



PKM Educational Trust

R. R. Institute of Technology

Affiliated to VTU Belgaum and Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka

Accredited by NAAC with „B+“

Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

PRO-GEEKS

VOLUME 5

ISSUE 1

FROM THE PRINCIPAL DESK

“Education is the passport to the future, for tomorrow belongs to those who prepare for it today.” RRIT News broadcasts the information of RAJA REDDY INSTITUTE OF TECHNOLOGY and showcases the hidden talents of the students and staff. It encloses the activities such as FDP, conferences attended and paper published in International and National journals by staff members and competitions won by the students and innovative projects carried out by them. I, take this opportunity to thank all the stakeholders for showing interest and continuous support. I extend my best wishes to all students in their chosen career path and I am sure the college will scale up to greater heights in the years to come and serve many more in the society.



Dr. Mahendra K.V.
Principal, RRIT

ABOUT THE DEPARTMENT

The Department of Basic Sciences shall deliver the analytical and Mathematical concepts to engineering students effectively, which will enable them in the strengthening of innovative skills during their further studies.

VISION

To spur the development of the Institution to become a premier Institution by igniting and nurturing enthusiasm, interest and passion, in the study of Fundamental courses of Physics, Mathematics and Chemistry and their applications in Professional studies, as a part of the curriculum.

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FROM HOD'S DESK

The Faculty of the Department of Basic Sciences takes keen interest and strive hard to nurture enthusiasm, interest and passion in the study of Fundamental courses of Physics, Mathematics and Chemistry and their applications for Engineering Studies. Guest lectures by Distinguished Professors are organized to enlighten the students about the latest thrust areas of Science and Technology.

FROM EDITOR'S DESK

A thought that has been enduring in mind when it becomes real; is truly an interesting and exciting experience. This news letter was one such cherished work that had its roots in the persuasion.

It would be a snapshot of the various activities and advancements for all associated with RRIT. Proper communication plays a vital role in institution's development. This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. This Volume 5 Issue 1 of the basic science department newsletter should inspire all of us for a new beginning enlighten with hope, confidence and faith in each other in the road ahead..... Happy Reading!

Editorial Board

Chief Editor

Dr. Ramachandramurthy V
Professor & HOD

Editor

Dr. Uppara Manjulamma
Assistant Professor

Members

Venkatesh S, 3rd Sem

Gurudarshan R, 3rd Sem

Sl. No	Name of The Activity	Date of Conduction	Resource Person
1	Three days Online national level seminar series on Quantum Mechanics and its importance.	27 th -29 th October 2020	Dr. Manoj Harbola Professor, Indian Institute of Technology(IIT), Kanpur. Dr. Rabeet Singh Assistant Professor, Banaras Hindu University (BHU), Banaras. Dr. B A Kanagalekar Assistant Professor, Rani Chennamma University (RCU), Belagavi.
2	One day Online Guest lecture	24 th November 2020	Dr. Alpesh Kumar RGPT, Amethi, India.
3	Student Induction Programme Phase I(Online)	9 th - 27 th November-2020	Dr. Ramachandramurthy V, Professor & Head, Department
4	Student Orientation Programme Phase II(Offline)	30 th November – 18 th December 2020	Dr. Ramachandramurthy V, Professor & Head, Department

HEARTY WELCOME TO OUR NEW PRINCIPAL

We are glad to welcome Dr. Mahendra K.V. our new principal to the RRIT Family. Dr. Mahendra K.V. was the former Principal of Amruta Institute of Engineering and Management sciences. He received BE in Mechanical Engineering from PDA college of Engineering Gulbarga University in 1987, ME from Bangalore University in 1992 and Ph.D (VTU Belagavi) in 2007 respectively. His area of interest is Production and characterization of Al-4.5% Cu alloy fly ash metal matrix composites. He has published several articles in international refereed journals. He has 30 years of teaching experience and also he guided 4 students.

Dr. Mahendra K.V. is a good administrator and eminent academician. As the principal of RRIT, we hope that he will take this institution to new heights. We wish him all the success in his endeavours.

Department News:

- Prof. Pavan Sagar D got award for 100% result.

Faculty Journal Publications:

- A.S. Aruna, V. Ramachandramurthy and N. Kavitha “ Non-Linear Rayleigh- Benard Magnetoconvection in Temperature-Sensitive Newtonian Liquids with Variable Heat Source”, Journal of the Indian Math. Soc,2021,8(1-2)0019-5839



TOPPER LIST

SEMESTER	I	II	III	DEPARTMENT TOPPER
II	 Rupam Pal 1RI19IS 037 90.25%	 Sai Kiran 1RI19EC014 90.20%	 ManaharNishad 1RI19CV014 90%	  Tanima Modal 1RI19CS048 100%
II	 Dheeraj K 1RI19EE004 80.85%	 Harshind T 1RI179ME005 80.80%		



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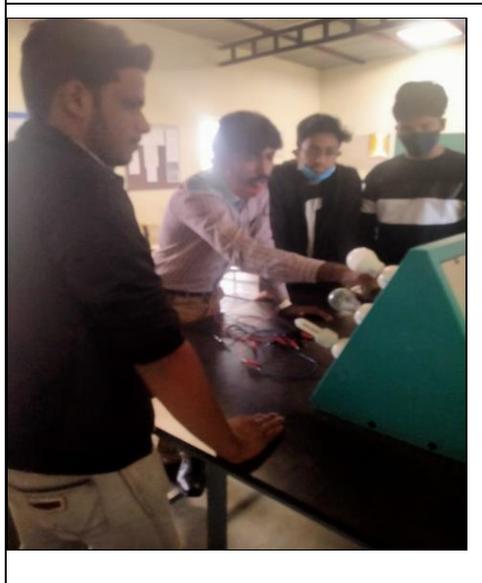
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Department of Basic Science

VOLUME 5

ISSUE 2

		
<p>First day Orientation programme by Introduction of Hod's</p>	<p>On orientation programme Quiz competition by Mrs. Parimala Gandhi and Mrs.Divya</p>	<p>Covid-19 awareness session by Dr. Sunitha H D and Dr. Manjunath R</p>
		
<p>Lab sessions</p>	<p>Orientation Program on Data Science</p>	<p>Orientation Program on Swayam and NPTEL</p>

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Ravi Kumar, 3rd Sem

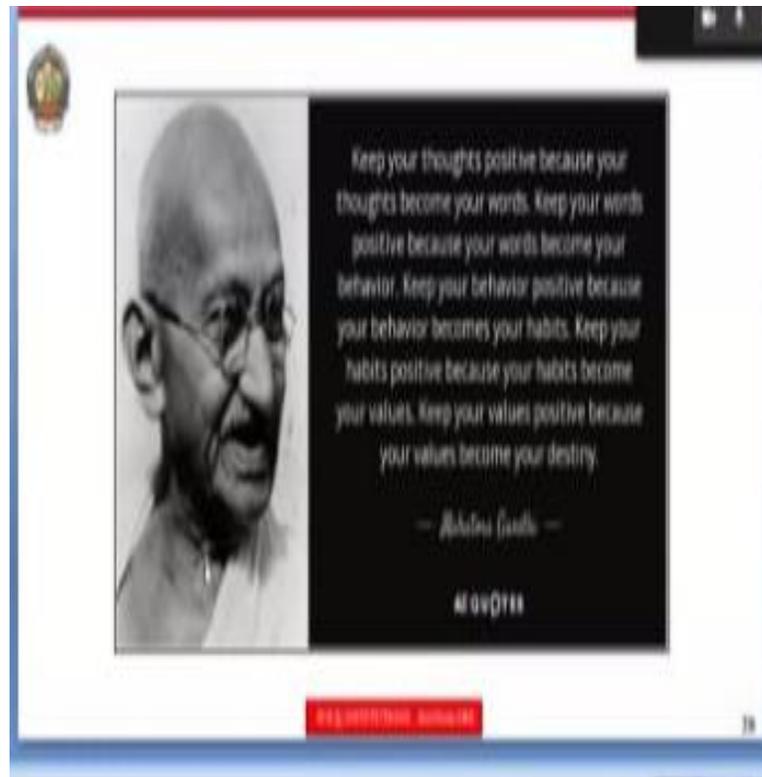
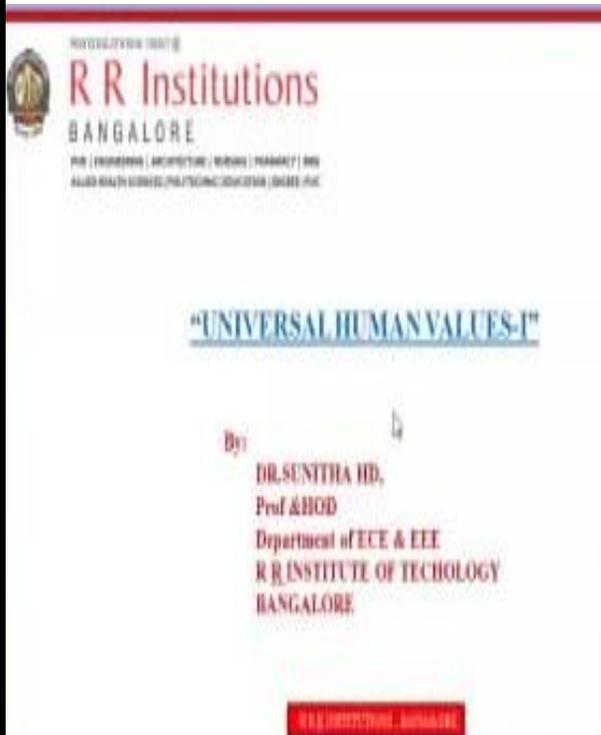
Student Induction programme 2020-2021 Phase-II (II semester) Schedule of events

