10 for each – max 20

If yes, give details

Online tests conducted for M. Sc. Environmental Science

Arranged video lectures from out station resource persons (Students have attended Webinar on Conservation of Sacred Groves & urban Greenery organized by the Kerala Forest Department).

j. Does the department provide remedial teaching?

15

Yes

No

If yes, furnish the following (use separate sheet if needed); provide evidence for student attendance

Sl. No.	Name of the teacher	Class for which remedial teaching is arranged	No of students benefited
1.	Environmental Research Methodology	First Semester MSc EVS	4
2.	Environmental Analytical Techniques Instrumentation	First Semester MSc EVS	5

k. Does the department provide coaching for entrance tests/eligibility tests (JAM, CSIR/UGC, University entrance tests etc..)?

15

Yes

If yes, furnish the following (use separate sheet if needed); provide evidence for student attendance

Sl. No.	Name of the teacher	Class for which remedial teaching is arranged	No of students benefited
1	Dr Subin K Jose	P.G Environmental science	24
2	Dr Subin K Jose	P.G Arts students	41
3	Dr Subin K Jose	Degree students (Civil service)	60



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**CRITERION II – RESEARCH**

- a. Give details of the publication by faculty, if any during the period . 2 for each – max 10

Sl. No	Name of faculty	Title of the paper	Title of the Journal and year of publishing	Citation index and impact factor of the journal, if available
1	Subin K Jose	FOREST FIRE RISK ASSESSMENT AND MANAGEMENT USING GEOSPATIAL TECHNOLOGIES	Compliance Engineering Journal.2020	Scopus indexed, UGC Care journal
2	Subin K Jose	Odonates of Irinjalakuda ponds of central Kerala, India	Zoo's Print.2020	Zoological Society of London. Scopus indexed
3	Subin K Jose	Disaster management principals and practices	Amazone Publishers	

- b. Is the department recognized as a research department?

Yes

05

If yes give the number of research scholars joined this year.

2

- c. Did the department produce any Ph. D during the last two years? (*For research departments only*)

No

10

If yes furnish the following

Sl. No	Name of the Research scholar	Name of the guide	Title of the thesis	Year of awarding

d. Does the department have running Major research projects?

Yes

10 for each

max 20

If yes furnish the following.

Sl. No	Name of the principal investigator	Duration		Title of the project	Funding agency
		from	to		
1.	Dr Manju N J	Project sanctioned for financial assistance.		Field – scale demonstration project to bioremediate heavily polluted natural drains in Kerala using a combined engineering approach of aeration, microorganisms and biofilm blocks.	Central Pollution Control Board, Delhi

e. Does the department have running Minor research projects?

No

5 for each

max 15

If yes furnish the following.

Sl.	Name of the principal	Duration	Title of the project	Funding agency

No	investigator	from	to		

a. Did the department submit any new proposal for project, seminar etc. to funding agencies during the academic year?

No 5 for each max 10

If yes give the number proposals submitted and the name of agencies.

b. Did the department conduct seminar/workshop/conference etc. during the academic year?

yes 5 for each max 15

If yes furnish the following

Sl. No	Title of the seminar/ workshop/ conference etc.	Duration		Whether international/ national/ state/regional	Funding agency
		From	To		
1.	Awareness programme on wetland biodiversity with special emphasis on Ponnani Kole Wetlands	27/09/2019		State Level	SWAK in collaboration with Dept. of Botany, Unvty. Of Calicut & Dept. of Geology & Envntl. Science, Christ College, IJK.
2.	National training programme on Sensitizing stake holders for responsible Institutional Waste	6,7 &			Christ College, IJK in collaboration with

3.	management	9/01/2020		National	CPCB, Bengaluru
	Lecture on Wild life conservation and Photography	08/09/2020		National	Christ College, IJK in collaboration with Department of Environment and climate Change.

- c. Is there any publication from faculty like books, articles, conference/seminar proceedings, course materials (for distance education), software packages or other learning materials, any other (specify) ?

Yes 5 for each max 15

If yes give details.

Dr Manju N J published an article in 'NEST – Research papers and articles on COVID – 19 pandemic published by Christ College (Autonomous), Irinjalakuda.

#### CRITERION III – CONSULTANCY AND EXTENSION

- a. Does the department have any MoU/ MoC (memorandum of contract)/ mutually beneficial agreements signed with industry /agency, or other academic institutions?

No 5 for ea

- a. Does the department have collaborative activities (on-the-job training, student placement, internship, publication, curriculum development, research, consultancy, etc.) with other organizations (service sector, agricultural sector, local bodies/community, administrative agencies, state/national/international organizations)?

Yes 05 for each max 10

If yes give details

Students used to carry out their M. Sc. Project work at NIT, Calicut, KFRI, KSPCB etc.

- b. Does the department conduct/coordinate any kind of extension activities which are integrated with the academic curricula, contributive to community development etc.?

Yes 5 for each max 10

If yes give details.

Organized a National training programme on Sensitizing stake holders for responsible Institutional Waste management in technical collaboration with CPCB, Bengaluru and funded by KSCSTE.

c. Does the department have partnership with University/Research institutions/Industries/ NGOs etc. for extension activities?

5 + 5

Yes No max 10

If yes give details

**CRITERION IV – EXTRACURRICULAR ACTIVITIES**

a. Mention achievements of students , if any, of the students under the department (D- zone, Quiz competitions etc..) outside the college

05 for each max 15

b. Mention the association activities, if any, during the academic year other than inauguration and sent off

5 each max 10

c. Mention performance of students in sports activities during the academic year (Athletics, Games etc in Intercollegiate/University competitions)

2 marks for each max 10

d. Any other relevant information the department wishes to add.

e. 10 marks

**CRITERION V – STUDENT SUPPORT AND PROGRESSION**

a. Furnish the pass percentage for degree main 2019 – 20 batch (pass out) and PG 2018 – 20 batch.

max 60

% pass

Postgraduate course 100 % :

Marks	>90%	89-80%	79-70%	69-55%
Number of students				
UG				

Number of students				
PG				

Language & Complementary Course (Batch-wise)

Batch	Number of students with grade			
	>90%	89-80%	79-70%	69-55%

Pass > 90 % = 20 marks, > 80 % = 10 marks, <80% = 0 marks.

For UG: Each >90% 2 marks each, 1 for 89-80% (Max 50)

For PG: Each >90% 3 marks each, 2 for 89-80% (Max 50)

For Language/Complementary for each students > 90% 2 marks, 1 for 89-80%, 0.5 for 79-70% (Max 20)

b. Mention about CSIR-UGC-NET, if any, obtained for the 2018 – 20 batches. (provide documentary evidence)

5 for each max 20

2 students from M. Sc. Environmental Science (2019 admission) qualified UGC – NET examination.

c. No of students who got admission in Top universities/institutions

(List of institutions- IITs, NITs, JNU, Hyderabad University, EFLUs, CUSAT, IISC, Pondicherry University, IISERs)

5 for each (Max 20)

Should submit list of students with register number

d. Mention the efforts made by the department to minimize the dropout rate and facilitate the students to complete the course.

(Max 5)

- e. Give the percentage of the students progressed to higher studies. Give details for last year. If records are kept >70%- 05 marks, 69-60%-3 marks, 59-50%- 2marks (Max 5)

Submit the list of students, admitted course, college and university

- f. Does the department provide any support for students for appearing and qualifying in various competitive examinations? (UGC-CSIR-NET, JAM, SLET, CAT, TOFEL, GMAT, GRE etc.); If yes provide evidence

(5 for each) (Max 10)

Yes

- g. Does the department provide placement and counseling services for students

Yes Records to be kept 10

If yes give the number of students benefited

- h. Does the department encourage and develop entrepreneurial skills among students

No 10

If yes give details

- i. Does the department have a mechanism to seek and use data and feedback from its graduates and from employers, to improve the growth and development of the institution?

No

If yes give details

5 marks each max 10

#### CRITERION VI – SUPPORTIVE ACTIVITIES

- a. Members of the department involved in the administrative/club/committee activities of the college in 2019-20 academic year?

2 mark for each (Max 10)

	Name	Activity to which associated
1.	Manju N J	Coordinator, Bhoomithrasena Programme Committee

2.	Manju N J Rekha V B	Coordinator for FDP conducted in association with GAD – TLC Coordinator, Enviro club
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b. Describe the measures taken for maintaining the cleanliness of staff room, classrooms, labs, museums etc.

Details to be furnished (Max 10)

Staff & Students	Rooms cleaned on a weekly basis
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c. Does the department maintain proper documentation of data on Internal marksheets /Question papers/ Stock register (Details to be furnished)

Yes

(Max 10)

d. Mention the measures if any, taken by the department for personality development of students.

(Max 05)

Date:

Signature:

Head of the department: