

THE RURAL COLLEGE, KANAKAPURA

RAMANAGARA DISTRICT-562117

DEPARTMENT OF PHYSICS



PHYSICS DEPARTMENT PROFILE

- Date of establishment: 1955
- Built-up area: About 200sq.m
- No. of teaching post sanctioned: 06
- Present teaching staff: 03
- Teacher – student ratio: 1:65
- No of Physics & Electronics Books: 4080
- Publications by Faculty: 03

DETAILS OF STAFF MEMBERS

Name of the Teaching Staff	Designation	Qualification	Specialisation
Sri. Nanjundiah, Retired on 30 th September 2022	Associate Prof.	M.Sc	Solid State Physics
Sri. M.T.Balakrishna	Associate Prof.	M.Sc M.Phil	Nuclear Physics
Sri.Krishna H. Fattepur, Transfer on deputation on 5 th February 2020	Associate Prof.	M.Sc	Solid State Physics
Kum. Manisha.S	Assistant Prof.	M.Sc	Nuclear Physics
Andani	Lab. Assistant	PUC	

Academic Details

Name	M. T. Balakrishna
Teaching experience	33 Years
Publications	03
Organisational Members	BOE in 2019-20, 2020-21 BOS in 2019-20, 2021-22

Publications

Paper 1

Title: International Journal of Hit Transaction on ECCN

Author: M.T.Balakrishna

Journal: The contradictions of sustainable urban development.
Volume No. 12, Issue: 2A (1), October 2019-March 2020, Page:
72-76

Paper 2

Title: Arts, Science and Humanities

Author: M.T.Balakrishna

Journal: An analysis on enrolment in senior secondary and higher education in India. Volume: 7, Special issue 2, March 2020 Page no: 107-104

Paper 3

Title: International Journal of Research in Economics and Social Science (IJRESS)

Author: M.T.Balakrishna

Journal: Recent trends in mobile banking science with special reference to internet of things (IOT) in Mysore City. Volume No: 11, 5 May 2021, Page No: 207-217

Name	Nanjundaiah
Teaching experience	33 Years
Organisational Members	BOE member 2017-18, 2018-19, 2019-20, 2020-21 BOS member 2019-20,2020-21, 2021-22
Publication	Nil

**GENDER PROFILE OF STUDENTS FOR THE YEAR
2017-18**

Class	Boys	Girls	Total
B.SC 1 (PCM+PMCs)	10	51	61
B.Sc 2 (PCM+PMCs)	23	37	60
B.Sc 3 (PCM+PMCs)	03	18	21

**GENDER PROFILE OF STUDENTS FOR THE YEAR
2018-19**

Class	Boys	Girls	Total
B.SC 1 (PCM+PMCs)	27	56	83
B.Sc 2 (PCM+PMCs)	09	48	57
B.Sc 3 (PCM+PMCs)	19	36	55

GENDER PROFILE OF STUDENTS FOR THE YEAR 2019-20

Class	Boys	Girls	Total
B.Sc 1 (PCM+PMCs)	23	42	65
B.Sc 2 (PCM+PMCs)	23	51	74
B.Sc 3 (PCM+PMCs)	11	45	56

GENDER PROFILE OF STUDENTS FOR THE YEAR 2020-21

Class	Boys	Girls	Total
B.SC 1 (PCM+PMCs)	23	35	58

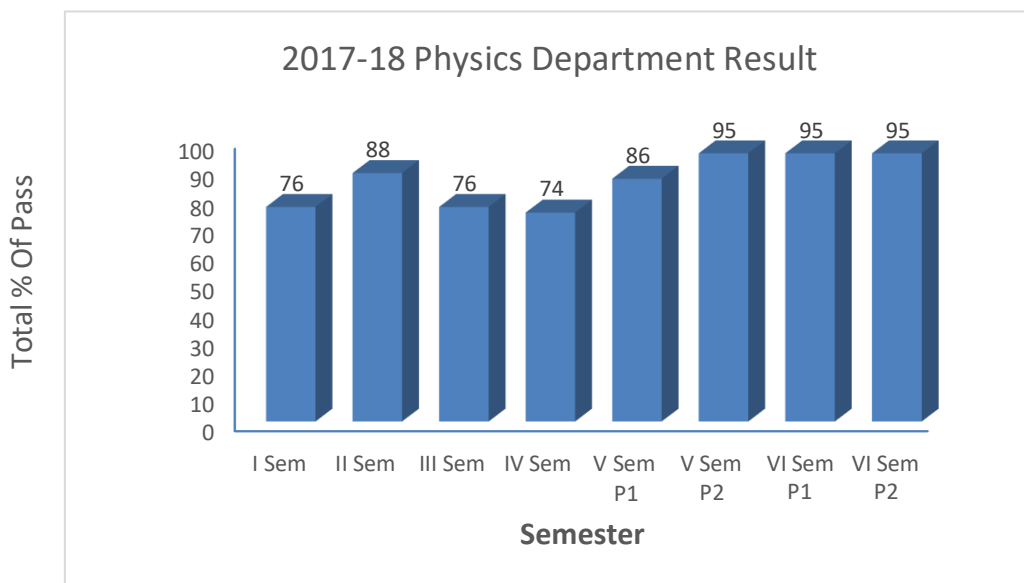
B.Sc 2 (PCM+PMCs)	18	40	58
B.Sc 3 (PCM+PMCs)	22	49	71

PHYSICS BOOKS PURCHASED BY OUR COLLEGE LIBRARY

2017-18			2018-19			2019-20		
Fund Source	No of Books	Amount in Rs.	Fund Source	No of Books	Amount in Rs.	Fund Source	No of Books	Amount in Rs.
College	Nil	Nil	College	20	5,168	College	29	8,062

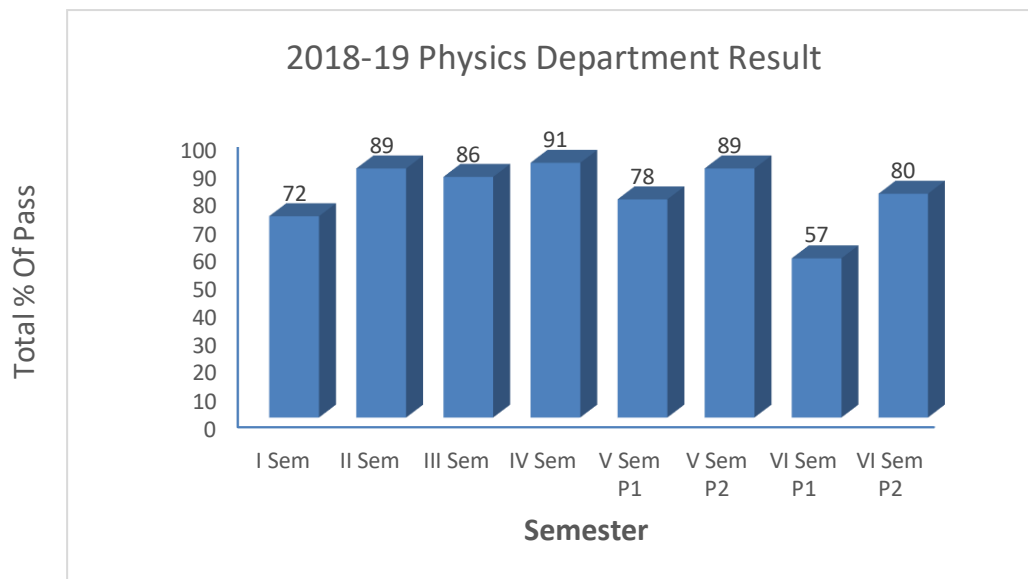
RESULT FOR THE YEAR 2017-18

CLASS	SEMESTER	PAPER	NO OF STUDENTS APPEARED FOR EXAM	FIRST CLASS	SECOND CLASS	PASS CLASS	FAILED	Total % Of Pass
B.Sc 1	I Sem	01	59	45	-	-	14	76
	II Sem	02	58	51	-	-	07	88
B.Sc 2	III Sem	03	59	45	01	-	13	76
	IV Sem	04	58	43	-	-	15	74
B.Sc 3	V Sem P1	05	21	18	-	-	03	86
	V Sem P2	06	21	20	-	-	01	95
	VI Sem P1	07	21	20	-	-	01	95
	VI Sem P2	08	21	20	-	-	01	95



RESULT FOR THE YEAR 2018-19

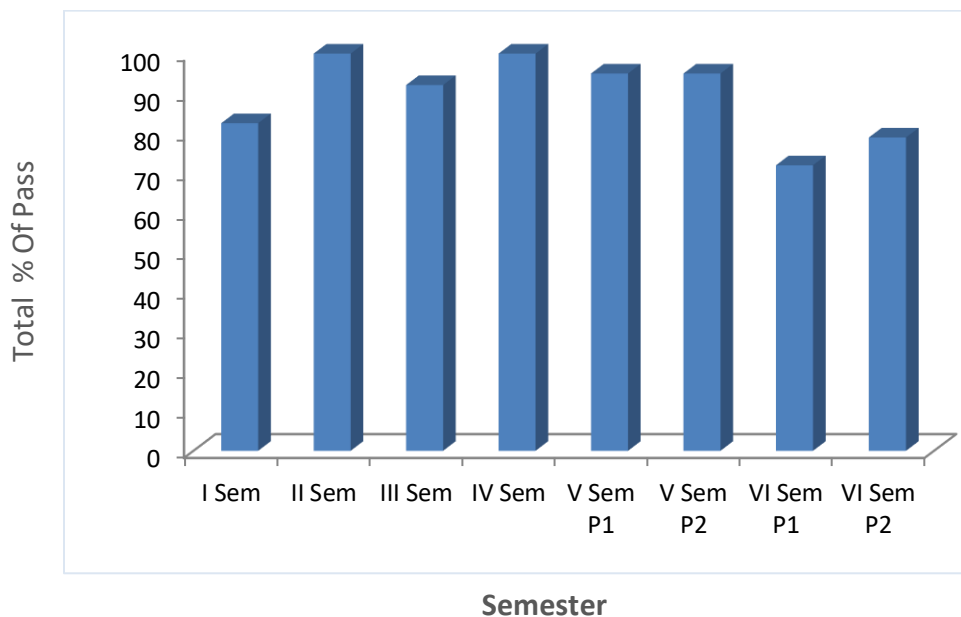
CLASS	SEMESTER	PAPER	NO OF STUDENTS APPEARED FOR EXAM	FIRST CLASS	SECOND CLASS	PASS CLASS	FAILED	Total % Of Pass
B.Sc 1	I Sem	01	83	57	03	-	23	72
	II Sem	02	80	63	07	01	09	89
B.Sc 2	III Sem	03	56	48	-	-	08	86
	IV Sem	04	57	51	01	-	05	91
B.Sc 3	V Sem P1	05	55	43	-	-	12	78
	V Sem P2	06	55	49	-	-	06	89
	VI Sem P1	07	54	31	-	-	23	57
	VI Sem P2	08	54	43	-	-	11	80



RESULT FOR THE YEAR 2019-20

CLASS	SEMESTER	PAPER	NO OF STUDENTS APPEARED FOR EXAM	FIRST CLASS	SECOND CLASS	PASS CLASS	FAILED	Total % Of Pass
B.Sc 1	I Sem	01	63	42	7	3	11	82.5
	II Sem	02	62	62	-	-	0	100
B.Sc 2	III Sem	03	76	60	8	2	6	92.1
	IV Sem	04	74	74	-	-	0	100
B.Sc 3	V Sem P1	05	57	54	-	-	03	95
	V Sem P2	06	57	52	-	-	05	91
	VI Sem P1	07	57	37	4	-	16	71.9
	VI Sem P2	08	57	43	2	-	12	78.9

2019-20 Physics Department Result



RESULT FOR THE YEAR 2020-21

CLASS	SEMESTER	PAPER	NO OF STUDENTS APPEARED FOR EXAM	FIRST CLASS	SECOND CLASS	PASS CLASS	FAILED	Total % Of Pass
B.Sc 1	I Sem	01						
	II Sem	02	58	58	-	-	-	100
B.Sc 2	III Sem	03						
	IV Sem	04	58	58	-	-	-	100
B.Sc 3	V Sem P1	05	57	54	-	-	03	95
	V Sem P2	06	57	52	-	-	05	91
	VI Sem P1	07	71	62	02	-	06	91.5
	VI Sem P2	08	71	61	03	-	07	90.1

LIST OF APPARATUS

S.No	EQUIPMENTS	QUANTITY
01	3MHz Signal Generator-MSG3M	03
02	70 MHz DSO-D37070A	02
03	DC Power Supply-TD3202M	03

04	DMM- VC97	04
05	Atwood Machine	01
06	Law of Conservation of Energy	02
07	Free Fall Expt Set-Up	02
08	Digital Travelling Microscope	01
09	E/M Thomson's Method	01
10	Digital Vernier Calipers	01
11	Photo Tube Characteristics and Plank's constant Expt Set-up PHO 501	01
12	Newton's rings Expt Set-up with bottom portion	01
13	Digital Stop Clock DSC 201	01
14	Digital Thermometer	01
15	Semiconductor diode laser with heavy base and white screen, grating stand and power supply	01
16	Cathode Ray Oscilloscope	04
17	Transistorised Power Supply	04
18	G M Counter	02
19	Dual Channel DC Source	04
20	Oscillators	08
21	Function Generator FC 100, FC 200	02
22	Spectrometers	04
23	Inductance and Capacitance Boxes (6-Dials)	06
24	Bi-Prism Apparatus	01

25	UPS	01
26	Thermo Couple Analyser	01
27	Photoelectric Apparatus	01
28	Multi-meters [MOTWANE]	02
29	Digital Multi-meters	07
30	LCD Projector with Smart Board	01
31	Microscopes	03
32	Op-Amp Kit	01
33	BH-Curve	01
34	Digital IC Trainer Kit	02
35	Digital Screw Gauge	01

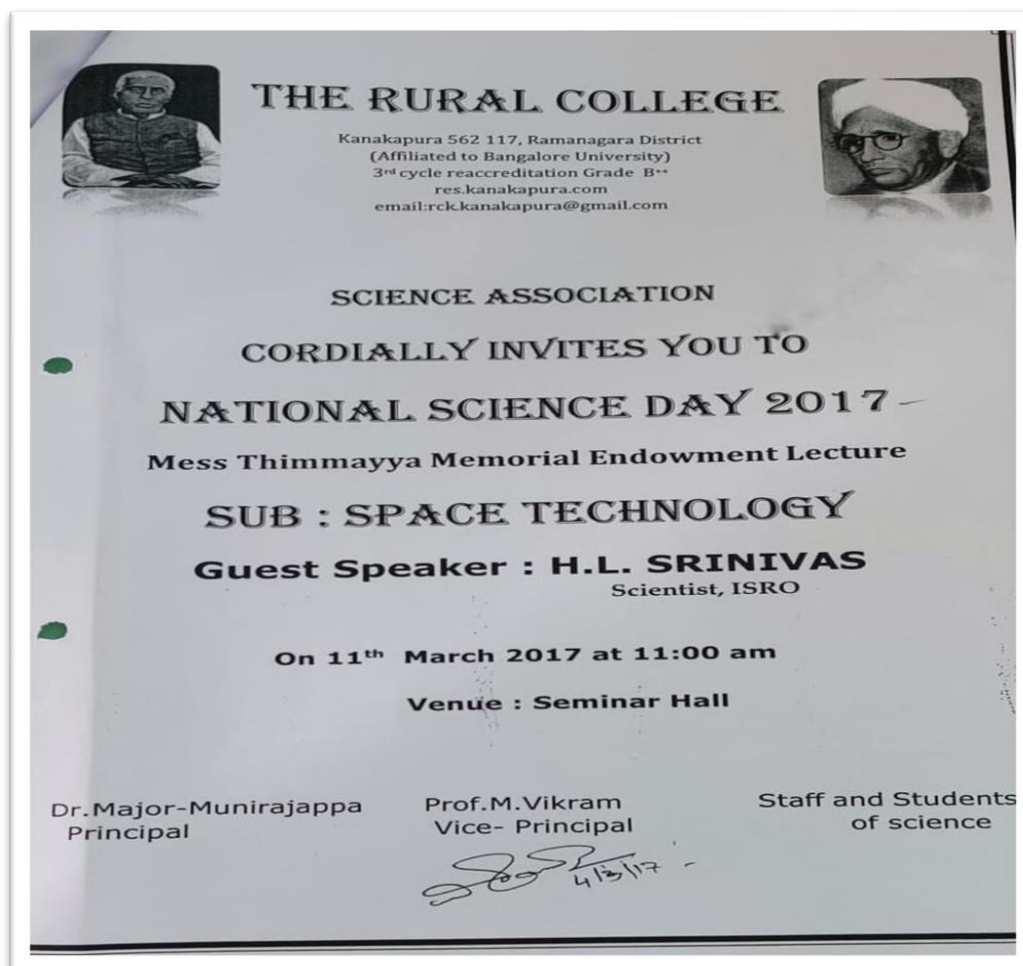
BEST PRACTISE

- 1) **Laboratory manuals** are prepared after thorough debate to ensure appropriate and uniform procedures
- 2) **Question bank** is prepared to ensure good pass percentage in university examinations.
- 3) **Additional Lab sessions** for absentees for various reasons
- 4) **Remedial classes** are arranged for the slow and academically weak learners.
- 5) **Financial assistance** to the economically backward students by the staff members for fees payment and books purchase
- 6) **Cash Prize Awarded**
 - 1st Place Rs. 1000
 - 2nd Place Rs. 500

DEPARTMENT ACTIVITIES 2017

NATIONAL SCIENCE DAY - 2017

From the department of Physics Rural college Kanakapura organized a National Science Day in the topic of “Space Technology” on 11th March 2017 from 11:00 AM onwards in seminar hall.



The guest speaker was heartily welcomed by Principal Dr. Major Munirajappa and Vice-principal Prof. M. Vikram and Head of the Department prof. Nanjundaiah sir in the presence of prof. M. T. Balakrishna and Science lecturer's.

The Guest **H.L. Srinivas**, Scientist at ISRO.

He explained the activities and satellite models and working lab. The students were able to witness and were inspired much. Seminar focuses on technology for use in space, astronautics and other activities beyond earth's atmosphere. Also discussed about invention, new technology, research and this will help us to gain knowledge about space, advantages and disadvantage of space technologies. All the BSc PCM and PMCs students are actively participated and show their participation by asking their doubts.

In view of this our department were organized the events which students are actively participated. The winners are awarded a cash prize.

National Science Day 2017

Various Competitions held on 22/2/2017

Power Point Presentation:

S.No	Student Name	Class & Section	Prize Amount in Rs	Signature of Student
1	Swaroop S.G	III B.Sc PCM	300/=	Swaroop S.G
2	Hemalatha K	III B.Sc PCM	200/=	Hemalatha K
3	Akshatha	I B.Sc CBZ	100/=	Akshatha

Lecture Competition:

S.No	Student Name	Class & Section	Prize Amount in Rs	Signature of Student
1	Sudhitha K.M.	II B.A HEG	300/=	Sudhitha K.M.
2	Sneha G	II B.Sc PCM	200/=	Sneha G
3	Bhaggyashree	II B.Sc CBZ	100/=	Bhaggyashree

Poster Presentation:

S.No	Student Name	Class & Section	Prize Amount in Rs	Signature of Student
1	Arpitha A	III B.Sc PCM	300/=	Arpitha A
2	Swaroop S.G.	III B.Sc PCM	200/=	Swaroop S.G
3	Vinutha S.	III B.Sc PCM	100/=	Vinutha S

FOOD STALL
12.3.17

As per the feedback received from the students it was very good learning experiences.

DEPARTMENT GUEST LECTURE PROGRAMME & EDUCATION TOUR

On 14th March 2017 ISRO Scientist **Dr.Srinivasa** was invited to our institution. He explained various activities of ISRO, Blueprint and its contribution to the development of India.

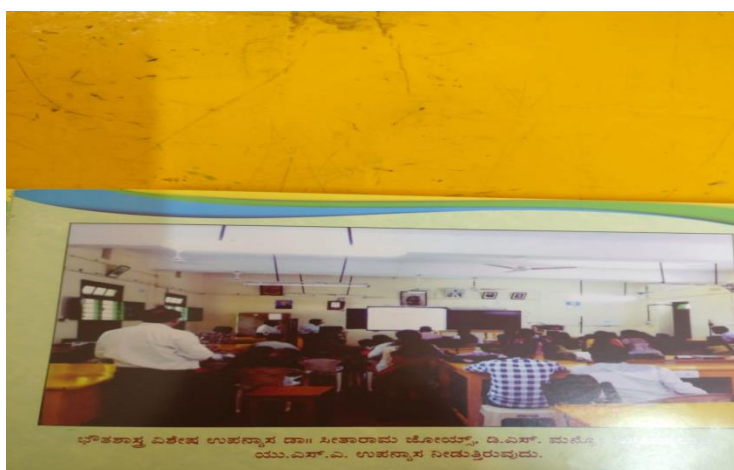
He helped our students to visit ISRO, Bangalore on 21st March 2017. He explained the activities and satellite models and working lab. The students were able to witness and were inspired much



ಭೌತಶಾಸ್ತ್ರದ ವಿಭಾಗದವರು (ISRO) ಇಸ್ರೋಗೆ ಭೇಟಿ ನೀಡಿದ್ದರು

SPECIAL LECTURE PROGRAMME ON CANCER CELLS

On 13 September 2017 the Dept. of Physics organized special lecture programme regarding Drug preparation, particularly related to Cancer. Eminent scientist **Dr.D.S.Seetharam Jois**, Munro University, USA, gave a lecture, later participated in the interactive session with the students and staff. He elaborately explained how affected cancer cells respond to any new molecule.



DEPARTMENT ACTIVITIES - 2018

NATIONAL SCIENCE DAY – 2018

Department of Physics Rural College Kanakapura organized a Science Day Celebration on 28 February 2018 from 11:00 AM onwards in seminar hall.

Head of the department **Prof.Nanjundaiah** gave a brief introduction on the importance of National Science Day and theme about “*Science And Technology For Sustainable Future*”.

Prof.M.T.Balakrishna has given talk on “*Raman Effect And Its Importance*”.

Students are actively participated and show their participation by asking the doubt

To,
The Principal,
Rural College,
Kanakapura.

28-02-2018

Sir,
Sub : Science day celebration 2018

With reference to the above cited subject, I would like to bring your notice that all the science Departments jointly celebrated The National Science Day with the following events

1. Prof. Nanjundaiah gave a brief introduction on the importance of National Science Day and theme "Science and technology for sustainable future".
2. Prof.M.T.Balakrishna has given talk on Raman effect and its importance.

3. **Essay competition : water crisis and management winners**

Sl.No.	Student Name	Class & Section	Prize Amount	Signature of the student
1.	Vidhya B.K	3 rd B.Sc/PCM	500/-	Vidya B.K
2.	Sushma H B	2 nd B.Com/C	500/-	Sushma H B
3.	Nethravathi S	2 nd B.Sc/CBZ	250/-	Nethravathi S

Consolation prizes : 1) Likhitha B.J, 1st B.Sc/PCM 250/- Likhitha B.J.
2) Rukmini R, 1st B.Sc/PCM 250/- Rukmini R.

4. **Lecture competition :**

Sl.No.	Student Name	Class & Section	Prize Amount	Signature of the student
1.	Bhagyashree	3 rd B.Sc/CBZ	500/-	Bhagyashree
2.	Likhitha B.J.	1 st B.Sc/PCM	400/-	Likhitha B.J.
3.	Vidya B.K	3 rd B.Sc/PCM	250/-	Vidya B.K

5. **Power Point Presentation :**

Sl.No.	Student Name	Class & Section	Prize Amount	Signature of the student
1.	Aliya Khanum	2 nd B.Sc/CBZ	500/-	Aliya Khanum
2.	Apoorva V	2 nd B.Sc/CBZ	400/-	Apoorva V
3.	Hrushikesh K.P	1 st B.Sc/CBZS	250/-	Hrushikesh K.P

6. Special prize for non-science - Suchithra KM 500/-
III BA + EG

Our department were organized the events like essay competition, lecture competition, power-point presentation on water crisis and management. The winners are awarded a cash prize.

MOTIVATIONAL SPEECH BY AUTHOR Prof. B. Basavraj

On 30/08/2018 Prof. B.Basavraju S.J.R.C. College and author of many Physics and Electronics books for various Science and Engineering streams participated in Seminar.

He gave inspirational talk on a) How to pursue B.Sc. Course 2) Learning Physics s through problems c) Opportunities after B.Sc. d) Life skills.





DEPARTMENT ACTIVITIES - 2019

JOB FAIR

The department of Physics on 24th April 2019 invited “INFOCON INTERNATIONAL” Bangalore related to hold a Job fair. The Company representatives came to our Institution and explained the scope of technology and about their company, Job opportunities, nature of training and they conducted three level interviews, in which they selected 16 students.



On 23rd September 2019 we invited distinguished scientist **Dr.Balakrishnan Manikyam** of the Meteorological Society of India. He delivered lectures in 2 sessions on basics of atmospheric

dynamics and applications. The lecture was very beneficial to the outgoing final B.Sc students.



DEPARTMENT ACTIVITIES – 2020

National science Day 2020 and Science Exhibition

From the department of Physics Rural college Kanakapura organized a “National science Day2020 And Science Exhibition” on 28 February 2020 from 10:00 AM onwards in S K Memorial Hall.

RURAL COLLEGE,
KANAKAPURA-562117
Ramanagara District, Karnataka
Affiliated to Bangalore University
Naac Re-accredited B++
www.res.kanakapura.com

SCIENCE ASSOCIATION
CORDIALLY INVITES YOU TO
NATIONAL SCIENCE DAY – 2020

DATE : 28.02.2020
Day : Friday

TIME : 10.00 a.m
VENUE : S.K. Memorial Hall

President : Sri.K. B. Nagaraju,
President, RES, Kanakapura.

Guest Speaker : Dr. K. C. Raghu,
Science columnist
Bangalore.

Chief Guests : Sri.M. L. Shivakumar
Vice President, RES, Kanakapura.

Sri. C. Ramesh,
Secretary, RES, Kanakapura.

Sri. K. G. Thimmappa
Director, RES and DCMC RCK,
Kanakapura.

Dr.M.Govindappa
Principal

Prof.Nanjundaiah
Vice Principal

Staff and Student
of Science

It was organized by inviting **Dr.K.C.Raghu**, Bangalore, and Science columnist. He delivered a lecture on the present food crisis and management in India. In the 2nd Session he elaborately explained Natural environmental conservation. In an open discussion with students and the public, he replied for various queries in detail.



On 6th March 2020 all the Science departments jointly organized a Science exhibition. There were totally 80 experiments/demonstration/models on various topics on view. The exhibition was open to High School, PU and Degree Students of all the Schools and Colleges of Kanakapura Taluk.

Students, Staffs and Management witnessed this Exhibition and appreciated. Leading Newspaper featured the exhibition and appreciated the event.



The programmes was lead by Prof. M T Balakrishna, Associate professor, Dept of Physics
The Programmes was inaugurated by Dr. M Govindappa, principal of our college in the presence of
Prof. Nanjundaiah Vice principal of our college

Resource Person: **Prof. Sathish**, Asst. Professor Dept. Of Physics, PES college Mandya.

Presence:

Prof. B.M Srinivas, HOD Dept. Of chemistry.

Prof. Channappa, HOD Department Of Economic, Prof. Devaraju, HOD Department Of Sociology.

Lt. M.J Vijendra, Dept. Of History. Prof. Poojashree, Dept. Of chemistry, and other science faculties.