Day 1: Monday (7-06-2021)	Inauguration Welcome by Dr. V. Ramachandramurthy , HOD, Basic sciences
	Presidential remarks by Dr. Mahendra K V , Principal, RRIT
	Universal Human Values-I by Dr. Sunitha H D , HOD of EC & EE, RRIT, Bangalore
	Universal Human Values-II by Prof. Parimala Gandhi , Dept. of EC, RRIT, Bangalore
Day 2: Tuesday (8-06-2021)	Lecture on Applications of Semiconductor by Dr. Anita R Nandurkar , KLEIT, Hubballi
	Personality Development by Prof. Lakshminarayan , NMIT, Bangalore
Day 3: Wednesday (9-06-21)	Career guidance (Branch wise) by Branch HODs , RRIT, Bangalore
	Creative practices and innovations by Dr. Manjunatha G , Dept. of Mech, RRIT, Bangalore
Day 4: Thursday(10-06-21)	Awareness of COVID-19 & Importance of vaccination by Dr. Mangala Gouri , Dept. of Pathology, Ramaiah Medical College, Bangalore.
	Yoga and its benefits by Prof. Girish , Dept. of Civil, RRIT, Bangalore
Day 5: Friday (11-06-2021)	Lecture on Material science by Dr. Anita R Shettar , Dept. of BS,RRIT, Bangalore
	Arts and Culture By Prof. Shruthi , Dept. of CSE, RRIT, Bangalore
Day 6: Saturday (12-06-21)	Motivational talk by Prof. R. Raveendra , RR college of Pharmacy, Bangalore.
	Extracurricular activity Talent Exhibition: Presentation by students
	Valedictory function

ONLINE STUDENTS INDUCTION PROGRAM

Transition from school to college life is one of the most challenging events in a student's life. When new students enter an institution, they come with diverse thoughts, backgrounds and preparations. They come into a new unfamiliar environment, and many of them have little knowledge of a university/college. An important task, therefore, is to welcome new students to Higher Education and prepare them for their new role. Due to Covid'19 situation as per AICTE guidelines, Students induction program was conducted from 07.06.2021 to 12.06.2021 through online platform for all the first year students (Batch:2020-2024) of Raja Reddy Institute of Technology who were admitted in academic year 2020-2021 and covered SIP module for the development of students. In addition, students were made to participate in several activities like poster presentation, oral presentation, Literary activity, physical and health related activity etc., during online student's induction program. The modules are given below.

Activities Beyond Curriculum



Induction Program for the First Year Students

Lecture on Universal Human Values-I

Publications in Journals

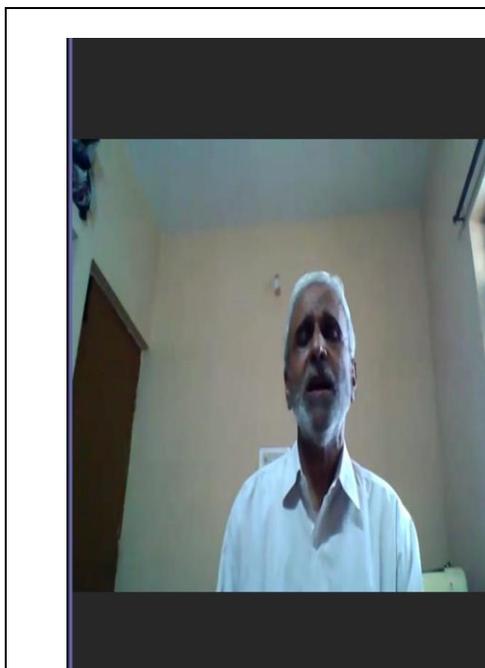
List of research publications from Faculty members

Faculty Name	Journal	National/ International	Title	DOI	Dept.
Dr. V. Ramachandramurthy	Heat Transfer	International	Rayleigh-Benard-Marangoni magnetoconvection in variable viscosity finitely conducting liquids, vol.50, PP. 5674-5696, 2021.	2021	Basic Science
Dr. V. Ramachandramurthy	JIMS	International	Non- Linear Rayleigh-Benard magnetoconvection in Temperature-Sensitive Newtonian Liquids with variable Heat Source ”, 2021, vol.88, PP.08-22, 2021.	2021	Basic Science
Dr. Uppara Manjulamma	Communications in Mathematics	International	Almost Kenmotsu manifolds	2021	Basic Science
Dr. Uppara Manjulamma	Palestine Mathematical Journal	International	<i>Real hypersurface of a Nearly Kaehlerian manifolds</i>	2021	Basic Science
Dr. Uppara Manjulamma	Italian Journal Of Pure and Applied Mathematics	International	Kenmotsu manifolds admitting generalized Tanaka-Webster connection , N. 46-2021 (1-8) 1.	2021	Basic Science

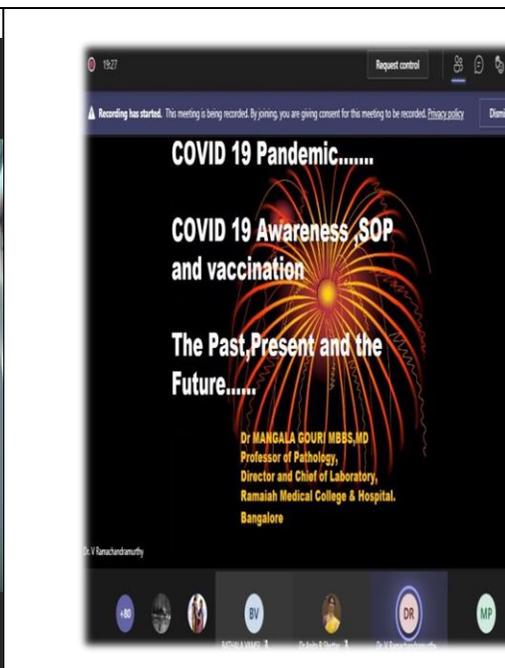
Awards & Achievements

- Dr. Ramachandramurthy , developed e-content for the course “CAPSM & TCFSMT” under “e-Shikshana programme-03 & e-Shikshana programme-04” OF VTU, e-Learning Center.
- Dr. Anita R Shetter, Shwetha K R , Thejaswini D, Padma Naik, Pavan Sagar D has passed NPTEL Exams conducted during July to November 2020 and they got certificates.
- Thejaswini D, Assistant Professor, RRIT, she got Perfect attendance award.

