

## Brief history and present status

The Department of physics had its humble beginning in 1965 as a small department with two members to cater to the teaching needs of the pre-degree and ancillary subjects for B.Sc. It was elevated to the status of a full fledged department when undergraduate course in Physics was allotted to the college by the University in the year 1981. Further, the department acquired the status of a P G department by the commencement of M.Sc course in the year 1993. From 2007 onwards the department is a research centre of the M G University, with two faculty members functioning as research guides. The first Ph.D degree from the Department is expected to be awarded during the forthcoming academic year. With the addition of two doctoral qualified faculty members and modern research equipment last year, the department is all poised for a leap in research activities in coming future. The department arranges regular orientation and training programmes for the students every month. With an average experience per faculty of ~ 20 years, the department can claim the presence of the most number of senior and experienced faculty members in the college as well as in the University.

The P G course in Physics achieved its glory when two students of the 2016 batch bagged the 4th and 7th ranks in the University. The Department has active research collaboration with the Inter University Center for Astronomy & Astrophysics (IUCAA), Pune and Cochin University of Science and Technology (CUSAT), Kochi. One of the members in the Department has transferred a technology which she developed to an Industrial firm. The research activities of the Department are centered around the topics of Photonics and Opto-electronics, Microwave electronics, Astrophysics and the Quantum transport phenomena. The department is proud of the fact that its alumni can be traced to world famous scientific and technical institutes like UK IR telescope (Hawaii), Mayo Clinic (USA), IBM (Sweden) ISRO (India) etc. The fact that a major contingent of the physics teachers in the higher secondary schools in the region are drawn from the alumni population of the Department indicates the regenerative role played by the Department in the field of education

# 1. Curricular aspects:

## 1.1 Courses offered:

- BSc Physics (3 year course in six semesters)
- MSc Physics (2 year course in four semesters)
- PhD in Physics
- Add-on courses-Electronic equipment maintenance (2 year diploma course)
- 1 year certificate course

## 1.2 Admission process

50% Admission of PG and UG Programmes are through Centralised Allotment Process (by university)

10% Community merit (by college)

20% SC/ST Candidates (by university)

20% management quota (by college)

## 1.3 Current strength

M.Sc II Sem	-	12
M. Sc IV Sem	-	13
BSc II Sem	-	29
B Sc IV Sem	-	39
B S c VI Sem	-	37
Add-on course (Electronic equipment maintenance)	-	24

## 2. Teaching Learning Process

### 2.1 Profile of the present faculty

Sl.No	Name	Designation	Qualifications	Entry in Service
1	Prof. Rageena Joseph	Associate Professor	M Sc	29/10/1985
2	Prof. K A Philip	Associate Professor	M Sc, M Phil	28/10/1985
3	Dr. Joe Jacob	Associate Professor	M Sc, PhD	22/11/1988
4	Prof. Baby Mathew	Associate Professor	M Sc	22/11/1988
5	Dr George James	Associate Professor	M Sc, M Phil, PhD	27/01/1994
6	Prof. Marykutty John	Associate Professor	M Sc, MPhil	01/08/1994
7	Dr.Indu Sebastian	Assistant Professor	M Sc Ph D (Submitted)	28/12/2015
8	Dr.Beena Mary John	Assistant Professor	M.Sc, Ph.D	28/06/2016
9	Dr.(Sr.) Anju Augustine	Temporary Faculty	M.Sc, Ph.D	09/06/2016
10	Sri.Sreeram P.G.	Temporary Faculty	M.Sc, UGC NET	09/06/2016



**Rageena Joseph**

- Head of the Department
- Member, College council
- Member, UGC Cell

- In service for 30 years
- Coordinator K. S. Tomy Endowment Lecture.
- Chairman, M G University Board of Examiners - P G 1st Sem



**K.A. Philip**



**Joe Jacob**

- Visiting Associate of Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune.
- Research Guide in the field of Astronomy & Astrophysics.
- Member of the Public Outreach and Education Committee, Astronomical Society of India.
- Co-PI of Indo-French Project on Radio Astronomy.

- Teacher in Charge, Astronomical Observatory.
- Co-ordinator, Prof. P.S. cherian Memorial Lecture.
- Chairman, M G University Board of Examiners - UG II Sem



**Baby Mathew**



**Dr. George James**

- Member, Board of Studies (UG Physics). M.G.University.
- Co-ordinator, Electronic Equipment and Maintenance add on Course M.G. University.
- Faculty in charge: Internet facility and Computer Labs.
- Member IQAC.





