

CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA



ACADEMIC ADMINISTRATIVE AUDIT (AAA)

SELF STUDY REPORT

NAME OF THE DEPARTMENT: PHYSICS

PERIOD:

2019 JUNE-2020 DEC

CATEGORY: SELF

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

No

(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 | <input type="checkbox"/> |
| 2. Interactive method | <input type="checkbox"/> |
| 3. Project-based learning | <input type="checkbox"/> |
| 4. Computer-assisted learning | <input type="checkbox"/> |
| 5. Experiential learning | <input type="checkbox"/> |
| 6. Seminars | <input type="checkbox"/> |
| 7. Others (mention) | <input type="checkbox"/> |
- (3 marks each max 15MARKS)

- Lectures : 1. Youtube Lectures: Dr V P JOSEPH : https://www.youtube.com/channel/UCx_oZnJSIPAcSUNkw0lsA
V P ANTO : <https://www.youtube.com/watch?v=ttotQOdNBiU>
<https://www.youtube.com/channel/UCeWeOYZ-goPLNxIDBiOOpiw>
2. Moodle : <http://christijkmoodle.in/course/view.php?id=276>
<http://christijkmoodle.in/course/view.php?id=180>
<http://christijkmoodle.in/course/view.php?id=367>
<http://christijkmoodle.in/course/view.php?id=361>
<http://christijkmoodle.in/course/view.php?id=359>
3. Google Classroom:
1. MERIN JOSE V: <https://classroom.google.com/u/0/c/MTgzODE5MTAwNzA3>
<https://classroom.google.com/u/0/c/MjE3MTgwMjQzMzE0>
<https://classroom.google.com/u/1/w/MjUwNzk3Mzg1Mzk5>
2. RAICHAL P JOHN: <https://classroom.google.com/u/0/c/MjUwNzk3Mzg1Mzk5?cjc=x7l64a5>

Interactive Method : Interactive classroom lectures and seminars. Problem solving after each section with student participation

Project -Based Learning: Classes are divided into Groups to review papers. Project is submitted as a part of the curriculum in groups.

https://drive.google.com/drive/folders/1T-NFN2e0_az8Gru6tSDdpX6NWEE4QSRX?usp=sharing

Computer -assisted Learning :Classes are conducted through platforms like youtube, google classrooms and Moodle. Online tests are conducted in similar manner through google forms and moodle. Assignments are submitted through online platforms.

<http://christijkmoodle.in/mod/assign/view.php?id=19971>

<http://christijkmoodle.in/mod/assign/view.php?id=3593>

<http://christijkmoodle.in/mod/assign/view.php?id=9008>

<http://christijkmoodle.in/mod/assign/view.php?id=14707>

<http://christijkmoodle.in/mod/quiz/view.php?id=18838>

Experiential Learning : Industrial visits are conducted to important places and reports are kept in the department.

<https://drive.google.com/drive/folders/19FDk6iAQQQq9DhuFAszOu2Zy3xulOMWB?usp=sharing>

Seminars: Seminars are conducted both online and offline with the help of audio visuals(using projectors and ppts)

<http://christijkmoodle.in/course/view.php?id=180§ion=3>

- 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 y

No

3marks each

max

15

If yes, give details.

Moodle classroom: <http://christijkmoodle.in/course/view.php?id=276>

<http://christijkmoodle.in/course/view.php?id=180>

<http://christijkmoodle.in/course/view.php?id=367>

<http://christijkmoodle.in/course/view.php?id=361>

<http://christijkmoodle.in/course/view.php?id=359>

Google Classrooms: : <https://classroom.google.com/u/0/c/MTgzODE5MTAwNzA3>

<https://classroom.google.com/u/0/c/MjE3MTgwMjQzMzE0>

<https://classroom.google.com/u/1/w/MjUwNzk3Mzg1Mzk5>

<https://classroom.google.com/u/0/c/MjUwNzk3Mzg1Mzk5?cjc=x7l64a5>

ICT enabled Seminars: <http://christijkmoodle.in/course/view.php?id=180§ion=3>

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

Yes

No

3marks each

max

15

If yes, give details of exams.

1. 3 rd Sem Physics Core-Electrodynamics 1 : <http://christijkmoodle.in/mod/quiz/view.php?id=18838>
2. 2 nd Sem Physics -Mechanics- <http://christijkmoodle.in/mod/quiz/view.php?id=2413>
3. 2 nd Sem Physics -Mechanics - <http://christijkmoodle.in/mod/quiz/view.php?id=2417>
4. 5th sem Physics core-Optics <http://christijkmoodle.in/mod/quiz/view.php?id=4064>

e. Does the department conduct any skill-developing programs (short-term add-on courses, soft-skill development programs etc.) for students? 05 for each – max 10

Yes

No

If yes, give details

f. Does the department apply for any new course, by designing curricula for it, during the current year?

Yes

No

5 each

max 15

If yes, give details

The department has started MSc Physics in the academic year 2020.

1.PHY1C01- CLASSICAL MECHANICS

2.PHY1C02 – MATHEMATICAL PHYSICS

3.PHY1C03 – ELECTRODYNAMICS AND PLASMA PHYSICS

4.PHY1C04 –ELECTRONICS

5.PHY1L01- GENERAL PHYSICS PRACTICAL 1

6.PHY1L02 – ELECTRONICS PRACTICAL 1

7.PHY1A01 – ABILITY ENHANCEMENT COURSE

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		
1	MERIN JOSE V	1	One week FDP-“Recent Trends in Advanced Materials And Applications	19.10.20	23.10.20	National	Dept of Physics,NIE
		2	FDP-“Web Tools and Platforms for Online Classes”	03.06.20	06.06.20	Regional	KPCTA Regional Committee
		3	FDP- “Outcome Based Education”	11.07.20		National	Dept of Commerce, Cauvery College
		4	Workshop- “ICT Tools for Interactive Teaching and Learning”	28.10.20		National	Christ College
		5	Workshop- “Material Technology Advancement in Current Scenario-MTACS2020”	04.07.20	10.07.20	National	Dept of Physics,Sathyabama Institute

		6	Conference-“Expanding Strategies of Teaching Learning with Digital	28.05.20		International	LF ,Guruvayoor
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		7	Proficiency” Online Course- “Introduction to Ordinary Differential Equations”	01.07.20	28.07.20	International	Korea Advanced Institute of Science and Technology
		8.	Online Course-“Programming for Everybody-Getting started with python”	01.06.20	27.06.20	International	University of Michigan
		9	Online Course- “Nuclear Reactor Basics”	01.04.20	30.04.20	International	National Research Nuclear University,MEPhI
		10	Online Course- “How to write a Resume”	01.07.20	03.07.20	International	The State University of New York
		11	FDP-“Quality Science Education in India in the 21 st Century”	03.11.20	09.11.20	National	Christ College
		12	Webinar-“Mass Transport in 2 D Materials”	02.07.20		National	M P Moothedan MSNT College,Shornur
		13	Webinar-“The beauty of Non Linear Systems”	01.08.20		National	Dept of Physcis,Farook College
		14	Webinar- “Century of Quantum Mechanics and Still Going Strong”	15.06.20	17.06.20	National	GSA,IPA,IAPT
		15	Conference- “Popularity of Science Among the society”	12.10.20	14.10.20	National	Dept of Physics, Bundelkhand University
		16	Lecture- “Why can’t time run backwards?”	08.10.20		International	Dept of Physics, MA College
		17	Webinar-“Frontiers in Experimental Physics-IWEP-2020”	05.08.20	06.08.20	International	Dept of Physics, Farook College
		18	Webinar-“Future of Quantum Computing”	22.06.20		National	Dept of Physics,NITJ
		19	Webinar – “New Trends in Optics and Photonics”	29.10.20	31.10.20	International	Dept of Physics,Governme nt Arts and Science College