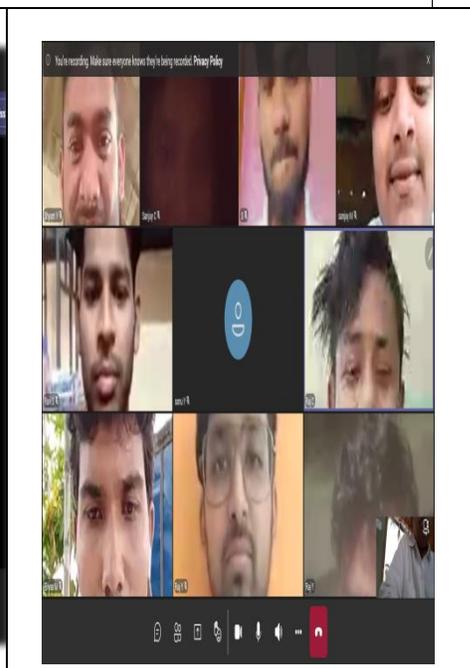
Gallery



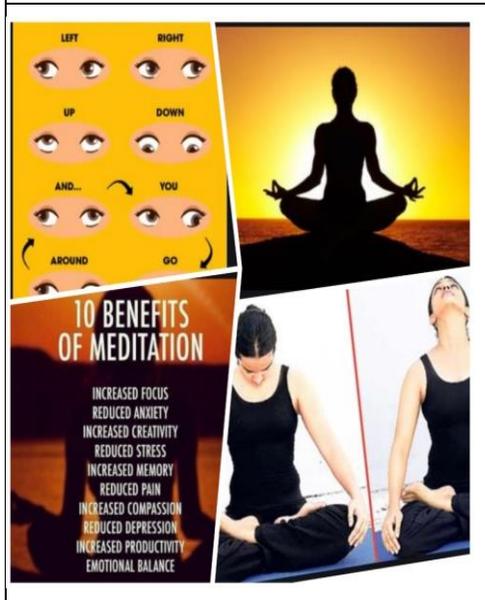
Lecture on Personality Development



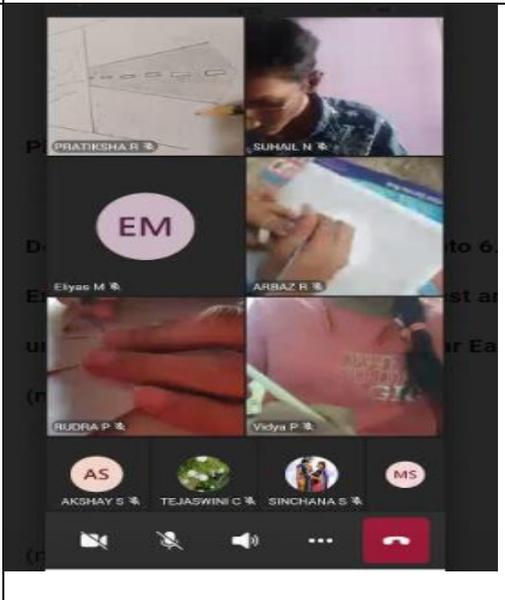
Awareness of COVID-19 & Importance of vaccination



Department of CSE conducted a "Career Guidance" program



Yoga and its benefits



Talent Exhibition by Students



Talent Exhibition by Students



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DEPARTMENT OF BASIC SCIENCE News Letter

VOLUME 6

ISSUE 1

FROM THE PRINCIPAL DESK

It gives me an immense pleasure to present before you the News Letter of Department of Basic Sciences, RRIT, Bangalore. On behalf of Management and staff I extend a warm welcome to newly joined 1 year BE students. God has created the earth, you and me create a heaven on it. Every individual has innate talents. It is only our attitude that decides outcome. RRIT has got rich experience on Engineering education. We know the art of identifying individual talents, nurture them as talented engineers and professionals and make them world class professionals. I congratulate the Department for bringing out this News letter. ---- **Best wishes to all**

ABOUT THE DEPARTMENT

The Department of Basic Sciences came into existence along with the institute. The department has well qualified faculty to teach undergraduate BE students. In addition to the regular teaching faculty publish research papers in reputed journals and present papers in conferences. The department also has research centers in Physics and Mathematics under VTU and offers Ph.D programs.

VISION

- To build a strong foundation for excellence in knowledge, skill and Ethics.
- To spur the development of the institution to become a premier Institution by igniting and nurturing enthusiasm, interest and passion, in the study of Fundamental courses of Physics, Mathematics, Chemistry and English and their applications in Professional studies, as a part of the curriculum

MISSION

- The Department of Basic Sciences shall deliver the analytical and Mathematical concepts to engineering students effectively, which will enable them in the strengthening of innovative skills during further studies.
- To inculcate the habit of increasing the power of reasoning and analytical ability for design and implementation of Novel Engineering Methods

FROM HOD'S DESK

I am very happy to present this news letter to all of you. Department of Basic Sciences at RRIT strive hard to strengthen fundamentals of Science in the minds of 1 year BE students along with quality education required in Engineering world. The pedagogy followed is in coherence with current requirement in order to bring out the best in the student to be successful engineers. I on behalf of the department, extend a warm welcome to all the newly admitted 1 year BE students to the portals of RRIT.

– **Best wishes**

FROM EDITOR'S DESK

We are happy to connect with you all through this News Letter. All efforts have been



Dr. Mahendra K V
Principal, RRIT

Editorial Desk Chief Editor

Dr. V Ramachandramurthy
Professor & Head
Dept. of Basic Science, RRIT

Editor

Prof. Chamanthi S
Assistant Professor
Dept. of Basic Science, RRIT

Members

Shalini N, 1st Sem ISE
Ullas M S, 1st Sem EEE
Bikash Singh Bista, 1st Sem CV
Shristee Yadav, 1st Sem Mech



Dr. V Ramachandramurthy
Professor & Head of
Dept. of Basic Science

made to compile information about the activities organized by the department effectively. The editorial board welcomes all the newly admitted I year BE students and wish them all the success in their career. --- **Best Wishes**

DEPARTMENT ACTIVITIES

1. STUDENT INDUCTION PROGRAMME I SEMESTER 2021-22

Sl.No.	Name of the Activity	Time	Resource Person
DAY 1: 13-12-2021			
1	Inaugural Function: Welcome and Introduction of HOD's	9.15-10-15 am	Dr Anita R Shettar, Dept. of Basic Science
	Address by Chief Guest-1	10.15-11.15 am	Dr. Madhukavi, IISc
	Address by Chief Guest-2	11.30-12.30 pm	Dr. Sreekantaswamy
	Presidential Address	12.30-12.45 pm	Dr. Mahendra K V, Principal RRIT
2	Syllabus & VTU Regulations	2.00-2.45 pm	Dr. V Ramachandramurthy, HOD, Basic Science RRIT
3	Visit to Parent departments, Laboratories & Workshops	2.45-4.30 pm	Faculty of Department of Basic Science
DAY 2: 14-12-2021			
1	Universal Human Values-I	9.15-11.00 am	Dr. Sunitha H D, HOD of E&C
2	Thinking/ Creativity/NPTEL/EK Bharath Shresth Bharath	11.15-1.15 pm	Dr. Manjunath R, HOD of CSE
3	Vedic Mathematics	2.00-4.30 pm	Dr,V. Ramachandramurthy HOD of Basic Sciences
DAY 3: 15-12-2021			
1.	Universal Human Values-II	9.15-11.15 am	Prof. G Parimala Gandhi , Associate Professor , E&C
2.	Electrical Safety Measures	11.30-1.15 pm	Prof. Gowtham, Assistant Professor, EEE
3.	Post Pandemic –COVID-19	2.00-3.15 pm	Dr. Mangala Gouri S R Ramaiah Medical College
4.	Technical Communication skills – I	3.30-4.30 pm	Prof. Anshu Deepak, Assistant Professor, E&C
DAY 4: 16-12-2021			
1.	Universal Human Values-III	9.15-11.15 am	Dr Anita R Shettar, Dept. of Basic Science
2	Proficiency, Exposure to computer Skills: Ms Office Data Science	11.30-1.15 pm	Prof. Dhananjay Dept. of CSE
3.	Science Based Games	2.00-4.30 pm	Faculty of Basic Science Department
DAY 5: 17-12-2021			
1.	Technical English Skills-II	9.15-11.15 am	Prof. Mala N, Dept.of Basic Science
2.	Advantages and disadvantages of Polymer	11.30-1.15 pm	Prof. Madhusudhan Y, Dept.of Basic Science
3.	Physical Activities(Involvement of students in indoor & outdoor games)	2.00-4.30 pm	Physical Education Director
DAY 6: 18-12-2021			
1.	Placement and Job Training	9.15-10.15 am	Dr. Niranjana R C
2.	Career Guidance –I(Dept. of CSE & ISE)	10.30 – 1.00 pm	Dr. Manjunath R, HOD of CSE

DAY 7: 20-12-2021			
1.	Career Guidance –II(Department of Civil Engineering)	9.15-11.15 am	Dr. G. Sankara, HOD of Civil
2.	Career Guidance –III(Mechanical Engineering)	11.30-1.15 pm	Dr. Channabasavaraj, HOD of Mechanical
3.	Department of EEE &E&C	2.00-3.15 pm	Dr. Sunitha H D, HOD of E&C
4.	Basics of 1 st year Laboratory	3.30-4.30 pm	Faculty of Physics & Chemistry
DAY 8: 21-12-2021			
1.	Motivational talk by Dr. Jagadheesh Kumar	9.15-11.15 am	Dr. Jagaheesh Kumar, Professor, Dept. of Civil Engineering
2.	Crisis Management/Decision making – MBA Dept	11.30-1.15 pm	Dr. Divya Murthy, Dept. of MBA
3.	Creative arts	2.00-4.30 pm	Prof. Madhusudhan Y, Dept. of Basic Science
DAY 9: 22-12-2021			
1.	Health Management	9.15-11.15 am	Dr. G. Sankara, HOD of Civil
2.	Proficiency Model : Our environment	11.30-1.15 pm	Prof. Madhusudhan Y, Dept. of Basic Science
3.	Library activities	2.00-4.30 pm	Mr. Rajesh P, Chief Librarian, RRIT
DAY 10: 23-12-2021			
1.	Essay Writing(Climat Change-Human role)	9.15-11.15 am	Prof. Madhusudhan Y, Dept. of Basic Science
2.	Proficiency Model Introduction to Sir C V Raman	11.30-1.15 pm	Dr Anita R Shettar, Dept. of Basic Science
3.	Mentoring System	2.00-4.30 pm	Dr. Sunitha HD, HOD of E&C
DAY 11: 24-12-2021			
1.	Goal setting	9.15-11.15 am	Sri Vallabha Chaitanya Dasa, ISKON, Bangalore
2.	Talent show by students	11.30-1.15 pm	Members of Cultural Committee
3.	Happiness for wellbeing	2.00-4.30 pm	Mr. Ashok Guptha & Mrs. Pooja Chowhan, Ravishankar Ashram, Bangalore
DAY 12: 27-12-2021			
1.	Yoga Practice and Presentation The speaker	9.15-11.15	Prof. Girish Dept. of Civil Engineering
2.	Science Quiz	11.30 – 1.00 pm	Faculty of Basic Science
3.	Feedback session & Valedictory function	2.00-3.30pm	

2. **CERTIFICATE COURSE ON PHYSICS OF ENGINEERING MATERIALS-**
01/01/2022 TO 10/03/2022

3. **AL SCIENCE DAY-28/2/2022** **NATION**

4. **DAY WORKSHOP ON INNOVATION AND DESIGN THINKING-21/03/2022** **ONE**



Faculty Achievements

Publications:

1.V.Ramachandramurthy-‘The effect of Magnetic Field on the onset of Benard Convection in Variable Viscosity Couple-Stress Fluids Using Classical Lorenz Model’, Applications of Mathematics, ISSN: 0862-7940, Springer Link, pp1-15.2021.

Volume 6, Issue 1

Page

3

GALLERY