**Marykutty John**

- Secretary, Staff Co-operative Society
- Tutor, Final year P G class
- Life Member, Academy of Physics teachers
- Co-ordinator, P.S. Cherian memorial Lecture

- Life Member, Photonic Society of India.
- Awardee of BSR Fellowship of UGC.
- Qualified NET, JEST and GATE Examinations,
- Research in the field of Photonics.
- Member, Road Safety Club.



**Indu Sebastian**



**Beena Mary John**

- Life Member, Indian Laser Association
- Life Member: Material Research Society of India
- Life Member, Academy of Physics Teachers
- Post-doctoral fellow, Institute of Optics, Paris 2007-2008

- Life Member Photonic Society of India
- Research in the field of Nano Photonics from CUSAT
- Co-ordinator: Science Club of the college
- Faculty in charge: Xmas Celebrations in the college
- Ad Hoc faculty in charge: Prayer meeting
- Qualified GATE Examination



**Sr.Anju K. Augustine**



**Sreeram P.G.**

- Integrated M.Sc from IISER Thiruvananthapuram
- Qualified UGC NET/JRF Exam
- Was in service as a temporary faculty till December 2016
- Joined IIT Madras as research fellow from Dec.2016

### 2.1.1 Details of former faculty members:

Sl. No:	Name	Date of retirement
1.	U. V. John	31-03-1988
2.	Jose Joseph	30-04-1989
3.	P. J. Mathew	31-03-1995
4.	Sr. Sibia	31-03-1996
5.	C.M. Chacko	31-03-1996
6.	M C John	31-03-1998
7.	C A Joseph	31-03-1999
8.	E D Sebastian	31-03-2000
9.	Jose Abraham	31-03-2001
10.	Sr. Tresa Maria	31-03-2003
11.	P S Cherian	31-03-2004
12.	K M Looka	31-03-2004
13.	M M George	31-03-2006
14.	Philomena Dominic	31-03-2008
15.	V V Chackochan	31-03-2010
16.	K S Tomy	31-03-2011
17.	Geetha K P	31-03-2011
18.	Philomenamma George	31-03-2014
19.	C B Satheeshkumar	31-03-2015
20.	K A Joseph	31-05-2015
21.	L J Parathazham	31-03-2016
22.	Jessy Thomas	31-05-2016

### 2.1.2 Continued Learning- Participation in academic seminars/conferences

- Dr. Indu Sebastian has participated in a two day workshop on “Relativistic Electrodynamics” sponsored by Association of Physics teachers in Christ College Iringalakkuda on 7-8 January 2017.
- Dr. Indu Sebastian has participated in a Three day workshop on “Electronic Experiments” sponsored by Association of Physics teachers in Providence College Kozhikode on 10-12 December 2016.
- Dr. Beena Mary John has participated in a KSCSTE sponsored national seminar on recent Advancements in Photonics-NSAP 2017 on Vimala College, Thrissur on 15th February 2017

### 2.1.3 Awards/ Recognition by faculty

#### **Dr. Joe Jacob**

- Visiting Associate of IUCAA for the last ten years.

*The Associateship entitles the faculty and his student to visit the Centre and use the telescopes, data analysis, library and other facilities. There are ample opportunities for collaboration with the faculty members of the Centre*

- Member, Public Outreach and Education committee, Astronomical Society of India
- Co - PI in the Indo French Project

#### **Indu Sebastian,**

- Awarded Basic Science Research (BSR) fellowship for meritorious students, Apr. 2012- Mar. 2016, University Grants Commission.
- Qualified Graduate Aptitude Test in Engineering (GATE 2011) in 851th rank
- Qualified Joint Entrance Screening Test (JEST 2009) in 69th rank with 91.9 percentile score.

#### **Beena Mary John**

- Recipient of Best thesis award of Indian Laser Association 2008
- IInd best poster award APT, OMTAT 2004, 2005
- Transferred the technology of Fabrication of two Holographic Photopolymers to Light Logics Holography & Optics Pvt. Ltd., Thiruvallam, Thiruvananthapuram
- Qualified Joint Entrance Screening Test (JEST 2009)

## 2.2 Teaching

### 2.2.1 Method of classes



Classes are mostly in the Lecture mode. Teachers make use of LCD projectors while teaching involves figures and sketches. Students are encouraged to ask questions in the classes.

Practical classes are of two hour duration. Care is taken to allot an apparatus for each student, so as to foster avenues for the student to explore more on the apparatus and to effect a complete learning.



### 2.2.2 Assignments/Seminars of students

- Assignments are given to students as a part of curriculum
- Seminars are not a part of curriculum for UG. Still we encourage them to conduct seminars

### 2.3 Tutorial System:

Two teachers are allotted the duty of the tutorship of a class. It is ensured that the tutors are teaching the students in every semester. They are also in charge of instructing the students on practicals and deciding on the experiments to be done.

Tutors collect the full data of every student and keep a Tutors Diary with the details of every student. Tutors also help the students psychologically and personally in difficult situations. They often discuss with them regarding their difficulties in studies, environment at home, anxieties etc. They also support in sorting out personal problems and relationship issues, if any, with their parents or friends.

Tutors establish a rapport with the students. They are in charge of guiding the students in the co-curricular and extra-curricular activities. They encourage the students to publish the department magazines, conduct cultural fests, arts and sports events, and organize celebrations during Onam, Xmas etc.

Name of Tutors	Class
Maykutty John	II PG
K A Philip	I PG
George James, Indu Sebastian	III DC
Baby Mathew, Joe Jacob	II DC
Regeena Joseph, Beena Mary John	I DC

### 2.4 Learning

Students use prescribed text books and reference books for learning. Class notes are also provided, whenever needed. Some students prefer to take Lecture notes. Students are encouraged to refer to conceptual books and authentic internet resources to acquire more knowledge.

### 2.5 Evaluation

The learning curve is monitored by conducting test papers in every paper. Two internal examinations and one model examination are conducted every semester. Internal marks are uploaded to the University website after publishing it in the notice board and mitigating the complaints of students, if any.



## 2.6 Interaction with parents:

The internal marks are communicated to the parents and they are invited for an interaction with the concerned tutor. During these meetings, parents and teachers discuss the strategies for helping the students in their studies.

## 2.7 Add-on Course - Electronic Equipment Maintenance

The department is conducting a UGC sponsored career oriented course in electronic equipment maintenance (EEM) offering certificate, diploma and advanced diploma for all the degree ongoing students of the college. This year 24 students have joined for certificate course and they are constructing ten regulated power supplies for the physics lab with the financial support from the department as a part of their EEM certificate course.

EEM Students are getting more exposure to the new electronic equipment and are doing Matlab programming and Simulink models for different electronic systems. Matlab / Simulink models will be useful in making embedded systems.



## 2.8 Evaluation of teachers by students - Score :

The faculty of the department has secured an average score above that of the college average, as indicated below.

Department Average	-	84.23
College Average	-	83.51

## 1. Research, Consultancy, Extension

### 3.1 Topics of Research

- PhD in Astrophysics, Optoelectronics, Microwave Electronics, Photonics, Material Physics and Quantum transport phenomena.

### 3.2 LIST OF RESEARCH GUIDES AND RESEARCH SCHOLARS

Sl. No	Name and Address of guide	U.O. No	Sl. No	Name of research scholar	U.O. No
1	Dr. Joe Jacob, Newman College Thodupuzha	Ac AVI/4573/R. G. /05 dated. Priyadarshini Hills dated04/06/2 007	1	Mr. Biju K.G Koonammakil (H) Kakkavayal, Wayanad (Dist)	2357/AcAXI/2/Phy/Juan2 0109/Acad. Dated, Priyadarshini Hills 11/05/2011
2	V.P.Joseph Dept. of Physics, Christ college Irinjalakuda	5207/ Ac AVI/2008/Aca d. Dated, Priyadarshini Hills dated23/10/2 008	2	Ms. Umadevi K. S Kaippilly Mana Thottippal P. O, Thrissur (Dist)	2546/A II/2010/Academic Dated, Priyadarshini Hills 27/05/2010
3	Dr. Thomas Varghese, Nirmala College Muvattupuzha	4381/ Ac AVI/1/R. G./2009/Acad Dated, Priyadarshini Hills 28/11/2009	3	Philip K. A Kozhimal (H) Muvattupuzha	1875/Ac.AIX/2/112/Physi cs/2011/Acad Dated, Priyadarshini Hills 06/04/2011
			4	Mr. Aloysius Sabu N Nedumkallel Avoly P. O	2946/Ac.AIX/2/112/Physi cs/2010/Acad Dated, Priyadarshini Hills 08/06/2011
			5	Ms. Sheena PA Parayil Thottumugam	147/2014/AII/3/Academi c, Dated, Priyadarshini Hills 01/01/2014
			6	Ms. Babitha K Kuniyil Dwaraka Puthur P O	6188/2014/AXI/1/Acade mic, Dated, Priyadarshini Hills 08/12/2014
			7	Ms. Seenamol K. Stephen, Thekkilakkattu(H) Devamatha Road, Koothattukulam	1084/2016/AXI/1/Acade mic Dated, Priyadarshini Hills 22/02/2016
			8	Francis Xavier P. A. Puthanpadath(H), Kuruppampadi	1084/2016/AXI/1/Acade mic Dated, Priyadarshini Hills 22/02/2016
			9	Anjaly Jose Vimala College, Trichur	1105/2017/AXI/1/Acade. dtd. 25.02.2017
			10	Hitha H. Nirmala College Muvattupuzha	1105/2017/AXI/1/Acade. dtd. 25.02.2017

### 3.3 Research Collaboration

- ✍ Dr. Joe Jacob: Visiting associate of IUCAA, Pune, from 2006 onwards and Co PI: Indo- French Project in Astrophysics with University of Lyon, France
- ✍ Indu Sebastian has research collaboration with International School of Photonics, CUSAT

### 3.4 Membership in Academic Bodies

#### **Dr. Joe Jacob**

- Member, Public Outreach and Education Committee (POEC), Astronomical Society of India (ASI)
- Life member Association of Physics Teachers.
- Life member of Indian Physics Association

#### **Indu Sebastian**

- Life member of Photonic Society of India
- Member of The Society of Photo-optical Instrumentation Engineers (SPIE)

#### **Dr. Beena Mary John**

- Life Member of Indian Laser Association & Material Research Society of India.
- Life Member of Academy of Physics Teachers.
- Post Doctoral Fellow in Institute of Optics, Paris from 2007 to 2008.

### 3.5 List of Publications

#### **Indu Sebastian**

Fabrication and characterization of Chalcogenide glass based waveguide structures, Science and Society 14 (1) 33-42, 2016 ISSN 0973-0206

#### **Regeena Joseph**

Clockwork Universe, International Journal of Advanced Research, Ideas and Innovations in Technology 3 (2), March – April 2017, ISSN-2454-132X

### 3.6 Inauguration of the renewed research centre on 10.03.2017





### 3.7 Seminar Series:

#### 1. *Prof. P.S. Cherian Memorial Lecture Series:*

Prof. P.S. Cherian was the former Head of the Department who always strived to bring in the latest in the field of science to the students. To commemorate his memory we started a Seminar Series during 2010. Each year an eminent scientist from a University/ Institute visits the Department and deliver a lecture on latest trends in the field of Physics. Most of the resource persons are either friends or classmates of Prof. Cherian. This year Prof P S Cherian memorial lecture on “Radio Astronomy past, present and future” was conducted on 16 August 2016. Dr. Viral Parekh, Raman Research Institute, Bangalore was the resource person.



#### 2. *Prof. K.S. Tomy endowment Lecture Series:*

Prof. K.S. Tomy, has donated a Sum of Rs: 1,00,000 to the college as his parting gift during his retirement. He being a man of great scholarship in the field of Quantum Mechanics, the money was utilised for instituting an endowment Lecture every year to give a conceptual base in this subject and to demystify it among students. This year the Endowment lecture was delivered on 30th August 2016 by the internationally reputed Scientist Prof. Waghmare, former faculty of IIT Kanpur, on the topic “Conceptual Quantum Mechanics”.



### 3.8 Seminars/ Conferences/ Workshops organized by the Department

1. Department of Physics conducted a seminar for PG students on instrumentation on 3rd June 2016. Mr. Jacob A.V., faculty of Add-on course was the resource person.
2. Department of Physics conducted the student motivational program “meet the young talent” on Friday 8th July 2016. Mr. Gopikrishnan from IISER Trivandrum delivered a lecture on “enjoying Science with roots in compassion” for the UG and PG students.



3. Department conducted a seminar on “Opening a new window to the universe with GW150914” on Friday 22nd July 2016. Prof A Gopakumar, TIFR, Mumbai delivered a talk on the very recent detection of gravitational waves from a pair of inspiraling black holes.