		20	Webinar- "Laser Spectroscopy"	15.08.20		International	Dept of Physics,NSS College
		21	Indo-US Conference	29.10.20	30.10.20	International	Dept of Physics, Government Arts and Science College,Karwar
		22	Webinar- "Virtual Classroom"	24.07.20		National	Dept of Science and Humanities, Christ College of Engineering
		23	Webinar- "Journey of Physics in the Service of Mankind"	27.10.20		National	Dept of Physics, MES Ponnani
		24	Webinar-"What can we do with a quantum Liquid"	28.10.20		National	Dept of Physics, SB College
		25	Webinar-"Physical Properties of Alloy systems"	03.08.20		International	Dept of Physics, St Aloysius College
		26	Webinar-" Raman Effect and its Applications"	25.06.20		National	Dept of Physics, Davangare University
		27	Conference-"Electrospun Flexible Energy Devices"	02.11.20		International	Dept of Optoelectronics, University of Kerala
		28	Conference-"Introduction to Time Series Analysis and its Applications"	07.10.20		International	Dept of Optoelectronics, University of Kerala
		29	Conference-"3 D Mechanical Bottom Up Nano Manipulation"	22.10.20		International	Dept of Optoelectronics, University of Kerala
		30	Conference- "Optical Signal Processing using Semiconductor Optical Amplifiers"	04.11.20		International	Dept of Optoelectronics, University of Kerala

		31	Conference- "The Fiber Optics Revolution"	28.10.20	International	Dept of Optoelectronics, University of Kerala
		32	Conference- "Physics of Color"	12.10.20	International	Dept of Optoelectronics, University of Kerala
		33	Conference- "A new Dawn of Fundamental Physics, Clear with light"	15.10.20	International	Dept of Optoelectronics, University of Kerala
		34	Conference - "6G-Electronic Packaging"	17.10.20	International	Dept of Optoelectronics, University of Kerala
		35	Webinar- "Sample Preparation for TEM and Data Analysis"	30.06.20	International	Dept of Material Science, Madurai Kamaraj University
		36	Webinar- "Space Debris Management"	07.08.20	International	TEAM 2020
		37	Webinar- "Space talk-Black holes at Work"	20.10.20	National	Dept of Physics, St Thomas College
		38	Webinar- "Stepping Stone to learn Python Programming"	25.06.20	National	Dept of Computer Science, Christ College of Arts and Science, Kilachery
		39	Webinar- "Super Heavy elements- Hopes and Challenges"	01.07.20	National	Dept of Physics, St Thomas College
		40	Webinar- "Super -Resolution with Far Field Optics"	22.07.20	International	Dept of Physics, Christ College
		41	Webinar- "Twenty five years of Exoplanets"	13.08.20	National	Dept of Physics, Christ College
			Webinar- "Way to 6 th generation			

2	RAICHAL P JOHN	42	communication devices”	19.09.20		International	Dept of Physics, Christ College
		43	Webinar-“Women and Science- Facts and Prejudice”	30.09.20		National	Dept of Physics, Christ College and Assabah College
		1	FDP-“Quality Science Education In India in the 21 st Century”	03.09.20	09.09.20	National	PMMMNTT & Christ College
3	JOSE SUNNY	1	SJC Online Service examination practice quiz	07.05.20		National	Dept. of History and Hindi St. Josephs College Irinjalakuda.
		2	Covid 19 awareness Quiz	29.04.20		National	St. Josephs College Irinjalakuda
		3	Online Awareness test on statistics	13.05.20		National	NSS College Nemmara Palkakad
		4	Econometrics and SPSS	13.05.20		National	Mahatma Gandhi College Thiruvananthapuram
		5	General Awareness Quiz	14.05.20			NSS College Nemmara Palkakad
		6	Online Physics Quiz	25.05.20		National	Christ College Irinjalakuda
		7	Covid 19 awareness online quiz	16.05.20		National	St. Thomas College Thrissur
		8	FDP – Outcome based education (OBE)	11.07.20		National	Cauvery college for women. St. Thomas College
		9	Webinar on Super heavy elements- Hopes and Challenges	01.01.20		National	St. Thomas College Thrissur