4. A one day colloquium on “Digital signal processing and Matlab Applications” was organised on 12th November 2016. Prof Neelakandan, Principal, ASIET conducted a lecture session in the morning followed by a hands on training in the afternoon.



5. Department of Physics arranged a career guidance program “Chase your dreams” on 20th January 2017. Prof Ravi K Pillai, career guidance expert and the former faculty member of Newman College, was the resource person.





6. Department of Physics arranged an orientation programme for curricular projects, “Aiming better student projects” on 4th February 2017. Prof S Sankararaman, Department of Optoelectronics, University of Kerala, Trivandrum was the resource person.



7. Dr. Kevin Luke, Cornell University, USA, an expert in the field of nanophotonics interacted with the PG students on 7th March 2017.





### 3.9 Extension/ Outreach Activities

#### 3.9.1 Skywatch programme:

Department of Physics arranged a Sky Watch program using the new Celestron 11' Telescope, "Observing the night sky" on 31st January 2017. Sri Sumesh S S, Technical expert, Priyadarshini planetarium, Trivandrum led the program.



### 4. Infrastructure and learning resources

#### List of major facilities

##### *Major apparatus acquired through DST-FIST assistance:*

- 11' celestron telescope
- Hind Hivac Thin film coating unit
- e/m apparatus
- Fibre optic bench
- Gouy Balance
- 20 digital oscilloscopes
- Zeeman Effect Apparatus
- Hall Effect Apparatus
- Frank - Hertz Apparatus



## 5. STUDENT SUPPORT AND PROGRESSION

### 5.1 Laurels to the Department

The greatest academic achievement by students this year had been securing of the 5<sup>th</sup> and 7<sup>th</sup> ranks in the M.Sc Examination conducted by the University.



Sudheesh T P  
Secured 5th Rank  
(6th position)



Sudheesh P Thankappan  
Secured 7th Rank  
(9th position)

### 5.2 Major Student Achievements

1. Overall Third position in Arts festival of the college in 2017.
2. Overall First Position in Annual Sports of the college in 2017.
3. A student project “Gesture controlled electric Gadgets: prototype in fan speed control (smart fan)” submitted by Kum. Jerryamol John, Kum. Lydia Dai, Kum. Neenu Jolly under the guidance of Dr. Indu Sebastian is selected for financial assistance by Kerala State Council for Science, Technology and Environment (KSCSTE) on 22<sup>nd</sup> November 2016



### 5.3 Students Study Tours

For the first time in the history of the college students went on a study tour by flight. M.Sc IVth Sem Students visited RRI and Visweswarayya Museum at Bangalore. They also visited the historial places in Mysore.



31 students and two teachers of the IVth Sem made an industrial visit to the Koodamkulam nuclear power plant, Thirunelveli on 24th November 2016.



### 5.4 Students Achievers



**SARATH SASI**  
THAL SAINIK CAMP  
DELHI NCC CADET



**KRISHNAPRIYA. S.NAIR**  
KERALANADANAM,  
KUCHIPUDI(A GRADE)



**VIBIN VIJAY**  
STRING INSTRUMENT



**YASWANTH RAJU**  
105 Kg WEIGHT  
LIFTING(FIRST),  
POWERLIFTING(THIRD)



**ANAND VISWANATH**  
COLLAGE,PAINTING,  
CARTOON,CLAY MODEL



**JERRY MOL JOHN**  
PARTICIPATED IN  
SUMMER PROJECT  
AT IUCAA, PUNE



## 5.5 Academic Results

Results 2016 final Bsc Physics model I													
Sl. No	Reg. No.	Name of Candidate	Pass	Overall grade	GPA sixth sem	Failed sem	fail	classical and	Overall grade	Overall GPA	PASS	% of pass-Overall	% of over all 'A+'
1	130021035483	ANJU MARIA ROY	P	A	8.12				B	7.99	P		
2	130021035484	ANN MARIA MATHEW	P	A	8.8				A	8.42	P		
3	130021035485	ANNMAY JOY	P	A	9				A	8.47	P		
4	130021035486	ANUPRIYA JAMES	P	A+	9.48				A+	9.23	P		
5	130021035487	ARUN ROY	P	A	9				A	8.26	P		
6	130021035488	ASWATHY K M	P	B	7.12	3 & 4	3-M,4-Ph				N		
7	130021035489	ASWIN MADHU	F		1, 2, 3, 4, 5, 6		all				N		
8	130021035490	BINYAMIN ABBAS	P	B	7.12	1, 2, 3	3-M,1-M,2-A				N		
9	130021035491	CHRISTY BEN	P	B	7.56				B	7.92	p		
10	130021035492	CIMIX SIBI	F		All						N		
11	130021035493	CLINT GEORGE	P	C	6.64	4,5	5-op,clqm, 4 -ph				N		
12	130021035494	DERRICK K. JOSEPH	P	A	8.08				A	8.03	P		
13	130021035495	DEVIKA DEVADAS	F		4,5,6		4-ph,5-clqm	f			N		
14	130021035496	DIYA JES VARGHESE	P	A+	9.08				A	8.15	P		
15	130021035497	JABIN JOSEPH	P	C	6.68	2,3,4,5	5-clqm,4- ph,m, 2-m3-m	f			N		
16	130021035498	JINTO JOSE	F		All			f			N		
17	130021035499	JINU JAMES	F		All						N		
18	130021035500	KRISHNAJA S. NAIR	P	B	7.4	4	4-p,c				N		
19	130021035501	KRISHNAPRASAD K R	P	A	8.88				A	8.55	P		
20	130021035502	LAIKSHMI SAJEEV	F		4,5,6		4-ph,5-clqm				N		
21	130021035504	MARY BOSCO	P	A	8.52				A	8.69	P		
22	130021035505	MINNU G. SHAJAN	P	B	7.88	5	5-clqm	f			P		
23	130021035506	NEELINA ROY	P	A	8.64				A	8.53	P		
24	130021035507	NEENUKUTTY .P.K	P	A+	9.36				A+	9.16	P		
25	130021035508	NELEENA CHANDRAN	P	A	8.12				B	7.83	P		
26	130021035509	NELSON JOY	P	B	7.92	4	4-m				N		
27	130021035510	NICE P KUNJUMON	P	B	7.52	1	1-E				N		
28	130021035511	NIDHI SABU	P	A+	9.08				A	8.97	P		
29	130021035512	NIRMAL .B. KALAPPURA	P	A	8.16	3,5	3-m,5-clqm	f			N		
30	130021035514	SAJIL GEORGE	P	B	7.92	3,4,5	3,4 -M,5-clqm	f			N		
31	130021035515	SANJANA JOLLY	P	A	9				A+		P		
32	130021035517	SHABNAMOL M K	P	A+	9.28				A	8.71	P		
33	130021035518	SHINY SUNNY	P	A	8.96				A	8.07	P		
34	130021035519	SUMI SANTHOSH	P	A+	9.2				A	8.61	P		
35	130021035520	THOMAS MATHEW	F		2,3,4,5,6		4- H,p,m -2-ph3-h,m,p 5-clqm	f			N		
36	130021035521	THOMASKUTTY FRANCIS	P	A	8.96				A	8.83	P		
37	130021035522	YADUKRISHNAN M H	P	A	8.72				B	7.51	P		

56.75675676  
8.108108108

### Results 2016 - Msc Final Physics

Sl. No	Reg. No.	Name of Candidate	Pass	Grade point	Overall grade	% of mark	university rank	Overall - pass %	university pass %	Explanation	% of over all 'A'
1	140011009183	Anitta James	P	3.1	B+	77.5					
2	140011009184	Anju George	P	3.17	B+	79					
3	140011009185	Asha James	P	3.38	B+	84.5					
4	140011009186	Bilna Joseph	F							passed only 3	
5	140011009187	Danya Das	P	2.6	B	65				1 sem waiting	
6	140011009188	Kripa George Thayyil	P	3.1	B+	77.5				2 sem waiting	
7	140011009189	Monisha S Mathew	F							passed only 4th	
8	140011009190	Pranava K.S	F							passed only 4th	
9	140011009191	Rosilint Mathew	P	3.18	B+	79.5					
10	140011009192	Sajana A.A	P	2.92	B	73					
11	140011009193	Silpamol Johny	P	2.92	B	73					
12	140011009194	Soorya James	P	2.96	B	74					
13	140011009195	Sudheesh P Thankappan	P	3	B+	87	7				
14	140011009196	Sudheesh T.P	P	4	A	88	5				
		Teacher in charge - Prof.K.A Philip									
		HoD of Physics - Rageena Joseph									

78.57142857

40.79

7.142857143

## 5.6 List of students who joined for PG studies in Physics

15 students out of 21 who passed the B.Sc course during 2016 has joined for Post Graduation in various universities / colleges as detailed below:

Ann Maria Mathew	-	Newman College, Thodupuzha
Neenukutty P.K.	-	Newman College, Thodupuzha
Arun Roy	-	Christ University, Bangalore
Anju Maria Roy	-	Christ University, Bangalore
Anupriya James	-	Christ University, Bangalore
Krishnaprasad	-	S B College, Changanassery
Mary Bosco	-	St. Joseph's College, Trichy
Thomaskutty Francis	-	St. Joseph's College, Trichy
Sanjana Jolly	-	K.G. College, Pampady
Minnu G. Shajan	-	Alagappa University, Karaikudy
Neelina Roy	-	Baselious College, Kottayam
Nileena Chandran	-	MES College Nedumkandam
Sumi Santhosh	-	MA College, Kothamangalam
Shabnamol M.K.	-	MA College, Kothamangalam

## 6. GOVERNANCE LEADERSHIP AND MANAGEMENT:

The matters of the department are discussed in regular meetings presided over by the HOD. The final decisions are taken after consolidating and considering the opinion of all the members. Faculty members are given the charge of implementation of the various programmes.

### 6.1 Policies of the Department:

- “zero class loss policy” envisages minimum loss of classes due to the conduct of co-curricular programmes. Major programmes of the department are arranged on Saturdays and holidays.
- “zero free hour policy” implemented by engaging classes which become free due to faculty members being on leave.
- Evaluation of progress of the students through regular test papers conducted from 9 am in the morning.

## 6.2 Collective responsibility:

The following meetings were conducted at the department to choke out new programmes and to take major decisions on the functioning of the department.

SI No:	Date	Agenda
1	01-06-16	To welcome the new HOD
2	03-06-16	To prepare the year plan
3	14-07-16	To decide on the seminar on gravitational waves, deficiency of lab staff
4	03-08-16	To discuss and decide on conduct of P S Cherian memorial Lecture
5	08-08-16	Decisions to conduct the PTA meeting
6	19-08-16	To decide on KST endowment lecture, to request for setting up of a proper research room
7	28-09-16	Decided t request to the principal to share the keys of computer lab and telescope room
8	21-10-16	Conduct of seminar on DSP, the matter of access to the key of the P G computer lab, conducting career orientation programme
9	5-12-16	Purchasing of lab equipments, conducting the sky watch programme
10	09-01-17	To access and make operational the thin film coating of the department stationed at the chemistry department
11	25-01-16	Deficiency of function generators in the lab,consolidation of department programmes conducted during the year
12	24-03-16	Preparations for academic audit

## 6.3. Financial Management

- All the equipments except one allotted under DST - FIST programme have been acquired by the Department and are in full use
- The department acquires the equipments for the U G course utilizing the special fee collected from students
- A sum of Rs: 1000 each per head is collected from the staff for welfare programmes of the department.

## 6.4 Recreation Activities

### “Oruma 2017” - Faculty Tour on 25.03.2017 - Kumarakom







## 6.5 Innovations and Best practices:

### 6.5.1 Participation in national level campaign

- The department participated in national level 'transit of mercury' observation campaign organized by the Inter University Centre for Astronomy and Astrophysics (IUCAA, Pune)

### 6.5.2 Science Theme Student Seminars

- Regular science theme student seminars are organized and conducted entirely by the students, as a part of the National Science Day Celebrations. This year the department celebrated the day by conducting a seminar series and a quiz competition named Valistus - 2017 on 10.03.2017. Prizes were distributed to the winners.







### 6.5.3 Regular Meeting of the Alumni batch 2007

The alumni of the 2007 batch of the B.Sc has a practice of getting together every year. They celebrated the memory of their studentship at Newman this year also. Also, this batch had been supporting two students with a stipend of Rs: 500 each for the three years of their undergraduate study.



### 6.6 Future plans - VISION 20-20

- To achieve 100% the placement for students.
- To enhance the number of students who opt for higher studies.
- To switch to computer based assignments and internal examinations.
- To boost the research output in the Department by availing funds for major and minor projects from funding agencies.
- Addition of more faculty members specialised in various branches of research in the department.

(Signature of HOD)