		10	Webinar on Impact of Nanotechnology	29.07.20		International	Christ College Irinjalakuda
		11	Webinar – Astronomy and Astrophysics	25.07.20		National	Mar Ivanios College Thrissur
		12	Webinar – Super Resolution with far field option	22.07.20		National	Christ College Irinjalakuda
		13	Webinar - Supercapacitors	03.08.20		International	Christ College Irinjalakuda
		14	Webinar – Defect Engineered electrodes for advanced rechargeable	27.08.20		National	Christ College Irinjalakuda
		15	Webinar – Twenty five years of explanents – A brief histroy	13.08.20		National	Christ College Irinjalakuda
		16	Webinar – Way to 6 th generation communication devices	10.09.20		National	Christ College Irinjalakuda
		17	Webinar – Women and Science : Facts and Prejudice	30.08.20		National	Christ College Irinjalakuda
		18	Split Free India movement Participation	Sep		National	National Service Scheme
		19	Raman Optonics Webinar Series 2020	28.10.20		National	University of Kerala
		20	Raman Optonics Webinar Series 2020	22.10.20		National	University of Kerala
		21	Raman Optonics Webinar Series 2020				
		22	Raman Optonics Webinar Series 2020	04.11.20		National	University of Kerala
		23	Popularity of science among the society	12.11.20 – 14.11.20		National	Bundelkhand University, Jhansi

		24	FDP-“Quality Science Education in India in the 21 st Century”	03.11.20 - 09.11.20		National	Christ college Irinjalakuda
		25	FDP-“Web Tools and Platforms for Online Classes”	03.06.20 - 06.06.20		National	KPTCA Regional Office

MERIN JOSE V Certificates: https://drive.google.com/drive/folders/1UrU6FgdNUI4_dFzosQj6CVmiAsoO1hUU?usp=sharing
RAICHAL P JOHN Certificates: https://drive.google.com/drive/folders/1UrU6FgdNUI4_dFzosQj6CVmiAsoO1hUU?usp=sharing
JOSE SUNNY Certificates: <https://drive.google.com/drive/folders/1gN4t7decZJYyWnCUxPzGPYAMZSe5BMQJ?usp=sharing>

- 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		
1	Dr V P JOSEPH	FDP-“Quality Science Education In India in the 21 st Century”	03.11.20	09.11.20	National	PMMMNMTT & Christ College
2	V P ANTO	Trainer in the 7 th Day Special Camp by NSS UNIT			State	Sahrdaya College of Engineering and Technology

Links for Certificates and Brochures:

https://drive.google.com/drive/folders/1cpE91WtxcDfLq6hlfSxYCFjQo9M09P_o?usp=sharing

- 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 Y No

10 for each – max 20

If yes, give details

Online tests were conducted using google forms and moodle platform.

1.3 rd Sem Physics Core-Electrodynamics 1 : <http://christijkmoodle.in/mod/quiz/view.php?id=18838>

2.2 nd Sem Physics -Mechanics- <http://christijkmoodle.in/mod/quiz/view.php?id=2413>

3.2 nd Sem Physics -Mechanics -<http://christijkmoodle.in/mod/quiz/view.php?id=2417>

Industrial visits were conducted to scientific institutions for students to have good perspective about research and recent developments.

<https://drive.google.com/drive/folders/19FDk6iAQQQq9DhuFAszOu2Zy3xuIOMWB?usp=sharing>

- j. Does the department provide remedial teaching? 15

Yes Y 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.	MERIN JOSE V	IV TH SEMESTER COMPLIMENTARY (FT AND GEO (SELF))	20

Link of the Google classroom : <https://classroom.google.com/u/1/c/MjUwNzk3Mzg1Mzk5>

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

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 JAM Coaching is arranged	No of students benefited
1.	MERIN JOSE V	3 DC Physics Core	10
2	JOSE SUNNY	3 DC Physics Core	10

Moodle Link: <http://christijkmoodle.in/course/view.php?id=276#section-6>

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.	Dr. V P JOSEPH	Wide Band Microwave Absorber using Flexible Broadside Coupled Split Ring Resonator Metamaterial Structure	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900801
		Rotation Sensor based on Near Field Perturbations of Metamaterial Split Ring Resonator	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900857
		Direct Amplitude Modulation Technique using Metamaterial Broadside Coupled Split Ring Resonator (BCSRR) Structure”	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900896

	Thin Film Metamaterial Split Ring Resonators at Microwave Frequencies	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900920
	Metamaterial Split Ring Resonator made of Polyaniline - polytetrafluoroethylene at Microwave Frequencies	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900824
	Specially Designed Metamaterial Split Ring Resonator for High Resolution Imaging at Microwave Frequencies	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900946.
	Nonstandard FDTD Realization of Radiation Behaviour of Epsilon Negative Metamaterial Corner Reflector Antenna	IEEE Explorer,2019	10.1109/MetaMaterials.2019.8900800
	Enhancing the resolution in imaging using folded metamaterial split ring resonator structure at microwave frequencies	AIP Conference Proceedings, 2019	Vol.2162, Pages: 020067-1 to 020067-5.
	Broadside coupled split ring resonator based multiband monopole patch antenna for wireless communication applications	AIP Conference Proceedings, 2019	Vol.2162, Pages: 020068-1 to 020068-4.
	Scattering from artificial Plasma cylinder using nonstandard FDTD	AIP Conference Proceedings, 2019	Vol.2162, Pages: 020069-1 to 020069-5.
	Microwave absorption properties of flexible zinc oxide sheet	AIP Conference Proceedings, 2019	Vol.2162, Pages: 020070-1 to 020070-4.
	Non - destructive method for thickness measurement of dielectric films using metamaterial resonator	AIP Conference Proceedings, 2019	Vol.2162, Pages: 020141-1 to 020070-5

		Frequency Dependent Radiation Properties of Negative Permittivity Metamaterial Reflector Antenna	<i>Physica Scripta</i>	Phys. Scr. 94 (2019) 105811 (9pp), <i>IOP Science</i>
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b. Is the department recognized as a research department?

Yes

No N

05

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

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

Yes

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

No 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		

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e. Does the department have running Minor research projects?

Yes

No

5 for each max 15

If yes furnish the following.

Sl. No	Name of the principal investigator	Duration		Title of the project	Funding agency
		from	To		

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

Yes

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

No

5 for each max 15

If yes furnish the following

Department in association with Department of Physics(Aided) has conducted various webinars.

Sl. No	Title of the seminar/ workshop/ conference etc.	Duration		Whether international/ national/ state/regional	Funding agency
		From	To		
1	Webinar- "Super capacitors"	03.08.20		International	Dept of Physics, Christ College
2	Webinar- "Way to 6 th Generation Communication Devices"	19.09.20		International	Dept of Physics, Christ College
3	Webinar- "Women in Science:Facts and Prjudices"	30.10.20		National	Dept of Physics, Christ College

Links of brochures : <https://drive.google.com/drive/folders/1zvN4TiGNt9H5sULsUowlZRt8f4243sOt?usp=sharing>

- 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

No

5 for each max 15 If yes

give details.

1. C.Bindu, Sreedevi P Chakyar, Anju Sebastian, Sikha K. Simon, Jovia Jose, Nees Paul, K.S. Umadevi, Joe Kizhakooden, Jolly Andrews and **V.P. Joseph** “Enhancing the resolution in imaging using folded metamaterial split ring resonator structure at microwave frequencies” AIP Conference Proceedings, 2019, Vol.2162, Pages: 020067-1 to 020067-5.
2. Joe Kizhakooden, Jovia Jose, Nees Paul, Sreedevi P Chakyar, Anju Sebastian, Sikha K. Simon, K.S. Umadevi, C. Bindu, Jolly Andrews and **V.P. Joseph**, “Broadside coupled split ring resonator based multiband monopole patch antenna for wireless communication applications” AIP Conference Proceedings, 2019, Vol.2162, Pages: 020068-1 to 020068-4.
3. Jovia Jose, Sikha K Simon, Anju Sebastian, Sreedevi P. Chakyar, Joe Kizhakooden, Nees Paul, C. Bindu, K.S. Umadevi, Jolly Andrews and **V.P. Joseph**,” Scattering from artificial Plasma cylinder using nonstandard FDTD, AIP Conference Proceedings, 2019, Vol.2162, Pages: 020069-1 to 020069-5.
4. Nees Paul, Jennet Jimmy, Sreedevi P. Chakyar, Sikha K. Simon, Joe Kizhakooden, C. Bindu, Anju Sebastian, K .S. Umadevi, Jovia Jose, Jolly Andrews and **V.P. Joseph**,” Microwave absorption properties of flexible zinc oxide sheet”, AIP Conference Proceedings, 2019, Vol.2162, Pages: 020070-1 to 020070-4.
5. Anju Sebastian, Dennet Davis, Sikha K. Simon, Sreedevi P. Chakyar, Jovia Jose, Joe Kizhakooden, Nees Paul, C. Bindu, Jolly Andrews and **V.P. Joseph**,” Non - destructive method for thickness measurement of dielectric films using metamaterial resonator”, AIP Conference Proceedings, 2019, Vol.2162, Pages: 020141-1 to 020070-5.

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?

Yes

No N

5 for each max 15 If

yes give details.

- 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

No N

05 for each max 10 If

yes give details

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

Y
Yes

No

5 for each max 10

If yes give details.

The Youtube lectures by our faculty , Prof V P Anto is utilized by department of physics (Aided) - St Thomas College and St Josephs college for 5 th semester electronics curriculum.

<https://www.youtube.com/channel/UCeWeOYZ-goPLNxIDBjOOpiw>

https://www.youtube.com/watch?v=NDDtL6icO_U

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

5 + 5

Yes

No N

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

1. Anu James - NCC B Certificate
2. Vincelet Majo – NCC B Certificate

<https://drive.google.com/drive/folders/19trCW3THhr-g0ymEC6e2apX5QmLLR6om?usp=sharing>

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

5 each max 10

1. Department conducted freshers day for first years via Google Meet Platform on 23 rd December.
2. Onam and Christmas celebrations where conducted via Google Meet Platform
3. PTA Meetings where held online for 3 DC and 2 DC Physics.

- 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

1. Anu James – Powerlifting Women – 2nd Place -University of Calicut
2. Anu James – Khokho Women- 3 rd Place -University of Calicut
3. Bharath - Judo – State Champion
4. Bharath - Judo – 2 nd Place- Calicut University_

https://drive.google.com/drive/folders/1vGjt_mrMUF-XahWshsoxq7rMWoo3VFA4?usp=sharing

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

10 marks

Adam Gil Christ Joy – Selected for Young Innovators India Program 2020. The final selection process and presentation is in progress

<https://drive.google.com/drive/folders/1SvwtAckKYuTNWocQGjcmUmCRLG1uX4Ha?usp=sharing>

CRITERION V – STUDENT SUPPORT AND PROGRESSION

- a. Furnish the pass percentage for degree main 2019 – 20 batch (pass out) and PG 2018 – 20batch. max 60

% pass

Postgraduate course :

Degree (Main) : 75

Marks	>90%	89-80%	79-70%	69-55%
Number of students				
UG		1	6	7

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% (Max50)

For PG: Each >90% 3 marks each, 2 for 89-80% (Max50)

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

- 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.

Remedial coaching is given to the weaker section of students. Students are given personal guidance and counselling regarding their career opportunities.

(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)

Su

STUDENT PROGRESSION			2019-20	DEGREE	BSC PHYSICS (SELF)		
CL No	REG NO	NAME	PASS/FAIL	HIGHER STUDIES			
				COLLEGE	UNIVERSITY	YEAR OF ADMISSION	COURSE
1092	CCARSPH051	ALEEZA SARA CHACKO	PASS	CHRIST COLLEGE	CALICUT UNIVERSITY	2020	MSc ENVIRONMENTAL CHEMISTRY
1103	CCARSPH052	HARIKRISHNA M	PASS	HINDUSTAN COLLEGE OF ARTS AND SCIENCE	BHARATHIYAR UNIVERSITY	2020	MSc PHYSICS
1098	CCARSPH056	DARIN JOSEPH	PASS	SRM	SRM UNIVERSITY	2020	MSc PHYSICS
1099	CCARSPH057	DERICK DEVASSY	PASS	LPU	LOVELY PROFESSIONAL UNIVERSITY	2020	MSc PHYSICS
1101	CCARSPH059	GLIDIN PEREIRA	PASS	SRM	SRM UNIVERSITY	2020	MSc PHYSICS
1106	CCARSPH061	JENNET JOY	PASS	ST THOMAS COLLEGE	CALICUT UNIVERSITY	2020	MSc PHYSICS
1093	CCARSPH064	ANLIN DCRUZ	PASS	KUFOS	KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES	2020	MSc CLIMATE SCIENCE
1095	CCARSPH066	ASWATHI K SIVARAJAN	PASS	CHRIST COLLEGE	CALICUT UNIVERSITY	2020	MSc PHYSICS
1102	CCARSPH068	GOVIND NARAYANAN K	PASS	CHRIST COLLEGE	CALICUT UNIVERSITY	2020	MSc PHYSICS
1109	CCARSPH071	MOHAMED ISHAQUE SHAFI	PASS	SRM	SRM UNIVERSITY	2020	MSc PHYSICS
1110	CCARSPH063	NEERAJ A	PASS	HINDUSTAN COLLEGE OF ARTS AND SCIENCE	BHARATHIYAR UNIVERSITY	2020	MSc PHYSICS
1111	CCARSPH072	NEHA HAFISH	PASS	FAROOK COLLEGE	CALICUT UNIVERSITY	2020	MBA
1115	CCARSPH073	VRINDA PRADEEP KUMAR	PASS	HINDUSTAN COLLEGE OF ARTS AND SCIENCE	BHARATHIYAR UNIVERSITY	2020	MSc PHYSICS
1113	CCARSPH074	ROSHAL P.S	PASS	SRM	SRM UNIVERSITY	2020	MSc PHYSICS

- 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 No

JAM COACHING :Classroom coaching as well as online coaching through moodle.
<http://christijkmoodle.in/course/view.php?id=276#section-6>

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

Yes No Records to be kept 10

If yes give the number of students benefited

Students were encouraged to participate in the placement training organized by Placement cell in Sahrdaya College.

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

Yes No 10

If yes give details

Industrial visits have been organized by the department to promote research aptitude in students. Hardcopy of the reports are kept in the department.

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?

Yes No 5 marks each max 10

If yes give details

Questionnaires were provided as a feedback mechanism.

Students have been contacted individually to know about their feedback on teaching methodologies ,syllabus and facilities provided by the department.

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)

Sl. No.	Name	Activity to which associated
1	Dr V PJOSEPH	DEAN OF SCIENCE,APT MEMBER,IAPT Member, BOS CHAIRPERSON(ST THOMAS AND CHRIST COLLEGE) BOS MEMBER (Christ college)
2	V P ANTO	APT MEMBER,CO-ORDINATOR OF PHYSICS SELF, BOS MEMBER
3	MERIN JOSE V	BOS MEMBER,CYCLE CLUB MEMBER,IQAC - DEPARTMENT CO-ORDINATOR
4	JOSE SUNNY	BOS MEMBER
5	RAICHALJOHN	BOS MEMBER

- b. Describe the measures taken for maintaining the cleanliness of staff room, classrooms, labs, museums etc.

Labs are sanitized and kept clean.Classrooms are maintained proper and clean.

Details to be furnished (Max 10)

- c. Does the department maintain proper documentation of data on Internal marksheets /Question papers/ Stock register (Details to be furnished)

Yes Y

No

(Max 10)

Yes, The copies of the same are kept in departments.

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

Students are given proper counselling whenever it is necessary.Strict measures are taken in case of violation of laws of college.Parents are intimidated about the conduct of students in the campus.Mentors are taking special care in ensuring good morals of students.

(Max 05)

Date:

Signature:

Head of the department: