



**RAMAKRISHNA MISSION VIVEKANANDA
EDUCATIONAL AND RESEARCH INSTITUTE**

[FORMERLY KNOWN AS RAMAKRISHNA MISSION VIVEKANANDA UNIVERSITY]

(Declared by Govt. of India as Deemed University under Section 3 of UGC Act, 1956)

PO Belur Math, Dist Howrah 711202, West Bengal

Brief Profile and Report of Activities for the Financial Year 2019-20

(01 April 2019 to 31 March 2020)

HISTORIC BACKDROP: SWAMI VIVEKANANDA'S VISION AND OBJECTIVES

Ramakrishna Mission Vivekananda University, formerly known as 'Ramakrishna Mission Vivekananda Educational and Research Institute' is a humble first step in actualizing Swami Vivekananda's vision of a University at Belur Math, the headquarters of Ramakrishna Math and Ramakrishna Mission that he founded at the behest of his Master, Sri Ramakrishna Paramahansa. In fact, on 2 July 1902, just a couple of days before he passed away, Swami Vivekananda prophesied that "the spiritual impact that has come to Belur [Math] will last fifteen hundred years; and it will be a great university. Do not think I imagine it; I *see* it." On another occasion, he wrote: "Now, the aim is to gradually develop this [Belur] Math into an all round university." As a humble step in actualizing this vision, Ramakrishna Mission started a University in 2005 under the name 'Ramakrishna Mission Vivekananda Educational and Research Institute'. It is also known as 'Ramakrishna Mission Vivekananda University', as subsequently renamed. In its effort to actualize Swami Vivekananda's vision of imparting 'man-making' and character-building education, the University has set its objectives as achieving excellence in the field of higher education on the one hand and on the other to create a band of educated youth who would, in Swami Vivekananda's words, possess 'muscles of iron and nerves of steel and a mind made of the same material of which the thunderbolt is made'—in short the objective is the creation of 'complete human beings' with 'head, hand and heart' fully developed: 'heart to feel, brains to conceive, and hands to work', men and women of impeccable character, inflexible moral fibre, penetrating intellects, lion-like courage and above all, intense feeling for the underprivileged and the downtrodden masses of India, those who would passionately feel and work for rebuilding a glorious India of the future—powerful, vigorous and rejuvenated.

VISION AND MISSION

Vision:

To be a great centre of learning blending the twin excellences of ancient Indian wisdom and modern scientific knowledge and technological skill, imparting life-building, character-making education.

Mission:

- ✓ **Pursuit of Excellence** - To strive for excellence in teaching, research and all academic endeavors.
- ✓ **Blending of Eastern and Western values** - To inculcate ancient Indian values like Shraddha (unshakable conviction), purity, truth, selflessness, harmony and peace, blending them with predominantly western values like scientific temper, rational outlook, technological efficiency, teamwork, professional integrity, work ethics, etc., in order to create a band of educated youth with lofty character and integrated personalities with harmonious development of heart, head and hand—faculties of feeling, thinking and willing—bhakti, jnana and karma with yoga or concentration interpenetrating all these.
- ✓ **Social responsibility** - To train and educate the youth to become socially responsible citizens to collectively rebuild a rejuvenated, glorious India by first of all building an impeccable, lofty character at the individual level.

OBJECTIVES, UNIQUENESS AND SALIENT FEATURES—THE ‘THRUST AREAS’:

The uniqueness of the University consists in its following salient features:

- (i) the emphasis on certain ‘thrust areas’ which are also ‘gap areas’ in that these areas scarcely receive any attention in the conventional universities in India,
- (ii) the multi-campus character of the University—it operates through a wide network of specialized Faculty Centres in these thrust areas located in different parts of India at the various branch-centres of Ramakrishna Mission some of which have been working in these areas for decades,
- (iii) the inculcation of higher human values in our attempt to realize Swami Vivekananda’s vision of education as ‘life-building, man-making character-making assimilation of ideas’—value-based education forms the essential component of *all* the courses run by the University.

To start with, the following ‘thrust areas’ have been chosen:

- (1) Disability Management and Special Education
- (2) Integrated Rural Development including Tribal Development
- (3) Indian Cultural and Spiritual Heritage and Value Education
- (4) Fundamental sciences—integrated teaching and research
- (5) Environmental Science and Disaster Management including relief and rehabilitation

Courses and academic programmes in the above areas are conducted at the University’s Belur main campus (the Headquarters) and the following approved ‘Off-campus’ centres through the various Schools as mentioned below:

- (1) School of Rehabilitation Sciences and Physical Education** at Coimbatore, Tamil Nadu.
- (2) School of Agriculture and Rural Development** at (i) Narendrapur, West Bengal, and (ii) Ranchi, Jharkhand.
- (3) School of Indian Heritage** at Belur main campus and Swami Vivekananda’s Ancestral House, Kolkata, West Bengal.
- (4) School of Mathematical Sciences** at Belur main campus and Swami Vivekananda’s Ancestral House, Kolkata, West Bengal.
- (5) School of Humanities and Social Sciences** at Belur main campus and Swami Vivekananda’s Ancestral House, Kolkata, West Bengal.

ACCREDITATION BY NAAC

The National Assessment and Accreditation Council, acronymed as NAAC (in Hindi: *Rashtriya Mulyankan evam Pratyayan Parishad*), accredits various higher education institutions after proper assessment based upon seven criteria, namely,

- (i) Curricular Aspects,
- (ii) Teaching-Learning and Evaluation,
- (iii) Research, Innovations and Extension,
- (iv) Infrastructure and Learning Resources,
- (v) Student Support and Progression,
- (vi) Governance, Leadership and Management,
- (vii) Institutional Values and Best Practices.

NAAC has been continuously improving and modifying its accreditation process to bring about greater transparency, objectivity and reliability. For this purpose, NAAC thoroughly revamped its process from July 2017 introducing 70% assessment through Data Verification and Validation of certain Quantitative Metrics responses to which will be verified and validated by a third party with the help of computer software designed specifically for the purpose while the rest of the 30% assessment is done through an expert team (called Peer Team) visit based on the responses to certain Qualitative Metrics. These Quantitative and Qualitative assessments are then suitably combined according to a certain formula and the final grade is awarded in 0—4 scale. The Institutional Cumulative Grade Point Average (CGPA) is calculated using the well-established statistical techniques and Grades awarded.

In the results released on 28 March 2019 in NAAC website, the Deemed-to-be-University, 'Ramakrishna Mission Vivekananda Educational and Research Institute' headquartered in Belur Math, with 'Off-Campus' Centres in Coimbatore (Tamil Nadu), Ranchi (Jharkhand) and Narendrapur (West Bengal), has been awarded the **highest Grade of A++ with CGPA of 3.66**, which is just a wee bit lesser than the CGPA of 3.67 obtained by the reputed Indian Institute of Science at Bengaluru.

Thus, Ramakrishna Mission's Deemed-to-be-University in the hallowed name of Swami Vivekananda, going for NAAC accreditation in its very first cycle, **ranks SECOND in the whole country** among all the Universities that have been accredited in the Revised Accreditation Format (RAF) initiated from July 2017 by NAAC.

The A++ accreditation will be valid for five years up to 28 March 2024.

THE BOARD OF MANAGEMENT OF RKMVERI AS ON 31 MARCH 2020:

1. Swami Atmapriyananda, Vice Chancellor (Chairperson)
2. Swami Bodhasarananda, Assistant General Secretary, Ramakrishna Mission
3. Swami Sarvottamananda, Pro-Vice Chancellor
4. Swami Kirtipradananda, Registrar (ex-officio Secretary of the Board of Management)
5. Sri Sunil Kumar Barnwal, IAS, Principal Secretary to the Chief Minister of Jharkhand
6. Sri M. Saravanan, IAS, PS to the MoS, Dr Jitendra Singh, Govt. of India, New Delhi
7. Dr. A. Santhosh Mathew, IAS (Retd), former Chairperson of National Council of Teacher Education (NCTE), former Jt. Secretary, Ministry of Rural Development, Govt. of India
8. Dr. Sunaina Singh, Vice Chancellor, Nalanda University, Rajgir, Bihar
9. Dr. Ishwar Acharya, Director, Central Council of Research in Yoga and Naturopathy, Ministry of AYUSH, Government of India, New Delhi
10. Dr. Bimal Roy, former Director, Indian Statistical Institute (ISI) and presently Head, RC Bose Centre for Cryptology and Security, ISI, Kolkata
11. Prof. Sukumar Adhikari, Senior Professor and Head, Dept of Maths, RKMVERI
12. Dr. N. Muthiah, Dean of Faculty of Disability Management and Special Education (FDMSE), Coimbatore Campus
13. Prof. Tapash Dasgupta, Dean of Faculty of Integrated Rural Development and Management (IRDM), Narendrapur Campus
14. Dr. Abhijit Bandyopadhyay, Associate Professor, Dept of Physics, RKMVERI
15. Dr. Avijit Dutta, Assistant Professor, Faculty of Integrated Rural and Tribal Development and Management (IRTDM), Ranchi (Morabadi)
16. Swami Kaleshananda, Controller of Examinations, Main Campus of RKMVERI, Belur (Permanent Invitee)

**ANNUAL REPORT OF ACTIVITIES OF VARIOUS
DEPARTMENTS / UNITS**

FROM 01 APRIL 2019 TO 31 MARCH 2020

LIST OF DEPARTMENTS, SCHOOLS, AND CAMPUSES AT A GLANCE

S. No.	Name of the Department	School	Campus
1	Physics	School of Mathematical Sciences	Belur
2	Computer Science	School of Mathematical Sciences	Belur
3	Mathematics	School of Mathematical Sciences	Belur
4	Sanskrit and Philosophy	School of Indian Heritage	Belur
5	Sports Science and Yoga	School of Rehabilitation Sciences and Physical Education	Belur
6	Faculty of Disability Management and Special Education (FDMSE)	School of Rehabilitation Sciences and Physical Education	Coimbatore
7	General and Adapted Physical Education and Yoga (GAPEY)	School of Rehabilitation Sciences and Physical Education	Coimbatore
8	Faculty of Agricultural Studies and Research (FAR)	School of Agriculture and Rural Development	Coimbatore
9	Faculty of Integrated Rural Development and Management (IRDM)	School of Agriculture and Rural Development	Narendrapur
10	Faculty of Integrated Rural & Tribal Development and Management (IRTDM)	School of Agriculture and Rural Development	Ranchi

PROGRAMMES OFFERED DURING THE YEAR

(i)

Physics

- ✓ M. Sc in Physics
- ✓ Ph. D. in Physics

(ii)

Computer Science

- ✓ M. Sc. Computer Science
- ✓ M. Sc. Big Data Analytics

(iii)

Sports Science and Yoga

- ✓ M. Sc. in Sports Science
- ✓ M.A/M.Sc in Yoga
- ✓ Integrated M. Phil-Ph. D. in Sports Science
- ✓ Integrated M. Phil-Ph. D. in Yoga
- ✓ PG Diploma in Yoga
- ✓ Certificate Course in Yoga
- ✓ Outreach programme in Yoga
- ✓ Certificate Course in Basic Ayurveda, Panchakarma & Naturopathy

(iv)

Mathematics

- ✓ Ph. D. in Mathematics
- ✓ M. Sc. in Mathematics

(v)

Sanskrit and Philosophy

- ✓ M. A. (Integrated) in Sanskrit
- ✓ M. Phil-Ph. D (Integrated) in Sanskrit
- ✓ BA (Hons) in Indian Heritage and Philosophy (BAIHP)

(vi)

IRDM

- ✓ M. Sc. in Agricultural Biotechnology
- ✓ M. Sc. in Agriculture and Rural Development
- ✓ M. Sc. (Agriculture) in Genetics and Plant Breeding
- ✓ M. Sc. in Environment and Disaster Management
- ✓ Post Graduate Diploma in Post Harvest and Food Technology
- ✓ Ph. D. in Agricultural Biotechnology
- ✓ Ph. D. in Agriculture and Rural Development
- ✓ Ph. D. (Agriculture) in Genetics and Plant Breeding
- ✓ Ph. D. in Environment and Disaster Management

(vii)

IRTDM

- ✓ 5 years integrated M. Sc. in Agriculture, Rural and Tribal Development
- ✓ 2 years M. Sc. in Agriculture, Rural and Tribal Development
- ✓ Ph. D. in Agriculture, Rural and Tribal Development
- ✓ 2 years M. A. / M. Sc. in Rural Development and Management
- ✓ 1 year Diploma in Agriculture and Rural Development
- ✓ Four-year B.Sc. (Hons) in Agriculture
- ✓ Diploma in Organic Farming

(viii)

FDMSE

- ✓ D. Ed. Special Education (Visual Impairment)
- ✓ D. Ed. Special Education (Hearing Impairment)
- ✓ D. Ed. Special Education (Mental Retardation)
- ✓ Diploma in Sign Language Interpretation (DISLI)
- ✓ Diploma in Theatre Arts for Holistic Development
- ✓ B. Ed. Special Education (Visual Impairment)
- ✓ B. Ed. Special Education (Hearing Impairment)
- ✓ B. Ed. Special Education (Mental Retardation)
- ✓ M. Ed. Special Education (Visual Impairment)
- ✓ M. Ed. Special Education (Hearing Impairment)
- ✓ M. Ed. Special Education (Mental Retardation)
- ✓ Integrated M. Phil. Ph. D. Special Education
- ✓ Integrated B. Ed. M. Ed. Special Education (Intellectual Disability)
- ✓ Certificate Course in Assistive Technology

(ix)

FAR

- ✓ B. Sc. (Hons) Agriculture

(x)

GAPEY

- ✓ Bachelor of Science in Physical Education Health Education and Sports
- ✓ Bachelor of Physical Education
- ✓ Master of Physical Education
- ✓ Integrated Ph. D. in Physical Education

**Certificate courses in 'Indian Spiritual Heritage' & Value Education at Belur campus
conducted by the 'School of Indian Heritage':**

Certificates courses in:

- ✓ Srimad Bhagavad Gita
- ✓ Katha Upanishad & Isha Upanishad
- ✓ Bhagavatam
- ✓ Spritual Heritage of India
- ✓ Life of Swami Vivekananda
- ✓ Karmayoga
- ✓ Bhaktiyoga
- ✓ Jnanayoga
- ✓ Rajyoga
- ✓ Patanjali Yogasutra
- ✓ Selections fromSwami Vivekananda's Vani O Rachana
- ✓ Stotras
- ✓ Sri Sri Chandi
- ✓ Sri Ramakrishna Kathamrita

LIST OF TEACHING FACULTY MEMBERS

Physics

S. No.	Name	Designation
1	Dr. Abhijit Bandyopadhyay	Associated Professor
2	Dr. Amitava Bhattacharyya	Assistant Professor
3	Dr. Bobby Ezhuthachan	Assistant Professor
4	Brahmachari Aditya	Monastic Faculty
5	Dr. Debasish Gangopadhyay	Professor
6	Dr. Ranjan Chaudhury	Professor
7	Dr. Sanjoy Biswas	Assistant Professor
8	Dr. Shamik Gupta	Associate Professor

Computer Science

S. No.	Name	Designation
1	Swami Sarvottamananda	Professor and Head
2	Dr. Subir Ghosh	Professor
3	Dr. Aditya Bagchi	Professor
4	Dr. Sudipta Das	Assistant Professor
5	Dr. Joydeep Mukherjee	Assistant Professor
6	Swami Dhyaganagamyanda	Assistant Professor
7	Swami Shastravidyananda	Assistant Professor
8	Brahmachari Ajaatachaitanya	Assistant Professor
9	Brahmachari Tamal	Assistant Professor

Sports Science and Yoga

S. No.	Name	Designation
1	Dr. Asok Ghosh	Professor
2	Dr. Asis Goswami	Professor
3	Dr. Uday Shankar Ray	Professor
4	Dr. Rupayan Bhattacharya	Professor
5	Dr. Kalipada Pal	Associate Professor
6	Dr. Kunal Sikder	Assistant Professor
7	Dr. Arkadeb Dutta	Assistant Professor
8	Swami Kaleshananda	Monastic Faculty
9	Brahmachari Ajaatachaitanya	Monastic Faculty
10	Dr. Dipankar Home	Adjunct Faculty
11	Dr. Subhankar Ghosh	Adjunct Faculty
12	Dr. S.R. Dasgupta	Visiting Faculty
13	Mr. Dipankar Pal	Visiting Faculty
14	Mr. Prasanta Samanta	Trainer

Mathematics

S. No.	Name	Designation
1	Dr. Sukumar D. Adhikari	Professor
2	Dr. Stephan Baier	Professor
3	Dr. Ashish Gupta	Associate Professor
4	Dr. Sudeshna Basu	Senior Faculty
5	Dr. Arindam Banerjee	Assistant Professor
6	Dr. Shameek Paul	Assistant Professor
7	Dr. Rajneesh K. Singh (upto Mar. 2020)	Assistant Professor
8	Dr. Sagnik Chakraborty	Assistant Professor
9	Br. Dripta Mj	Assistant Professor

10	Jyoti Sengupta	Visiting Faculty
11	Mr. Pallab Kanti Dey	Post-doc
12	Mr. Ratnadeep Acharya	Post-doc

Sanskrit and Philosophy

S. No.	Name	Designation
1	Dr. Rakesh Das	Assistant Professor
2	Dr. Venkataramana Bhat	Assistant Professor
3	Dr. Gopikrishnan Reghu	Assistant Professor
4	Dr. Nagaraj Bhat	Assistant Professor
5	Dr. Neeraj Kumar Bhargave	Assistant Professor
6	Dr. Shantanu Ayachit	Assistant Professor
7	Swami Japasiddhananda	Assistant Professor
8	Swami Vedarthananda	Assistant Professor
9	Swami Medhananda	Assistant Professor

IRDM

S. No.	Name	Designation
1	Dr. Tapash Dasgupta	Dean
2	Dr. Pranab Kumar Nag	Professor
3	Dr. Kalyan Ganguly	Professor (Hon.)
4	Dr. Amitava Chatterjee	Emiratus Professor
5	Dr. Dinendra Ray Choudhuri	Professor (Hon.)
6	Dr. Rupak Goswami	Assistant Professor
7	Dr. Gautam Chatterjee	Assistant Professor
8	Dr. Sanchayeeta Misra	Assistant Professor
9	Dr. Ashutosh Sawarkar	Assistant Professor
10	Dr. Kishor Kumar	Assistant Professor
11	Dr. Alok Kumar Hazra	Scientist

IRTDM

S. No.	Name	Designation
1	Prof. Bharat Chandra Saha	Dean
2	Prof. Ashok Kumar Jasu	Professor
3	Dr. Dipankar Chatterjee	Assistant Professor
4	Dr. Avijit Kumar Dutta	Assistant Professor
5	Dr. Arunava Sengupta	Assistant Professor
6	Mr. Amitava Dutta	Assistant Professor
7	Dr. Deep Narayan Mukherjee	Assistant Professor
8	Dr. Vishal Walmik Dhote	Assistant Professor
9	Dr. Adyant Kumar	Assistant Professor
10	Dr. Badole Shrikant Purushottam	Assistant Professor
11	Dr. Pankaj Kumar Mishra	Assistant Professor
12	Dr. Sudarsan Biswas	Assistant Professor
13	Mr. Supratim Patra	Laboratory Demonstrator
14	Mr. Arindam Ghosh	Teaching Assistant
15	Mr. Suresh Kumar Mahto	Teaching Assistant
16	Mr. Koustab Majumdar	Teaching Assistant

FDMSE

S. No.	Name	Designation
1	Dr. N. Muthaiah	Dean
2	Dr. S. Parween	Assistant Professor
3	Dr. J.B. Dheesha	Assistant Professor
4	Dr. K. Dhanalakshmi	Assistant Professor
5	Mr. S. Parthasarathy	Assistant Professor
6	Mrs. S.N. Hamsapriya	Assistant Professor

7	Mrs. M. Senthilvani	Assistant Professor
8	Dr. A. Sudha	Assistant Professor
9	Dr. Saumya Chandra	Assistant Professor
10	Dr. S. Logesh Kumar	Assistant Professor
11	Mrs. V. Indirani	Assistant Professor
12	Mrs. P. Sukumari	Assistant Professor

FAR

S. No.	Name	Designation
1	Dr. S. Sureshkumar	Professor
2	Dr. S. Mani	Professor
3	Dr. N. Jaivel	Assistant Professor
4	Dr. S. Suresh	Assistant Professor
5	Dr. T. Masanaselvam	Assistant Professor
6	Dr. M. Tamil Selvan	Assistant Professor
7	Dr. G. Yoganathan	Assistant Professor
8	Dr. M. Selvam	Assistant Professor
9	Dr. K. Vinoth Kumar	Assistant Professor
10	Dr. K.Mohanasundram	Assistant Professor
11	Dr. M.Vijaya Kumar	Assistant Professor
12	Mr. B. Muthuraja	Assistant Professor
13	Mr. S. Chandraprakash	Assistant Professor
14	Mr. A. Suresh	Assistant Professor
15	Mr. M. Rajkumar	Assistant Professor
16	Mr. S. Kasinathan	Assistant Professor
17	Mr. M. Ashok Kumar	Assistant Director
18	Dr. J. Ramesh	Assistant Librarian

GAPEY

S. No.	Name	Designation
1	Dr. R. Giridharan	Associate Professor
2	Dr. A. Sathiya Moorthy	Assistant Professor
3	Dr. Dibakar Debnath	Assistant Professor
4	Dr. D. Yuvaraj	Assistant Professor
5	Dr. E. Saravanan	Assistant Professor
6	Dr. M. Ramajayam	Assistant Professor
7	Mr. S. Sakthivel	Assistant Professor
8	Mr. S. Rajavarman	Assistant Professor
9	Mr. Becon Debbarma	Assistant Professor

NEW PROGRAMMES / COURSES STARTED IN THE YEAR

Sports Science and Yoga

S. No.	Programme
1	M.A/M.Sc in Yoga
2	M.Sc in Sports Science

Sanskrit and Philosophy

S. No.	Programme
1	BA (Hons) in Indian Heritage and Philosophy (BAIHP)

IRTDM

S. No.	Programme
1	Four-year B.Sc. (Hons) in Agriculture
2	Diploma in Organic Farming

DETAILS OF STUDENTS ADMISSION DURING THE YEAR

Physics

S. No.	Programme	No. of Students
1	M. Sc. Physics	32
2	Ph. D. Physics	3

Computer Science

S. No.	Programme	No. of Students
1	M. Sc. Computer Science	20
2	M. Sc. Big Data Analytics	12

Sports Science and Yoga

S. No.	Programme	No. of Students
1	M.A/M.Sc in Yoga	10
2	M.Sc in Sports Science	6
3	PG Diploma in Yoga	11
4	M.Phil Yoga	4

Mathematics

S. No.	Programme	No. of Students
1	M. Sc. Mathematics	15
2	Ph. D. Mathematics	6

Sanskrit and Philosophy

S. No.	Programme	No. of Students
1	M. A. (Integrated) in Sanskrit	18
2	M. Phil-Ph. D (Integrated) in Sanskrit	4
3	BA (Hons.) in Indian Heritage and Philosophy	3

IRDM

S. No.	Programme	No. of Students
1	M. Sc. in Agricultural Biotechnology	17
2	M. Sc. in Agriculture and Rural Development	29
3	M. Sc. (Agri) in Genetics and Plant Breeding	8
4	M. Sc. in Environment and Disaster Management	12
5	PG Diploma in Post-Harvest and Food Technology	7
6	Ph. D. in Agricultural Biotechnology	1
7	Ph. D. (Agri) in Genetics and Plant Breeding	2

IRTDM

S. No.	Programme	No. of Students
1	5 year Integrated M. Sc. in ARTD	45
2	B.Sc. (Hons.) Agriculture	49
3	2 year M. Sc. in ARTD	1
4	2 year M. A/M. Sc. in RDM	20
5	1 year Diploma in ARD	29
6	Diploma in Organic Farming	19

FDMSE

S. No.	Programme	No. of Students
1	B.Ed. in Special Education (Hearing Impairment)	1
2	B.Ed. in Special Education (Intellectual Disability)	12
3	Integrated B.Ed.-M.Ed. Special Education (Intellectual Disability)	8
4	M.Ed. in Special Education (Hearing Impairment)	2
5	M.Ed. in Special Education (Intellectual Disability)	1
6	Integrated M.Phil.-Ph.D. (Intellectual Disability)	1

FAR

S. No.	Programme	No. of Students
1	B. Sc. (Hons) Agriculture	61

GAPEY

S. No.	Programme	No. of Students
1	B. Sc. in Physical Education, Health Education and Sports	68
2	B. PEd.	50
3	M. PEd.	28
4	Integrated MPhil+ Ph.D.	4

STUDENTS PASSED OUT DETAILS OF THE YEAR**Physics**

S. No.	Programme	No. of Students
1	M. Sc. Physics	11
2	Ph. D. Physics	2

Computer Science

S. No.	Programme	No. of Students
1	M. Sc. Computer Science	5
2	M. Sc. Big Data Analytics	7

Sports Science and Yoga

S. No.	Programme	No. of Students
1	PG Diploma in Yoga	14

Mathematics

S. No.	Programme	No. of Students
1	MSc in Mathematics	9

Sanskrit and Philosophy

S. No.	Programme	No. of Students
1	M. A. (Integrated) in Sanskrit	11

IRDM

S. No.	Programme	No. of Students
1	MSc in Agricultural Biotechnology	12
2	M.Sc in Agriculture and Rural Development	24
3	M.Sc in Environment and Disaster Management	9
4	M. Sc. (Ag) in Genetics and Plant Breeding	3
5	PG Diploma in Post Harvest and Food Technology	6

IRTDM

S. No.	Programme	No. of Students
1	M.A./M.Sc. in Rural Development and Management	7
2	Integrated M.Sc. in Agriculture Rural and Tribal Development	10
3	B.Sc. (Hons) in ARTD as a part of Integrated M.Sc. ARTD	32
4	Diploma in Agriculture and Rural Development	17

FDMSE

S. No.	Programme	No. of Students
1	B.Ed. in Special Education (Visual Impairment)	4
2	B.Ed. in Special Education (Hearing Impairment)	8
3	B.Ed. in Special Education (Intellectual Disability)	3
4	Integrated B.Ed.M.Ed. Special Education (Intellectual Disability)	11
5	M.Ed. in Special Education (Visual Impairment)	1
6	M.Ed. in Special Education (Hearing Impairment)	3
7	M.Ed. in Special Education (Intellectual Disability)	3
8	M.Phil. in (Hearing Impairment)	1

FAR

S. No.	Programme	No. of Students
1	B. Sc. (Hons) Agriculture	63

STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

Physics

DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

Sl. No.	Name of the student	Institution joined and course persuing
1	Atanu Roy Chowdhury	Institution joined: Indian Association for the Cultivation of Sciences, Kolkata Course Persuing: PhD in Physics
2	Dipak Maity	Institution joined: Institute of Physics, Bhubaneswar Course Persuing: PhD in Physics
3	Rittick Sarkar	Institution joined: Raman Research Institute, Bangalore Course Persuing: PhD in Physics
4	Sourav Mondal	Institution joined: Indian Association for the Cultivation of Sciences, Kolkata, Course Persuing: PhD in Physics

DETAILS OF STUDENTS PLACED:

Sl. No.	Name of the student	Organisation / Company where placed
1	Dr Aloke Kumar Sinha	Haldia Govt. College, WB Designation: Assistant Professor

Computer Science

DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

Sl. No.	Name of the student	Institution and course persuing
1	Kaustav Bhanja	Institution joined: IIT Kanpur Course Persuing: PhD programme
2	Soura Sena Das	Institution joined: ISI Kolkata Course Persuing: PhD programme
3	Sushoban Bandyopadhyay	Institution joined: IISER Bhubaneswar Course Persuing: PhD programme

DETAILS OF STUDENTS PLACED:

Sl. No.	Name of the student	Organisation / Company where placed
1	Ritam Seth	Project linked personnel in ISI Kolkata

Mathematics**DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:**

Sl. No.	Name of the student	Institution and course pursuing
1	Ritesh Khan	Institution joined: Indian Institute of Technology Madras Course Pursuing: PhD, Department of Mathematics
2	Sanjay Mukherjee	Institution joined: National Institute of Science Education and Research Course Pursuing: PhD
3	Mouli Chakraborty	Institution joined: Trinity College Dublin Course Pursuing: Centre of Research Training in Advanced Networks for Sustainable Societies (ADVANCE CRT) PhD Programme

Sanskrit and Philosophy**DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:**

Sl. No.	Name of the student	Institution
1	Avijit Ghosh	Institution joined: Pondicherry University, Kalapet, Puducherry
2	Biswarup Bej	Institution joined: Rashtirya Sanskrit Vidyapeetha, Tirupati
3	Byasdeb Maji	Institution joined: Indian Institute of Education, Naul, Shyampur, Howrah
4	Krishnapada Ruidas	Institution joined: Rashtirya Sanskrit Vidyapeetha, Tirupati
5	Rahul Maity	Institution joined: RKMVERI, Belur Math

6	Sadananda Das	Institution joined: Rashtirya Sanskrit Vidyapeetha, Tirupati
7	Sankha Subhra Gachchhit	Institution joined: RKMVERI, Belur Math
8	Shantanu Nayek	Institution joined: RKMVERI, Belur Math
9	Shubhadip Pal	Institution joined: RKMVERI, Belur Math
10	Sumanta Bhaskar	Institution joined: Rashtirya Sanskrit Vidyapeetha, Tirupati

DETAILS OF STUDENTS PLACED:

Sl. No.	Name of the student	Organisation / Company where placed
1	Bishnu Pada Pal	Vidyasagar Day College, Kolkata
2	Kartik Mete	Govt. General Degree College, Kalna-1, Burdwan
3	Tridib Kumar Mandal	Diamond Harbour Women's University, South 24 Parganas
4	Bulet Mondal	Diamond Harbour Women's University, South 24 Parganas

IRDM

DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

Sl. No.	Name of the student	Institution and course persuing
1	Aayushi Gupta	Institution joined: Czech University of Life Sciences, Prague Course Persuing: PhD AgBT
2	RohitBharati	Institution joined: Czech University of Life Sciences, Prague Course Persuing: PhD AgBT
3	Rupsha Nandi	Institution joined: Indian Statistical Institute, Giridih Course Persuing: PhD AgBT
4	Saikat Das	Institution joined: IISER, Kolkata Course Persuing: PhD AgBT
5	SayaniBandyopadhyay	Institution joined: Bidhan Chandra KrishiViswavidyalaya, Nadia Course Persuing: PhD AgBT

6	Arindam Banerjee	Institution joined: IRTDM, Ramakrishna Mission Vivekananda Educational and Research Institute Course Pursuing: PhD ARD
7	Sarthak Roy	Institution joined: IRTDM, Ramakrishna Mission Vivekananda Educational and Research Institute Course Pursuing: PhD ARD

DETAILS OF STUDENTS PLACED:

Sl. No.	Name of the student	Organisation / Company where placed
1	Deep Sourav Ray	Trainee (Business Executive), IngreensPvt. Ltd (A mobile e-Governance based Company), Salt Lake, Kolkata
2	Diptesh Chatterjee	Trainee (Business Executive), IngreensPvt. Ltd (A mobile e-Governance based Company), Salt Lake, Kolkata
3	Arpita Das	Trainee (Business Executive), IngreensPvt. Ltd (A mobile e-Governance based Company), Salt Lake, Kolkata
4	Shyamal Mandal	Trainee (Production Department), Pan Seeds Pvt. Ltd. (A Seed based Company), Kolkata
5	Suman Mondal	Trainee (Sales & Marketing), Dayal Group (An Agri-based Company), Bhubanerwar Branch; later joined Tata Rallis
6	Arindam Banerjee	Collector's Fellow, District Administration, West Singbhum, Jharkhand
7	Riya Khatun	Project Associate, Shamahita Math (A reputed N.G.O) Bankura, West Bengal
8	Tanaya Ghosh	Research Associate, IKOnet Research & Consultants Pvt. Ltd., Salt Lake, Kolkata, West Bengal (later Joined Child in Need Institute, Kolkata)
9	Shuchismita Guha	Research Associate, IKO-net Research & Consultants Pvt. Ltd., Salt Lake, Kolkata, West Bengal
10	Sarthak Roy	Innovation Associate, National Innovation Foundation – India (Autonomous Body of Department of Science and Technology, Govt. of India), Bhubaneshar Cell, Odisha
11	Sarnava Mondal	Innovation Associate, National Innovation Foundation – India (Autonomous Body of Department of Science and Technology, Govt. of India), Bhubaneshar Cell, Odisha
12	Piyali Sen	Innovation Associate, National Innovation Foundation – India (Autonomous Body of Department of Science and Technology, Govt. of India), Bhubaneshar Cell, Odisha
13	Pritam Bhattacharyya	Assistant Project Coordinator, Bikash Society (NGO), Bankura, West Bengal
14	Sulagna Sarkar	Assistant Project Coordinator, Bikash Society (NGO), Bankura, West Bengal

15	Sangita Som	Documentation Cum Social Officer, Hope Foundation – Kolkata (NGO), Kolkata, West Bengal
16	Tania Mukherjee	Documentation Officer, Society for Indian Children's Welfare, Kolkata, West Bengal
17	Sanjib Mondal	Social Welfare Officer, Dept. of Women, Child and Social Welfare, Govt. of West Bengal
18	Pratyusha Basu	HR Trainee, Pan Seeds Pvt. Ltd.
19	Suranjali Das Karmakar	Trainee, Food Processing Unit, Padmashree Institute of Management and Science
20	Ankan Kumar Samanta	Trainee (Sales & Marketing), Dayal Group (An Agri-based Company), at East Midnapure Branch, West Bengal
21	Dhruba Saha	Trainee (Production), Keventers Pvt. Ltd. (A Fruit based Company), at East Midnapure Branch, West Bengal

IRTDM

DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

Sl. No.	Name of the student	Organisation / Company where placed
1	Anant Kumar	Institution joined: RKMVERI Course Pursuing: Integrated M.Sc. in ARTD
2	Abhisekh Barman	Institution joined: International Institute of Population Sciences, Mumbai, Course Pursuing: Post Graduate Degree
3	Ambarish Mandal	Institution joined: Tata Institute of Social Sciences, Mumbai Course Pursuing: Post Graduate Degree
4	Amit Ruidas	Institution joined: RKMVERI Course Pursuing: M.Sc. in RDM
5	Anirban Kundu	Institution joined: RKMVERI, IRDM Faculty
6	Anirban Ranjit	Institution joined: RKMVERI Course Pursuing: M.Sc. in RDM
7	Anupam Biswas	Institution joined: Tata Institute of Social Sciences, Mumbai Course Pursuing: Post Graduate Degree
8	Anupriya Pal	Institution joined: Tata Institute of Social Sciences, Mumbai Course Pursuing: Post Graduate Degree
9	Bijaya Majumdar	Institution joined: Tata Institute of Social Sciences, Mumbai Course Pursuing: Post Graduate Degree
10	Dibyendu Adak	Institution joined: Tata Institute of Social Sciences, Mumbai Course Pursuing: Post Graduate Degree

11	Jayabrata Bardhan	Institution joined: Tata Institute of Social Sciences, Mumbai Course Persuing: Post Graduate Degree
12	Kailash Kumar	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
13	Krishna Kumar Mahli	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
14	Kumar Subham	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
15	Mahasweta Dolai	Institution joined: RKMVERI Course Persuing: M.Sc. in RDM
16	Mahendra Karmali	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
17	Nitish Kumar	Institution joined: Azim Premji University Course Persuing: Post Graduate Degree
18	Prasun Sadhukhan	Institution joined: Tata Institute of Social Sciences, Mumbai Course Persuing: Post Graduate Degree
19	Rahul Bepari	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
20	Rishav Ghosh	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
21	Ritesh Raj	Institution joined: Allen Career Institute
22	Sanat Kumar Samanta	Institution joined: Tata Institute of Social Sciences, Mumbai Course Persuing: Post Graduate Degree
23	Sangita Maity	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
24	Santanu Sana	Institution joined: International Institute of Population Sciences, Mumbai Course Persuing: Post Graduate Degree
25	Soumyadeep Saha	Institution joined: Tata Institute of Social Sciences, Mumbai Course Persuing: Post Graduate Degree
26	Sucharita Ghoshal	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
27	Suryadyuti Banerjee	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
28	Susmita Chakraborty	Institution joined: RKMVERI Course Persuing: Integrated M.Sc. in ARTD
29	Swarnali Saha	Institution joined: Azim Premji University Course Persuing: Post Graduate Degree
30	Uttaran Pal	Institution joined: Tata Institute of Social Sciences, Mumbai Course Persuing: Post Graduate Degree
31	Baleshwar Mahto	Institution joined: RKMVERI Course Persuing: B.Sc. in ARTD

32	Haldhar Bedia	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
33	Hritik Mandal	Institution joined: RKMVERI Course Pursuing: Diploma in Organic Farming
34	Mohini Nisha	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
35	Nikhil Chandra Mahato	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
36	Puja Kumari	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
37	Rajesh Mondal	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
38	Sheela Kumari	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
39	Shilpa Kumari	Institution joined: Birsa Agricultural University Course Pursuing: B.Sc. (Ag)
40	Harish Chandra Mahto	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD
41	Swagatam Roy	Institution joined: RKMVERI Course Pursuing: Diploma in Organic Farming
42	Reddy Gowtham	Institution joined: RKMVERI Course Pursuing: B.Sc. in ARTD

DETAILS OF STUDENTS PLACED:

Sl. No.	Name of the student	Organisation / Company where placed
1	Akshay Kumar Mahto	Development of Human Action (DHAN) Foundation, Madurai (Tamil Nadu)
2	Balram Mahto	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi (Jharkhand)
3	Buddhadev Jana	Development of Human Action (DHAN) Foundation, Madurai (Tamil Nadu)
4	Kuldeep Rajak	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi (Jharkhand)
5	Saheb Mondal	Going to School, Patna, (Bihar)
6	Sourav Pathak	Shamayita Math, Jhargram (West Bengal)
7	Sudhir Kumar	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi (Jharkhand)

8	Supratik Chakraborty	Development of Human Action (DHAN) Foundation, Madurai (Tamil Nadu)
9	Janak Mahto	Satin Credit Care Pvt. Limited, New Delhi
10	Niraj Oraon	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi (Jharkhand)
11	Subhash Kumar Ghosh	PRASARI, Kolkata (West Bengal)
12	Sumit Kumar	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi (Jharkhand)
13	Upendra Kumar	Life Education Development and Support (LEADS), Simdega (Jharkhand)
14	Abir Banerjee	NEEDS, Chaibasa (Jharkhand)
15	Amar Lal Mahto	NEEDS, Chaibasa (Jharkhand)
16	Manu Kumari	Vedic Organic Certification Agency, Hyderabad (Telangana)
17	Souvik Pradhan	NEEDS, Chaibasa (Jharkhand)
18	Sunaina Kumari	NEEDS, Chaibasa (Jharkhand)
19	Suresh Munda	Sashanka Agro. Tech. Pvt Ltd., Ranchi (Jharkhand)
20	Sushma Kumari	K. N. Bioscience (India) Pvt. Ltd., Hyderabad (Telangana)
21	Vijay Kumar Choudhary	Satin Credit Care (Pvt) Ltd., New Delhi

DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

PHYSICS

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Anirban Chatterjee	Dr. Abhijit Bandyopadhyay
2	Baishali Roy	Dr. Bobby Ezhuthachan
3	Debraj Das	Dr. Shamik Gupta
4	Kartik Panda	Dr. Amitava Bhattacharyya
5	Somnath Poray	Dr. Bobby Ezhuthachan
6	Shivam Verma	Dr. Sanjoy Biswas
7	Suchetan Das	Dr. Bobby Ezhuthachan

SPORTS SCIENCE AND YOGA

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Bankim Biswas	Dr. Asis Goswami
2	Gopinath Bhowmik Bhunia	Dr. U S Ray
3	Subhasis Biswas	Dr. Rupayan Bhattacharya
4	Ankur Biswas	Dr. Asok Ghosh

MATHEMATICS

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Soumendu Nandy	Dr. Ashish Gupta
2	Dwaipayan Mazumder	Prof. Stephan Baier
3	Bikramjit Kundu	Prof. Sukumar D. Adhikari
4	Md. Ibrahim Molla	Prof. Sukumar D. Adhikari
5	Kanoy Kumar Das	Dr. Arindam Banerjee
6	Esrafil Ali Molla	Prof. Stephan Baier

7	Krishnendu Paul	Dr. Shameek Paul
8	Santunu Mondal	Dr. Shameek Paul
9	Sanu Bera	Dr. Ashish Gupta
10	Snehashis Mukherjee	Dr. Ashish Gupta
11	Sourav Das	Prof. Stephan Baier

SANSKRIT

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Malay Porey	Dr. Gopikrishnan Reghu
2	Janardan Ghosh	Ayon Maharaj
3	Palash Ghorai	Ayon Maharaj
4	Sibsankar Karan	Dr. Gopikrishnan Reghu
5	Sumanta Choudhury	Dr. Gopikrishnan Reghu
6	Amit Kumar Dey	Dr. Venkataramana Bhat
7	Joydeb Dinda	Dr. Rakesh Das
8	Nityananda Manna	Dr. Rakesh Das
9	Srimanta Bhadra	Dr. Rakesh Das
10	Sudip Mondal	Dr. Rakesh Das
11	Sujit Paramanik	Dr. Venkataramana Bhat
12	Binod K.	Dr. Nagaraja Bhat
13	Bishnu Pada Pal	Dr. Neeraj Kumar Bhargave
14	Kartik Mete	Dr. Nagaraja Bhat
15	Sanatan Das	Dr. Venkataramana Bhat
16	Sujit Maiti	Dr. Rakesh Das
17	Sukanta Manna	Dr. Gopikrishnan Reghu
18	Tridib Roy Mondal	Dr. Venkataramana Bhat
19	Krishna Gopal Patra	Dr. Rakesh Das
20	Saibal Acharya	Dr. Nagaraja Bhat
21	Soumitra Acharya	Dr. Neeraj Kumar Bhargav

22	Arupam Sanyal	Dr.Shantanu Ayachit
23	Arpan Bhattacharya	Ayon Maharaj
24	Biplab Mallick	Ayon Maharaj

IRDM

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Anirneeta De	Prof. Tapash Dasgupta
2	ShyamGhosh	Prof. Tapash Dasgupta
3	Vibha Singh	Dr. Md. Nasim Ali
4	Shibasis Mukherjee	Dr. Gautam Chatterjee
5	Adrija Banerjee	Dr. Kishor Kumar
6	Argha Chakraborty	Dr. Gautam Chatterjee
7	Shatabdi Saha	Dr. Rupak Goswami
8	Sangita Patra	Dr. RupakGoswami
9	Mahadev Bera	Prof. Pranab Kumar Nag

IRTDM

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Koustab Majumdar	Dr. Dipankar Chatterjee
2	Manoj Raul	Dr. Dipankar Chatterjee
3	Suresh Kumar Mahto	Dr. Avijit Kumar Dutta

GAPEY

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Manigandan. C	Dr. E. Saravanan
2	Prem Kumar. G	Dr. D. Yuvaraj
3	Rajavarman. S	Dr. R. Giridharan
4	Yelika Phaneendra Kumar	Dr. R. Giridharan

FDMSE

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	J. Gangadhara Rao	Dr. Sudha A.
2	Maged Hamood Mohammed Al-Refi	Dr. S. Parween
3	Amani Qasim Ahmed Algashany	Dr. Saumya Chandra

DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

PHYSICS

Details of publications in journals:

- David Métivier, Lucas Wetzel and **Shamik Gupta**, Onset of synchronization in networks of second-order Kuramoto oscillators with delayed coupling: Exact results and application to phase-locked loops, Phys. Rev. Research 20, 023183 (2020); arXiv:1906.02643
- Yoshiyuki Y Yamaguchi, **Debraj Das** and **Shamik Gupta**, Critical exponents in mean-field classical spin models, Phys. Rev. E 100, 032131 (2019); arXiv:1905.08970
- **Debraj Das** and **Shamik Gupta**, Relaxation to equilibrium in models of classical spins with long-range interactions, J. Stat. Mech.: Theory Exp. 084007 (2019); arXiv:1904.00432
- **Amitava Bhattacharyya**, P. P. Ferreira, F. B. Santos, D. T. Adroja, J. Lord, L. E. Correa, A. J. S. Machado, and L. T. F. Eleno; Two-band superconductivity with unconventional pairing symmetry in HfV₂Ga₄; Physical Review Research (Rapid Communications) 2, 022001(R) (2020)
- **Amitava Bhattacharyya**, P. Rodiere, P.K. Biswas, A. D. Hillier, F. Bernardini, S. Tence, D.T. Adroja, and A. Cano; Evidence of nodal superconductivity in LaFeSiH; Physical Review B 101, 224502 (2020)
- **Amitava Bhattacharyya**, D. T. Adroja, J. S. Lord, L. Wang, Y. Shi, H. Luo, and A. M. Strydom, Low temperature Quantum Fluctuations in the Non-Fermi Liquid System CeCo₂Ga₈; Physical Review B 102, 234502 (2020)
- **Amitava Bhattacharyya**, D. T. Adroja, P. K. Biswas, Y. J. Sato, M. R. Lees, D. Aoki, and A. D. Hillier;; Ir 5d-band Derived Superconductivity in LaIr₃; Journal of Physics: Condensed Matter 32, 065602 (2020)
- **Amitava Bhattacharyya**, **K. Panda**, D. T. Adroja, N. Kase, Surabhi Saha, P. K. Biswas, Tanmoy Das, M. R. Lees, and A. D. Hillier, Investigation of Superconducting Gap Structure in HfIrSi using muon spin relaxation/rotation; Journal of Physics: Condensed Matter 32, 085601 (2020)
- **Amitava Bhattacharyya**, D. T. Adroja, K. Panda, Surabhi Saha, Tanmoy Das, A. J. S. Machado, T. W. Grant, Z. Fisk, A. D. Hillier, P. Manfrinetti; Evidence of Nodal Line in the Superconducting Gap Symmetry of Noncentrosymmetric ThCoC₂; Physical Review Letters 122, 147001 (2019)
- **Kartik Panda**, **Amitava Bhattacharyya**, D. T. Adroja, N. Kase, P. K. Biswas, Surabhi Saha, Tanmoy Das, M. Lees, and A. D. Hillier; Probing the superconducting ground state of ZrIrSi: A μ SR study; Physical Review B 97, 024500 (2019)
- Provino, V. Smetana, T. A. Hackett, D. Paudyal, M. K. Kashyap, C. Bernini, **Amitava Bhattacharyya**, S. K. Dhar, M. Pani, F. Gatti, A.-V. Mudring, P. Manfrinetti; Stability, crystal structure and magnetism of the M₂Ni₂1B₆ and M₃Ni₂0B₆ (M = U, Nb) compounds and the role of U in the formation of quaternary (U,Nb,Ni)₃Ni₂0B₆; Inorganic Chemistry 58, 15045-15059 (2019)

- **Sanjoy Biswas, Anirban Chatterjee**, Emidio Gabrielli and Barbara Mele; Probing dark-axionlike particle portals at future $e + e -$ colliders; Sanjoy Biswas, Anirban Chatterjee, Emidio Gabrielli and Barbara Mele; Physical Review D 100, 115040 (2019)
- **Ranjan Chowdhuri** and S. Bhattacharjee, Effective charge coupling in low-dimensional doped quantum antiferromagnets, Int. J. Phys. & Math. Sc. 14(2), 23 (2020).
- **Abhijit Bandyopadhyay** and **Anirban Chatterjee**, Diffusive dark matter and dark energy scenario and k-essence in the context of Supernova Ia observations, Eur. Phys. J. Plus 134, no. 4, 174 (2019)
- **Abhijit Bandyopadhyay** and **Anirban Chatterjee**, Realizing interactions between dark matter and dark energy using k-essence cosmology, Mod. Phys. Lett. A 34, no. 27, 1950219 (2019)
- **Abhijit Bandyopadhyay** and **Anirban Chatterjee**, Implications of JLA data for k-essence model of dark energy with given equation of state, Eur. Phys. J. Plus 135, no. 2, 181 (2020)
- **Abhijit Bandyopadhyay** and **Anirban Chatterjee**, Time-dependent diffusive interactions between dark matter and dark energy in the context of k-essence cosmology, accepted for publication in Research in Astronomy and Astrophysics.
- **Bobby Ezhuthachan, Suchetan Das** and Arnab Kundu, Real time dynamics from low point correlators in 2dBCFT, Journal of High Energy Physics, 141 (2019)
- **Bobby Ezhuthachan** and **Suchetan Das** Spectrum of modular Hamiltonian in the vacuum and excited states, Journal of High Energy Physics, 9 (2019)

Papers submitted to Journals:

- M. Manoranjani, **Shamik Gupta**, and V. K. Chandrasekar, Sakaguchi-Kuramoto model in presence of asymmetric interactions that break rotational symmetry (Submitted to Phys. Rev. E, 2020)
- Mrinal Sarkar and **Shamik Gupta**, The Kuramoto model with additional nearest-neighbor interactions: Existence of a nonequilibrium tricritical point (Submitted to Phys. Rev. Research, 2020); arXiv:2005.06856
- Gennaro Tucci, Andrea Gambassi, **Shamik Gupta** and Édgar Roldán, Controlling Particle Currents with Evaporation and Resetting (Submitted, 2020); arXiv:2005.05173
- V. K. Chandrasekar, M. Manoranjani, and **Shamik Gupta**, The Kuramoto model in presence of additional interactions that break rotational symmetry (Submitted to Phys. Rev. Research, 2020)
- D. T. Adroja, **A. Bhattacharyya**, Y. J. Sato, M. R. Lees, P. K. Biswas, K. Panda, D. Aoki, and A. D. Hillier; Pairing symmetry of an intermediate valence superconductor CeIr₃ investigated using μ SR measurements; (Submitted to Physical Review B)
- Yasuyuki Shimura, Andreas Work, **Amitava Bhattacharyya**, D. T. Adroja, Philipp Gegenwart, Suguru Tsuda, Takahiro Onimaru, and Toshiro Takabatake , Anisotropic Negative Thermal Expansion and Magnetostriction Deeply inside the Valence Fluctuating Region in CeIrSn with a Metamagnetic Crossover; (submitted to Physical Review Letters)
- **Ranjan Chowdhuri** and S. Bhattacharjee, Investigation of charge correlations and determination of effective Coulomb interaction in low-dimensional doped quantum antiferromagnets, arXiv: Cond-Mat/ 1904.09319v2 (2020)

Details of papers presented in conferences, seminars and others:

- Debraj Das (PhD Student): December 2019 - Conference on Recent Topics in Statistical Mechanics, National Institute of Science Education and Research (NISER), Bhubaneswar, India (Oral presentation, Title: Relaxation to equilibrium in models of classical spins with long-range interactions)
- Shamik Gupta: Tankhiwale Lectures, Nagpur University, Nagpur, India, March 2 – 3, 2020 (Presentation: Random Walks: Classical vs. Quantum)
- Shamik Gupta: Recent Topics in Statistical Mechanics, NISER, Bhubaneswar, India, December 11, 2019 (Presentation: Martingale Theory for Housekeeping Heat)
- Shamik Gupta: Conference on Nonlinear Systems and Dynamics (CNSD 2019), IIT Kanpur, Kanpur, India December 14, 2019 (Presentation: Statistical Physics of Synchronization: Exact results on the nonequilibrium stationary state of the noisy Kuramoto model)
- Shamik Gupta: Emerging Trends in Statistical and Condensed Matter Physics, RKMVERI, Belur Math, India, January 4, 2020 (Presentation: Thermodynamics of Small Systems)
- Amitava Bhattacharyya: Evidence of nodal superconductivity in newly discovered Fe, Co, and V-based material, IISER Kolkata during 3-4 February, 2020
- Amitava Bhattacharyya: Novel emergent properties of Quantum Materials, Indian Institute of Technology Dharwad, Dharwad, 20th July 2019
- Amitava Bhattacharyya: The 13th meeting of the R & D Project Evaluation Committee on Physical Science, Energy & Mathematics, Dept. of Science & Technology and Biotechnology, West Bengal, India, 28th November 2019
- Amitava Bhattacharyya: National Conference on Quantum Condensed Matter (Q-MAT), IISc Bangalore, India, Probing Non-Centrosymmetric Superconductors ThCoC2 with Muons, 8th-10th July 2019

COMPUTER SCIENCE

- Sudipta Das, Anup Dewanji, Subrata Kundu, "Software Reliability based on Renewal Process Modeling for Error Occurrence due to Each Bug with Periodic Debugging Schedule" accepted in Probability in the Engineering and Informational Sciences
- Avideep Mukherjee, Tanmay Basu, A medoid-based weighting scheme for nearest-neighbor decision rule toward effective text categorization, Springer Nature – Applied Sciences (published on 4 May 2020)

Note: The authors did this work when they were affiliated with RKMVERI.

Conference publications by RKMVERI faculty:

- Lokshtanov, Daniel, Pranabendu Misra, Joydeep Mukherjee, Fahad Panolan, Geevarghese Philip, and Saket Saurabh. "2-Approximating Feedback Vertex Set in Tournaments." In Proceedings of the Fourteenth Annual ACM-SIAM Symposium on Discrete Algorithms, pp. 1010-1018. Society for Industrial and Applied Mathematics, 2020.

- Dibyayan Chakraborty, Florent Foucaud, Harmender Gahlawat, Subir Kumar Ghosh, Bodhayan Roy: Hardness and Approximation for the Geodetic Set Problem in Some Graph Classes. Conference on Algorithms and Discrete Applied Mathematics 2020:102-115

Review of Journal/Conference Papers by RKMVERI faculty:

- Sw. Dhyangamyananda and Br. Mrinmay gave invited talks in NIT Durgapur. Dhyangamyananda spoke on Variants of Oriented Coloring, and Mrinmay spoke on On the Interface of Operations Research and Analytics, on 28 Feb 2020.
- Special Note: Sw. Dhyangamyananda was invited as an external expert by the committee at ISI kolkata, constituted for reviewing the promotional cases of scientific assistants (grade A B and C) of ISI kolkata in 1st wk of July 19 at ISI kolkata.
- Sw. Sarvottamananda is the Editor for Special Issue in the international journal of Discrete and Applied Mathematics, to be published by Springer in 2021.
- Sudipta Das has reviewed 3 research papers in the international conference on Mathematical Methods in Reliability 2019, one in Arabian Journal for Science and Engineering, and one in Elsevier Journal Applied Mathematical Modelling.
- Subir Ghosh have reviewed a research paper each in Discrete and Computational Geometry, SIAM Journal of Discrete Mathematics, International Journal on Computational Geometry and Applications, Transactions on Algorithms, and two papers in Computational Geometry: Theory and Applications.

SPORTS SCIENCE AND YOGA

- Prasad, T., Ghosh, S. and Goswami, A. (2019). Walking pattern of sighted volunteers with open eye and closed eye conditions. Journal of Disability Management and Special Education (JODYS), 2(2)
- Prasad, T., Guha, S., Bose, K., Ghosh, S., and Goswami, A. (2019). Arduino based Randomized Audio Source Generator for testing Spatial Orientation Ability of Visually Impaired Persons. International Journal of Advanced and Innovative Research (2278-7844), 8(5), 1-4.
- Prasad, T., Ghosh, S. and Goswami, A. (2020). Static balance ability of persons with visual impairments on firm and foam surfaces. European Journal of Adapted Physical Activity, DOI: 10.5507/euj.2020.002
- Dutta A, Lev-Ari Tidhar, Barzilay O, Mairon R, Wolf A, Ban-Shahar O, Gutfreund Y (2020). Self-motion trajectories can facilitate orientation based figure-ground segregation. Journal of Neurophysiology (<https://doi.org/10.1152/jn.00439.2019>).
- Mikhail A. Kolpakova, Kunal Sikderb Amrita Sarkarc, Shaswati Chakib, Sanket K. Shuklab Xinji Guoa, Zhao Qia, Carlos Barberyb Abdelkarim Sabria and Khadija Rafiqb, 2019. Inflammatory Serine Proteases Play a Critical Role in the Early Pathogenesis of Diabetic Cardiomyopathy. Cellular Physiology and Biochemistry. DOI.ORG/10.33594/000000190

Design Registration / Copyright / Patent

- Prasad, T., Guha, S., Bose, K., Ghosh, S., and Goswami, A. (2019). 'Spatial Perception Audio Game', Design registration accepted and Published 2019. The Patent Office Journal No. 27/2019, 05/07/2019, 28999.

Seminar and Workshop Publications:

- Biswas, B. Goswami, A. and Ghosh, S. (2020) Effect of number of trials on spatial perception audio game. Presented in "International Conference on Physical Education, Yoga and Sports Sciences in 2020s Era" organised by Institute of Physical Education for Women, Hastings House, Kolkata on 15.01.2020.
- Biswas, S., Goswami, A. and Ghosh, S. (2020) a comparative study on resting heart rate and heart rate variability of cricketers and track event athletes of west Bengal. Presented in "International Conference on Physical Education, Yoga and Sports Sciences in 2020s Era" organised by Institute of Physical Education for Women, Hastings House, Kolkata on 15.01.2020.

Projects submitted/sanctioned:

- Improvement of general health, cardiovascular and metabolic risk factors in visually-impaired teenagers through yoga, meditation and orientation ability training- To LV Prasad Eye foundation-Hyderabad - By Kunal Sikder and Asis Goswami.
- Hepato-Ayurgenomics: combining Genetics and Ayurveda for personalized diagnosis and therapy against chronic liver diseases- To AYUSH- By Kunal Sikder and Dr. Kalipada Pal
- Management of Pain in Knee Osteoarthritis by Yoga: Submitted to: CCRYN, ministry of AYUSH 2019-2020 under EMR research scheme by Dr Arkadeb Dutta, Dr Santiranjan Dasgupta

MATHEMATICS

- S.D. Adhikari, R Balasubramanian, S Eliahou, D J Gryniewicz, 2019. On a conjecture of Fox-Kleitman and additive combinatorics, Proc. Indian Acad. Sci. (Math. Sci.), 129:43.
- S.D. Adhikari, L.Boza, S.Eliahou, M.P.Revuelta, M.I.Sanz, 2019. Numerical semigroups of Szemerédi type, Discrete Applied Mathematics, 263:8-13.
- S.D. Adhikari, B. Roy, S. Sarkar, 2020. Weighted Zero-Sums for Some Finite Abelian Groups of Higher Ranks, Combinatorial and Additive Number Theory III, 1-12, Springer Proc. Math. Stat., 297, Springer, Cham.

- S. Baier, S.B. Lynch, L. Zhao, 2019. A lower bound for the large sieve with square moduli, *Bulletin of the Australian Mathematical Society*, 100(2):225-229.
- S. Baier, N. Prabha, K. Sinha, 2020. Central limit theorems for elliptic curves and modular forms with smooth weight functions, *J. Math. Anal. Appl.*, 485(1), 123709, 29pp.
- S. Baier, P.K. Dey, 2020. Prime powers dividing consecutive integer values of $x^{2^n} + 1$, *Res. Number Theory*, 6(1), 12pp.
- S. Baier, R.K. Singh, 2020. Erratum to "Large sieve inequality with power moduli for function fields" *J. Number Theory* 196 (2019) 1{13}, *J. Number Theory*, 210: 431-432
- S. Baier, A. Bansal, R.K. Singh, 2020. Correction to "Divisibility problems for function fields", *Acta math. Hungar.*, 160(2): 519-521
- S. Baier, A. Bansal, 2020. Large sieve with sparse sets of moduli for $\mathbb{Z}[i]$, *Acta Arith.* (To Appear).
- S. Baier, R.K. Singh, 2020. The large sieve with square moduli for quadratic extensions of function fields, *Int. J. Number Theory* (To Appear).
- S. Baier, M. Technau, 2020. On the distribution of $\alpha \pmod{1}$ in imaginary quadratic number fields with class number one. *Journal de Theorie des Nombres de Bordeaux* (In Revision).
- Banerjee, H.T.Ha, S. Kara-Bayerslan, 2020. Regularity of Powers of Edge Ideals: From Local Properties to Global Bound. *Algebraic Combinatorics* (Accepted)
- Banerjee, J.K. Verma, K. Goel, 2020. Generalized Hilbert-Kunz function of the Rees algebra of the face ring of a simplicial complex. *Contemporary Mathematics* (Accepted)
- S.Chakraborty, V.Gurjar, D.Mondal, 2019. Quasi-factorially closed subrings of commutative rings. *Journal of Algebra*, 534: 190-206.
- S.Chakraborty, 2019. Everywhere vanishing polynomial functions. *Journal of Algebra and its Applications* 19(02).
- S.Chakraborty, V.Gurjar, D.Mondal, 2019. Some results about complete and analytic local rings. *Journal of Pure and Applied Algebra* 224(7).
- P. Das, P. K. Dey, S. S. Rout, 2020. Sums of fifth powers being a perfect power: A special case, *Journal of Ramanujan Mathematical Society* 35(1): 23-33.
- P. Das, P. K. Dey, B. Maji, S. S. Rout, 2020. Perfect powers in an alternating sum of consecutive cubes, *Glasnik Matematicki III*, 55(75): 37-53.
- P. K. Dey, B. Roy, 2020. Torsion groups of Mordell curves over cubic and sextic fields. *Publicationes Mathematicae Debrecen* (Accepted).

SANSKRIT

Sl. No	Name of the faculty	Title of the paper	Journal	ISSN/ISBN No	Editor & publisher
1	Swami Japasiddhananda	Yogānandadaśakam (a poem in Sanskrit)	The Vedanta Kesari, (an English Monthly) March 2020	ISSN 0042-2983	Sri Ramakrishna Math, Mylapore, Chennai
2	Neeraj Kumar Bhargave	Jagadīśābhimatākhyātārthavimarśaḥ (जगदीशाभिमतारख्यातार्थविमर्शः)	Gomati (गोमती)	ISSN 2231-0800	राष्ट्रियसंस्कृतसंस्थानम् (मानितविश्वविद्यालयः) लखनऊपरिसरः उत्तरप्रदेशः
3	Ayon Maharaj	Sarvamukti: Sarvepalli Radhakrishnan's Aporetic Metaphysics of Collective Salvation (Jan. 2020)	Philosophy East and West: A Quarterly of Comparative Philosophy	E-ISSN: 1529-1898 ISSN: 0031-8221	Editor: Franklin Perkins Publisher: University of Hawaii Press (USA)
		Śiva jñāne jīver sevā: Reexamining Swami Vivekananda's Practical Vedānta in the Light of Sri Ramakrishna (Aug. 2019)	Journal of Dharma Studies	E-ISSN: 2522-0934 ISSN: 2522-0926	Editors: Rita D. Sherma & Purushottama Bilimoria Publisher: Springer (USA)

Articles / Chapters published in Books

Sl. No.	Name of the faculty	Title of the article	Book Title	ISSN /ISBN No	Editor & publisher
1.	Ayon Maharaj	'Infinite Paths, Infinite Doctrines': Perry Schmidt-Leukel's Fractal Approach to Religious Diversity from the Standpoint of the Ramakrishna-Vivekananda Tradition	New Paths for Interreligious Theology: Perry Schmidt-Leukel's Fractal Interpretation of Religious Diversity	ISBN: 9781626983380	Editors: Alan Race & Paul Knitter Publisher: Orbis Books (USA)

Books Published as single author or as editor:

Sl. No.	Name of the faculty	Title	Publisher	ISBN	No. of coauthors
1	Rakesh Das	Cipiṭakacarvaṇam	Registrar, Kavikulaguru Kalidas Sanskrit University, Nagpur & New Bharatiya Book Corporation, New Delhi	978-818315-410-9	Editor
		Daridradurdaivam	BN Publication, Midnapore	-978-81-930415-9-8	Editor
2	Gopikrishnan Reghu	śēṣacakrapāṇiviracita m kārakatatvam (शेषचक्रपाणिविरचितं कारकतत्वम्)	Kavikulaguru Kalidasa Sanskrit University, Ramtek, Maharashtra	978-81-8315-427-7	Editor

IRDM

- A.Nath, D. Nath, C.K. Santra and T. Dasgupta. 2019. Post-harvest Evaluation of Rice Hybrids for Grain and Cooking Qualities. *International Journal of Current Research and Review Research Article* .DOI: <http://dx.doi.org/10.31782/IJCRR.2019.11124>.
- C. Das, A. Dutta, A.Muhuri, S.Kothari, P.Ghosh, A.Roy, A.K.Hazra, S.K.Bandyopadhyay and S.Chatterjee.2020. Biochemical Analysis and Evaluation of Antimicrobial Properties of Theaflavins and Flavonoids-rich Extract (TFE) and its Nanoconjugates: A Comparative Study. *IJPSR*, 2020 (Accepted)
- D.N.Saha, P.Mukherjee, S.Dutta, K.Meena, S.K.Sarkar, A.B.Mandal, T. Dasgupta and J. Mitra.2019. Genomic insights into HSFs as candidate genes for high temperature stress adaptation and gene editing with minimal of target effects in flax. *Scientific Reports* (www.nature.com/scientificreports/) Vol. 9: 5581 <https://doi.org/10.1038/s41598-019-41936-1>.
- J. Dasgupta and P.K.Nag. 2019. Climate-Induced Thermoregulatory Responses in Non-Linear Thermal Environment: Investigating the Inter-Dependencies Using Facile Artificial Neural

Network-Based Predictive Strategy. *International Journal of Occupational Safety and Ergonomics*, October, 1–66

- K.Dhara, N.Moitra, S. Misra, S.Ghosh, S.Bose, and K.Poddar. (2019). Socio- Economic Status of the Sheep and Goat Farmers in Sundarban, West Bengal. *International Journal of Livestock Research*, Vol. 9(9), 168-179. doi:10.5455/ijlr.20190710050419.
- K.Majumder, D.Nath, R.B.Mallick and T.Dasgupta. 2019. Grain Quality and Multivariate Analysis of Various Quality Parameters in Rice Genotypes. *Agricultural Science Digest*. DOI: 10.18805/ag.D-4995.
- K. Ray, M.Brahmachari, R. Goswami, S.Sarkar, K.Brahmachari, A. Ghosh, M.K. Nanda. 2019. Adoption of improved technologies for cropping intensification in the coastal zone of West Bengal, India: A village level study for impact assessment. *Journal of the Indian Society of Coastal Agricultural Research*, Vol. 37(2), 144-52.
- K.Ray, P. Sen, R. Goswami, S. Sarkar, K.Brahmachari, A. Ghosh, M.K.Nanda and M.Mainuddin. 2020. Profitability, energetics and GHGs emission estimation from rice-based cropping systems in the coastal saline zone of West Bengal, India. *PLoS One*, Vol. 15(5), DOI:10.1371/journal.pone.0233303.
- M. Bhattacharjee, K. Majumder, S.Kundagrami and T. Dasgupta. 2020. Evaluation of Recombinant Inbred Lines for Higher Iron and Zinc Content Along with Yield and Quality Parameters in Rice (*Oryzasativa* L.). *Indian Journal of Agricultural Research*. DOI: 10.18805/IJARE.A-5454 .
- M.Bhattacharjee, S. H. Prakash, S. Roy, S. Soumen, T. Begum and T. Dasgupta. 2019. SSR-based DNA fingerprinting of 18 elite Indian varieties of sesame (*Sesamum indicum* L.). *Nucleus* (Springer). Vol.63 (1): 67-73. <https://doi.org/10.1007/s13237-019-00290-3>.
- M.Bhattacharjee and T. Dasgupta. 2020. Comparison of start codon targeted (SCOT) and EST-SSR markers in sesame. *Journal of Oilseeds Research*, Vol. 37 (special issue):37.
- P.K.Nag. 2020. Human-Centered Agriculture Ergonomics and Human Factors Applied. Springer, ISBN 978-981-15-7268-5 (In Press).
- S.Dutta, S. Chakraborty, R. Goswami, H. Banerjee, K. Majumdar, B.Li, and M.L. Jat. 2020. Maize yield in smallholder agriculture system—An approach integrating socio-economic and crop management factors. *PLoS One*, vol. 15(2), DOI: DOI: 10.1371/journal.pone.0229100.
- S.Ghosh, J.K.Chatterjee, A.K.Hazra. 2019. Comparative evaluation of in vitro antioxidant activities and high-performance liquid chromatography fingerprinting of fruit peels collected from food processing industry wastes. *PhcogRes*, Vol. 11: 346-51.
- S. Saha and R. Goswami. 2020. Destinations of Male Outmigration and their Drivers in Indian Sundarbans. *Space and Culture*, India, Vol. 8(1), DOI: 10.20896/saci.v8i1.601.

- S. Chakraborty, S. Dutta, A. Debnath, S. Bandopadhyaya, S. Khalko, J. C. Jana and B. C. Saha (2019). Notification of crop varieties and registration of germplasm. Ginger Variety GCP-49 (Mohini, IC- 0614552). *Indian J. Genet.*, **79**(2): 511-520.
- Tripathy, S. and Dutta, A. K. (2019). Effect of enriched Sanjeevani and Agnihotra on growth, yield and quality of brinjal (*Solanum melongena* L.). *Journal of Phytology*, 11: 42-46.
- Pathak, S. and Dutta, A. K. (2019). Screening Onion Varieties through Organic Farming in the South Chhotanagpur Plateau of Jharkhand during Post-Kharif Season. *Journal of Emerging Technologies and Innovative Research*, 6(5): 492-500.
- Jana, B. and Dutta, A. K. (2019). Performance of Capsicum Cv. Yellow Wonder Grown Through Organic Farming under Low Cost Protective Structure and Open Field Conditions. *Journal of Emerging Technologies and Innovative Research*, 6(5): 485-491.
- Roy, S. and Dutta, A. K. (2019). Evaluation of Organically Grown Sprouting Broccoli cv. Fiesta under Open Field Condition of Eastern Indian Plateau. *Journal of Emerging Technologies and Innovative Research*, 6(2): 489-495.
- Guha, S. and Dutta, A. K. (2019). Performance of Organically Grown Strawberry cv. Douglas under the South Chhotanagpur Plateau Region of Jharkhand. *Journal of Emerging Technologies and Innovative Research*, 6(2): 496-503.
- Rajak, K.; Reddi, G.; Mahto, A. K. and Dutta, A. K. (2019). Performance of Different Varieties of Brinjal Grown Through Organic Farming in Chhotanagpur Plateau. *Journal of Emerging Technologies and Innovative Research*, 6(2): 449-459.
- Ghosh, S. and Biswas, S. 2020. Digitization and usage of e-governance: a comparative study between semi-urban and rural landscape, *International Journal of Science Technology and Management*, 09(03):6-16.
- Anjum Ahmad, T. Chowdhury and Adyant Kumar (2019). Effect of Tillage and Weed Control Techniques on Energy Dynamics and Profitability of Chickpea (*Cicer arietinum* L.) – Rice Cropping Sequence in Irrigated Ecosystem of C. G. Plains. *Current Journal of applied Science and Technology*, 38(6): 1-8
- Rahul Kumar, Barsha Rani, and Adyant Kumar (2019). *Padap Rog Prabandhan Me Proyog Kiye Janebale Rasayanik Padarth Ke Gun abang Dharm*. *Land Bank Journal*, 59(1): 12-13. (In Hindi).
- Dutta, A. and Das, P. (2019). Constraints Faced by the Tribal (Santal) SHG Members in the Process of Empowerment. In: R. Mondal, A. I. Singh, P. C. Dutta (Eds.) *Livelihood and sustainable Development in North East India*. Concept Publishing Company Pvt. Ltd, New Delhi. ISBN: 978-93-86682-56-7
- Majumdar, K. (2020). Rural Transformation in India: Deagrarianization and the Transition from a Farming to Non-farming Economy. *Journal of Developing Societies*, Sage publication. <https://doi.org/10.1177%2F0169796X20912631>. [SCOPUS & Web of Science (WOS) indexed].
- Majumdar, K. & Chatterjee, D. (2020). Perception of poverty: A study on non-social work students. *Social Work & Society: An International Journal*. [SCOPUS indexed].

- Majumdar, K. & Chatterjee, D. (2020). Tangible resources, intangible systems: A study on environmental perception among the Lodha community of West Bengal, India. *Journal of Indian Anthropological Society*. [UGC Care listed journal].
- Ribhu, A., Majumdar, K., & Chatterjee, D. (2019). Victim of System: A Study on Crime Committed by Children and Child Victim with special reference to Ranchi district of Jharkhand, India, in Channaveer et al. (Eds.) *Social Welfare Policies and Programme in South Asia*, Routledge, London. (DOI: <https://doi.org/10.4324/9780429323041>). **Web of Science (WOS) indexed.**
- Majumdar, K. & Chatterjee D. (2020). Forest Right Act- 2006, Customary Laws and Sustainable Community Development: A Study on Lodha Tribe of West Bengal in Momen et al. *Building Sustainable Communities: Civil Society Response in South Asia*. Palgrave Macmillan, Singapore (in press). ISBN: 978-981-15-2392-2.
- Majumdar, K., Raul, M. & Chatterjee, D. (2020). Social Status and Subjective Well-being of Tribal Elders: A Narrative Discourse in Jianguo et al. *Social Welfare in India and China: A Comparative Perspective* in Sakaguchi et al., Palgrave Macmillan, Beijing (in press). <https://www.springer.com/gp/book/9789811556470>. ISBN: 978-981-15-5647-0

FDMSE

Sl. No.	Name	Date	Title of the paper presented	Place
1	Mrs. V. Indirani	22 nd April 2019	Inclusive Education: Issues and Challenges	Ayikudi, Tamil Nadu
2	Dr. K. Dhanalakshmi	25 th -27 th April 2019	Adapted Sports Training to Special Educators and Physical Educators	Noida, Uttar Pradesh
		9 th January 2020	Environmental Modifications and Classroom management for Children with Low Vision	Palakkad, Kerala
3	Dr. P. Ramakrishna & Mrs. K. Rajeswari	3 rd July 2019	Understanding Deafblindness & MDVI	Palakkad, Kerala
		26 th Aug to 1 st Sep 2019	Sign language training program for B.Ed. Special Education (Hearing Impairment)	Tirupati, Andhra Pradesh
		4 th Sep 2019	Universal Design for Learning Embedded with Assistive Technology for Children with Special Needs	Karaikudi, Tamil Nadu
4	Dr. Saumya Chandra	3 rd Sep 2019	Interpreting Medical and Therapeutic Assessment - Report Writing	Coimbatore, Tamil Nadu
		22 nd & 23 rd November 2019	Neuropsychology and Brain-based Learning	Chennai, Tamil Nadu

5	Mrs. Kamakshamma Murthy	7 th December 2019	TLM for the Visually Impaired students	Coimbatore, Tamil Nadu
6	Dr. Sudha A	1 st February 2020.	Technology Enhanced Learning for Children with Intellectual Disabilities	Coimbatore, Tamil Nadu
7	Dr. S. Logesh Kumar	27 th to 29 th January 2020	Innovation and Integration in Education of Modern School Sciences and Mathematics	Mysuru, Karnataka
8	Dr. S. Parween & Dr. J. B. Dheesha	6 th February 2020	Training Teacher Educators on Implementing Universal Design for Learning	Mysuru, Karnataka

Details of publications in journals and books

Sl. No.	Name	Title of the paper	Journal	ISSN No.
1	Dr. Saumya Chandra	Creating an Indigenous Activity Panel to enhance learning among Children with Sensory Processing Disorders	UGC approved International Journal of Research and Analytical Reviews Vol. 6 May 2019	ISSN No. 2349-5138
		Educationally Backward Children: Social Exclusion V/S Inclusion	UGC approved Journal - Disabilities and Impairments, Vol. 33 (2) July 2019	ISSN No. 0970 356X
		Developing a Training Package for Persons with Intellectual Disabilities involving Natural Properties	UGC approved Journal Research Journal of Humanities and Social Sciences (RJHSS), Volume 10, Issue 2, June 2019	ISSN No. 0975-6795
2	Fr. Baiju Thomas (Research Scholar) & Dr. Saumya Chandra	Facilitating sustainable development in inclusive learning environment for students with special needs	UGC approved International Journal of Multidisciplinary Educational Research, Volume 8 issue 9 (7)	ISSN No. 2277-7881.
3	Dr. Sampurna Guha & Dr. Sudha A.	Value Education and Inclusion: A Shift towards Inclusive Curriculum for Children with Mild Intellectual Disability"	International Journal of Multidisciplinary Educational Research Volume 8, Issue 9(8), September 2019	ISSN No. 2277-7881

4	Mr. Gangadhara Rao J. & Dr. Sudha A.	Application of Teaching Strategies by General Education Teachers in Facilitating Inclusive Education for Children with Intellectual Disabilities – A Survey Study	UGC approved International Journal of Emerging Technologies and Innovative Research	ISSN No. 2349-5162
		Application of Curriculum Adaptation Methods by the general Education Teachers towards Facilitating Inclusive Education for children with intellectual disabilities	Global Journal for Research Analysis, Vol. 8, Issue-8, August-2019	ISSN No. 2277 - 8160
5	Mr. Maged Alrefi (Research Scholar) & Dr. S. Parween	Spelling Errors (SE) among students with Visual Impairment and students with normal vision	Scholarly Research Journal for Humanity Science & English Language, Vol. 7, Issue 34 July, 2019	ISSN NO. 2348-3083

FAR

Sl No.	Particulars	Faculty
1	Genetics of low phytate in maize. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Dr. S. Sureshkumar
2	A novel vegetative propagation method in guava. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020.	
3	<i>Invitro</i> evaluation of the <i>Streptomyces</i> Formulation on the growth of Paddy Seedlings. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020	Dr. N.Jaivel
4	Characterization of <i>Bacillus</i> as a potential antagonist for inhibition of root rots pathogen <i>Macrophomina phaseolina</i> in pulses. In: The Biotic Science Congress (Bioscon) held at Sona College of Technology, Salem, Tamil Nadu, during 26 th - 27 th July, 2019.	
5	Phytotoxicity effect of metal oxide nanoparticles on growth parameters of maize and tomato. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Dr. K.Vinoth Kumar

6	Efficacy of vermicompost on growth and yield parameters of <i>lycopersicum esculentum</i> (tomato). In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020.	
7	Study the effect of organic and inorganic fertilizers on quality of tomato fruits and soil properties. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security, organized by RKMVERI-FAR during 27 th & 28 th Feb, 2020.	
8	Heterosis of grain yield and yield related traits in rice hybrid. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security, organized by RKMVERI-FAR on 27 th & 28 th Feb, 2020.	Dr. K. Mohana Sundaram
9	Self-life and characterization of EFF. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Dr. G. Yoganathan
10	Suitable medium for sugarcane budchip nursery. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Mr. M. Rajkumar
11	Suitable poly bag nursery for sugarcane. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Mr. M. Rajkumar
12	New record of predatory mite Genus Raphignathus (Acari: Prostigmata: Raphignathidae) from coconut ecosystems in Tamil Nadu. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Dr. S. Suresh
13	Analysis of Microbial population and PGPR populations in rhizosphere soil of <i>Coleus forskohlii</i> . In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Mr. S. Kasinathan
14	Assessment of Pathogenicity of <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> in Paddy. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019.	Mr. S. Chandraprakash
15	Performance of Various Substrates on Oyster Mushroom (<i>Pleurotus florida</i>) Cultivation. In: National Conference on Organic Farming For Sustainable Agriculture held at School of Agriculture, Prist Deemed to be University, Thanjavur during March, 2019	
16	Estimation of Technical, Allocative and Economic efficiency of Major food crops in Tamil Nadu – A Data Envelopment Analysis approach. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019	Mr. B. Muthuraja

17	Farmers as entrepreneur in poultry production – A case study. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020	Mr. A. Suresh
18	Estimation of Technical, Allocative and Economic efficiency of Major food crops in Tamil Nadu – A Data Envelopment Analysis approach. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019	Dr.J.Ramesh
19	Knowledge Perception and Adaptation Strategies to Climate Change Among Farmers in Coimbatore District. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR on 21 st & 22 nd Feb, 2019.	Dr. T. Masanaselvam
20	Role of Indigenous Technical Knowledge (ITK) to Sustainable Agriculture. In: National seminar on Current Trends and Challenges in Sustainable Agriculture, held at RKMVERI-FAR during 21 st & 22 nd Feb, 2019	
21	Tribal women empowerment through Eco-Tourism. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020	
22	Contribution of Profile Rural Youth Entrepreneurs With Their Attitude Towards Entrepreneurial. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020.	
23	Rural Youth Entrepreneurs and their Entrepreneur Ventures. In: National conference on Promoting Agriculture for Farmers Livelihood and Food Security held at RKMVERI-FAR during 27 th & 28 th Feb, 2020	

ii) Details of publications in journals and books:

Sl. No.	Particulars	Faculty
1	Study the effect of metal oxide (ZnO) nanoparticles on root anatomy of Maize (<i>Zea mays</i>). 2019. International Journal of Recent Scientific Research, 10 (3): 30693-30696	Dr. K.Vinoth Kumar
2	Subsurface drainage system and amendments on cumbu napier hybrid grass in waterlogged saline alkali soil.2019.Journal of Experimental Biology and Agricultural Sciences, 7(5):429-437	
3	Proceedings book of national seminar on Current Trends and Challenges in Sustainable Agriculture, organized by RKMVERI-FAR on 21 st & 22 nd Feb, 2019,p: 354 ISBN:9789353513214.	
4	Effect of Traditional training with and without Ladder training on Balance ability of High School Kho-Kho players. Journal of Educational Research and Extension.	Mr. M. Ashok Kumar
5	Proceedings book of national seminar on Current Trends and Challenges in Sustainable Agriculture, organized by RKMVERI-FAR on 21 st & 22 nd Feb, 2019,p: 354 ISBN:9789353513214.	Dr. G. Yoganathan

6	Optimization of culture conditions for antimicrobial metabolites production by <i>Streptomyces</i> sp. Against bacterial leaf blight pathogen <i>Xanthomonas oryzae</i> pv. <i>Oryzae</i> . 2019. Int. J. Chem. Stud., 7(3): 1187-1191.	Dr. N.Jaivel
7	Proceedings book of national seminar on Current Trends and Challenges in Sustainable Agriculture, organized by RKMVERI-FAR on 21 st & 22 nd Feb, 2019,p: 354 ISBN:9789353513214.	Mr. B. Muthuraja
8	Crop production in Climate changes.2019. Published Tamil Monthly Magazine (KovaiVanikam) as popular article.	Dr. T. Masanaselvam
9	Approximate Controllability of Sobolev-type Fractional Neutral Evolution Inclusions.2019. Discontinuity, Nonlinearity, and complexity, 8(1).	Dr. M. Tamil Selvan
10	Results on approximate controllability of second-order non autonomous integro-differential inclusions via resolvent operators. 2019. International Journal of Dynamical systems and Differential Equations, 9(2): 1-20.	

GAPEY

Sl No	Name of the Staff	Conferences / Seminars	Organized by
1	Dr. M. Ramajayam	International Conference on Role of Sports Sciences and Yoga on Human Performance Enhancement	Madurai Kamaraj University
2	Dr. M. Ramajayam	International Conference on Yoga for Global Health, Happiness and Harmony	Maruthi College of Physical Education
3	Dr. M. Ramajayam	National Seminar on Role of Yoga for Health and Lifestyle Management	Maruthi College of Physical Education
4	Dr. D. Yuvaraj	International Conference on Yoga for Global Health, Happiness and Harmony	Maruthi College of Physical Education
5	Dr. Dibakar Debnath	International Conference on Yoga for Global Health, Happiness and Harmony	Maruthi College of Physical Education
6	Dr. E. Saravanan	International Conference on Yoga for Global Health, Happiness and Harmony	Maruthi College of Physical Education
7	Sri Becon Debbarma	International Conference on Yoga for Global Health, Happiness and Harmony	Maruthi College of Physical Education
8	Dr. R. Giridharan	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
9	Dr. A. Sathiya Moorthy	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY

10	Dr. M. Ravi	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
11.	Dr. Dibakar Debnath	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
12	Dr. D. Yuvaraj	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
13	Dr. E. Saravanan	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
14	Dr. M. Ramajayam	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
15	Sri S. Sakthivel	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
16	Sri S. Rajavarman	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY
17	Sri Becon Debbarama	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21 st Century Skills for Students with Special Needs	Ramakrishna Mission Vivekananda Educational and Research Institute – FDMSE & GAPEY

Details of publications in journals and books:

Sl. No	Name of the Author	Title	Name of the journal with ISSN NO	Issue and volume
1	Dr. E. Saravanan	Comparative analysis of body fat among college level footballers from different parts of India	International Journal of Yogic, Human Movement and Sports Sciences (UGC Listed) ISSN: 2456-4419	2019; 4(1): 1067-1069

2	Dr. E. Saravanan	Effects of 8 weeks Thera-band exercise program on upper body strength performances of adolescent boys	International Journal of Physiology, Nutrition and Physical Education (UGC Listed) ISSN: 2456-0057	2019; 4(1): 1695-1698
3	Dr. E. Saravanan	Analysis of team effectiveness of elite level volleyball players	International Journal of Yogic, Human Movement and Sports Sciences (UGC Listed) ISSN: 2456-4419	ISSN: 2456-4419 Impact Factor: (RJIF): 5.18 Volume - 4 / Issue - 1 / June - 2019
4	Dr. E. Saravanan	Effects of selected asanas and relaxation technique on competitive sports anxiety among volleyball players	Review of Research, UGC approved Journal No. 48514 ISSN: 2249-894X	ISSN: 2249-894X impact factor: 5.7631(UIF) Volume - 8 / Issue - 9 / June - 2019
5	Dr. M. Ramajayam	Effect of asanas with pranayama on flexibility and vital capacity of adolescent school girls	International Journal of Yogic, Human Movement and Sports Sciences (UGC Listed) ISSN: 2456-4419	ISSN: 2456-4419 Impact Factor: (RJIF): 5.18 Volume - 4 / Issue - 1 / June - 2019
6	Dr. M. Ramajayam	Combined Influences of Particular Exercises with Digital Equipment Practices on Selected Skill Variables and Overall Playing Ability of Badminton Novice Players	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878	2019; 8(3): 1739-1743
7	Sri S. Sakthivel	Effect of Specific Kabaddi Skill Training with Video Feedback Instructional Training on Physical Fitness Variables and Overall Playing Ability Among Inter-University Male Kabaddi Players	Journal of Information and Computational Science (UGC CARE Group II Certified Journal with ISSN: 1548-7741)	Vol:10 Issue:3 March-2020

DETAILS OF:
WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS ATTENDED DURING THE
YEAR

Physics

- ✓ Shamik Gupta: Tankhiwale Lectures, Nagpur University, Nagpur, India, March 2 – 3, 2020.
- ✓ Shamik Gupta: Recent Topics in Statistical Mechanics, NISER, Bhubaneswar, India, December 11, 2019.
- ✓ Shamik Gupta: Conference on Nonlinear Systems and Dynamics (CNSD 2019), IIT Kanpur, Kanpur, India December 14, 2019.
- ✓ Debraj Das (PhD Student): February 2020 - Spring College on the Physics of Complex Systems, ICTP - The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (school only partly held due to Covid-19 pandemic).
- ✓ Amitava Bhattacharyya: May-June 2020, Superconducting Devices and Circuits organized by Tata Institute of Fundamental Research, Hyderabad (Online conference)
- ✓ Amitava Bhattacharyya: April-June 2020, Good Night Seminar Series 2020 organized by Tata Institute of Fundamental Research, Mumbai (Online conference).
- ✓ Debraj Das (PhD Student): December 2019 - Conference on Recent Topics in Statistical Mechanics, National Institute of Science Education and Research (NISER), Bhubaneswar, India.
- ✓ Debraj Das (PhD Student): November 2019 - Young Scientists' Conference, India International Science Festival (IISF) 2019, Kolkata, West Bengal, India (Poster presentation, Title: A noisy path to bifurcation).

Mathematics

Sukumar D. Adhikari

- ✓ Workshop on Additive Combinatorics, International Center for Theoretical Sciences Bangalore, Feb. 24 - Mar. 06, 2020

Stephan Baier

- ✓ The 7th Number Theory Down Under meeting, University of New South Wales, Sydney, Australia, September 30 - October 3, 2019.
- ✓ Workshop on Additive Combinatorics, International Center for Theoretical Sciences Bangalore, Feb. 24 - Mar. 06, 2020

Arindam Banerjee

- ✓ Hochschild homology workshop, Chennai Mathematical Institute, July 15 to 20, 2019.
- ✓ Conference on commutative algebra and algebraic geometry, Indian Institute of Science Education and Research Bhopal, July 2 to 6, 2019.

Shameek Paul

- ✓ National Centre for Mathematics Workshop on Linear Algebraic Groups, Indian Institute of Technology Bombay, June 24 - July 13, 2019.
- ✓ Combinatorial models in representation theory, Institute of Mathematical Sciences, Chennai, November 4-16, 2019.
- ✓ Workshop on Linear Algebra and Applications, Dr. Shyama Prasad Mukherjee University, Ranchi, August 10 - 13, 2019.
- ✓ Workshop on Additive Combinatorics, International Center for Theoretical Sciences Bangalore, Feb. 24 - Mar. 06, 2020

Rajneesh K. Singh

- ✓ "Perfectoid spaces" program workshop, International Centre for Theoretical Sciences-Tata Institute of Fundamental Research, Bengaluru, September 9 to 13, 2019.

Sagnik Chakraborty

- ✓ Conference on commutative algebra and algebraic geometry, Indian Institute of Science Education and Research Bhopal, July 2 to 6, 2019.

Pallab K. Dey

- ✓ Workshop on Additive Combinatorics, International Center for Theoretical Sciences Bangalore, Feb. 24 - Mar. 06, 2020

Invited-Talks

Sukumar D. Adhikari

- ✓ Gave an invited talk at "The Fifth Mini Symposium of the Roman Number Theory Association" held at Universita Roma Tre, Rome during April 10-12, 2019
- ✓ Series of talks on Topology at Annual Foundational School - I held at Harish-Chandra Research Institute, Prayagraj during 6, May to 1, June, 2019.
- ✓ Invited talk at DMS Seminar of IISER Kolkata on June 25, 2019
- ✓ The pigeonhole principle and some applications, One day Number Theory seminar, Ramakrishna Mission Vivekananda Centenary College Rahara, September 17, 2019.
- ✓ Weighted zero-sum constants: A survey, Zero-Sum Ramsey Theory: Graphs, Sequences and more Workshop, CMO-BIRS Mexico, November 13, 2019.
- ✓ Invited talk in 'Intercity Number Theory Meeting' held at IMSc, Chennai, during December 28-29, 2019.
- ✓ Invited talk during inauguration of an INSPIRE INTERNSHIP SCIENCE CAMP-2020 at OmDayal Group of Institutions, Uluberia, Howrah, West Bengal on 13th January, 2020.
- ✓ Invited talk in a Two-Day Conference at Department of Mathematics, Panjab University, Chandigarh, held during February 13-14, 2020.

Stephan Baier

- ✓ The circle method. IMSc Chennai, May, 2019.
- ✓ Prime powers dividing products of consecutive integer values of $x^2 + 1$. The 7th Number Theory Down Under meeting, University of New South Wales, Sydney, Australia, October 1, 2019. The meeting spanned four days, from September 30 to October 3, 2019 and was hosted by the Number Theory Group at the University of New South Wales.
- ✓ The circle method and its applications. Ramakrishna Mission Centenary College, July 9, 2019.

- ✓ The distribution of primes -- old and new results. Talk was a part of 2 day national seminar, Midnapore College, July 27, 2019.
- ✓ Distribution of the error terms in the Sato-Tate law. Indian Institute of Technology Kanpur, August 28, 2019.
- ✓ Restricted Diophantine Approximation. Indian Institute of Technology Kanpur, August 31, 2019.
- ✓ Restricted Diophantine approximation in real quadratic number fields, University of New South Wales, Sydney, Australia. Talk was delivered during Prof. Baier's visit to UNSW from 14 Feb. 2020 to 20 Feb. 2020.

Ashish Gupta

- ✓ Hamilton's quaternions and Central Simple Algebras, RKMVERI, July 2019.
- ✓ The group determinant, Indian Institute of Technology Kanpur, Jan. 2020.

Sudeshna Basu

- ✓ Geometry of Banach space: An overview, National Institute of Technology, Durgapur, September 12-13, 2019.
- ✓ Linear Hahn Banach Extension of module homomorphisms in Hilbert and Banach modules, Catholic University of America, Washington DC, USA, October 16, 2019.

Arindam Banerjee

- ✓ Packing properties of cubic squarefree monomial ideals, Conference on commutative algebra and algebraic geometry, Indian Institute of Science Education and Research Bhopal, July 2, 2019.

Shameek Paul

- ✓ Linear Algebra and Applications, Dr. Shyama Prasad Mukherjee University, Ranchi, August 10 to 13, 2019.
- ✓ Lectures on Algebra (as resident faculty) at the Pedagogical Training for Mathematics Teachers (PTMT) programme at Tejpur University, Tejpur, December 25 - 30, 2019.

Sagnik Chakraborty

- ✓ Finiteness of integral closures of analytic and complete local rings, Conference on commutative algebra and algebraic geometry, Indian Institute of Science Education and Research Bhopal, July 5, 2019.
- ✓ Finiteness of integral closures of analytic and complete local rings, Workshop on Commutative Algebra, RKMVERI Belur Math, November 1, 2019.

Pallab K. Dey

- ✓ Prime powers dividing products of consecutive integer values of $x^{2n} + 1$, Indian Statistical Institute Calcutta, January, 2020.

Sanskrit and Philosophy

Sl. No.	Name of the faculty	Programme	Duration	Organised by
1.	Swami Japasiddhananda	A National Level Meeting on "Śaṅkara Jayanti Celebrations"	25 and 26 Jan 2020	Vedanta Bharati, Mysore at Shri Sharadapeetham, Sringeri, Chikkamagaluru, Karnataka
		Five-Day Lectures Series: "Early Chalukyan Monuments"	6 to 10 Jan 2020	Bhandarkar Oriental Research Institute, Pune under the Academic Development Programme supported by Infosys Foundation
		International Seminar on the theme "The Relevance of Indian Philosophy to Contemporary Western Philosophy: A new paradigm of Philosophy"	6 to 8 Jan 2020	Centre for Indological Studies and Research, The Ramakrishna Mission Institute of Culture, Golpark, Kolkata
		Five-Day Certificate Course in Bhartrhari and Philosophy	2 to 6 Dec 2019	Bhandarkar Oriental Research Institute, Pune under the Academic Development Programme supported by Infosys Foundation
		6 th International Sanskrit Computational Linguistics Symposium	23 to 25 Oct 2019	Department of Computer Science and Engineering, IIT Kharagpur, Kharagpur Venue: IIT Kharagpur, Kharagpur
		One Day Workshop on "Learn Sanskrit – The Language of Ayurveda"	29 Sept 2019	Sanskrit Promotion Foundation, New Delhi Venue: Central Ayurveda Research Institute for Drug Development, Kolkata
2.	Gopikrishnan Reghu	75 th Orientation Programme, HRDC	21 Nov – 14 Dec, 2019	Jadavpur University, Kolkata
		Special Lecture on Manuscriptology	16 – 18 August	Kavikulaguru Kalidasa Sanskrit University, Ramtek
3.	Nagaraja Bhat	75 th Orientation Programme, HRDC	21 Nov – 14 Dec, 2019	Jadavpur University, Kolkata

- ✓ Dr. Gautam Chatterjee attended and delivered an invited talk at the First Meeting for the Committee constituted for Empirically Validating the results of SPNF Model at Professor JayashankarTelangana State Agricultural University, Hyderabad, India, 7-8 June, 2019.
- ✓ Hiratan Dey attended a seven days' workshop on "Youth Leadership and People Skills" at TISS (Tata Institute of Social Sciences) Mumbai campus from 27th July to 2nd August 2019.
- ✓ J. Sen, National Workshop on Hands on Training and Exercise on the Tool for Planning of Sustainable Development: ArcGIS held during 6th Sept – 7th Sept, 2019 at Jadavpur University (attended).
- ✓ Dr. A. K. Hazra delivered special lecture at North-Eastern Hill University (NEHU), Shillong, Meghalaya in UGC Refresher Course in Chemistry organised by NEHU in association with UGC-HRDC during 23rd – 26th October, 2019 on the theme of "Chemistry Today".
- ✓ Dr. Sanchayeeta Misra participated in CAFT Training programme on "Inculcating ICT-enabled skills for Technology Transfer" 05th to 25th November, 2019 at Bihar Agricultural University, Sabour, Bhagalpur.
- ✓ Dr. Gautam Chatterjee attended and delivered an invited talk at the XIV Annual Group Meeting of All India Network Project on Organic Farming at ICAR-Central Island Agricultural Research Institute, Port Blair, India, 12-14 November, 2019.
- ✓ Dr. A.K. Hazra delivered an invited lecture at University Science Instrumentation Centre (USIC) Vidyasagar University, Paschim Medinipur, West Bengal, on 13-15th Nov, 2019.
- ✓ Dr. Ashutosh Swarkar attended National Seminar National Seminar on "Agro-Chemical Inputs and Its Extension Approaches towards Food Security and Bio-Safety: Prospects & Challenges" held on 15 & 16 November, 2019, at SAMETI-WB, Narendrapur, organised by SAMETI-WB, IRDM F/C-RKMVERI and SSKVK-RKMVERI.
- ✓ Dr. A. K. Hazra attended 5th IUPHAR World Conference on the Pharmacology of Natural Products, organised by Indian Pharmacological Society in association with National Institute of Nutrition, Hyderabad during 4th – 7th December 2019 and delivered a lecture on "Natural Products for Healthy Ageing: from Molecular Targets to Therapy". 8. Dr.GautamChatterjee attended and delivered a talk at the SERB-ECRA Group Monitoring Workshop at BITS-Pilani, Hyderabad campus, India, 15 February, 2020.
- ✓ Dr. Gautam Chatterjee attended DST-SERB sponsored One-day Workshop on 'Hands-on Learning with Basic Bioinformatics for Beginners' at ICAR-Central Research Institute for Jute and Allied Fibres, Barrackpore, India, 22 February 2020.
- ✓ J. Sen, National Symposium for hands on training on Python, R and QGIS from March 3rd to 6th, 2020 at Adamas University (attended).

FAR

S. No.	Particulars	Attended by
1	Two Day National Conference on 'Promoting Agriculture for Farmers Livelihood & Food Security' held at RKMVERI FAR, on 27 th and 28 th February, 2020.	All FAR Staff members
2	One Day Workshop on Professional Ethics & Plagiarism and Strengthening Research for Quality Publications organized by Research Cell, Sankara College of Science and Commerce, Coimbatore on 31 st August 2019.	Dr. M. Selvam
3	One Day National Level FDP on Teaching English for Specific Purpose: Science and Technology' held at SNS College of Technology, Coimbatore on 22 nd November, 2019	

GAPEY

S. No	Name of the Staff	Conferences / Seminars	Organized by
1	Dr. A.Sathiya Moorthy	Two Day National Workshop on "Quality Assessment and Accreditation Under Revised Accreditation Framework"	Avinashilingam Institute of Home Science and Higher Education for Women
2	Dr. A.Sathiya Moorthy	One Day Workshop on "Movement Therapy (Stretching and Aerobics)"	Manonmaniam Sundaranar University
3	Dr. E. Saravanan	Two Day National Workshop on "Quality Assessment and Accreditation Under Revised Accreditation Framework"	Avinashilingam Institute of Home Science and Higher Education for Women
4	Dr. M. Ravi	National Level Workshop on Research Methodology and SPSS Application in Physical Education	Manonmaniam Sundaranar University
5	Dr. M. Ramajayam	One Day Workshop on "Data Analysis in R Using STATCRAFT"	PSG College of Arts & Science
6	Dr. M. Ramajayam	One Day Workshop on "Movement Therapy (Stretching and Aerobics)"	Manonmaniam Sundaranar University
7	Dr. M. Ramajayam	State Level Workshop on Physiotherapy and Rehabilitation Exercises	CMS College of Science and Commerce

DETAILS OF
SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS
HOSTED / ORGANISED DURING THE YEAR

Physics

Conferences/workshops organised:

- ✓ The Department has organised a one day workshop "Seminar on Emerging Trends in Statistical and Condensed Matter Physics", on January 4, 2020
- ✓ The Department of Physics organised a 3 day workshop on "Observational Astronomy" during 20-22 January 2020, which included both lectures/videos and observation sessions making use of in-house telescopes facilities in the Department.
- ✓ All students of the Department participated the workshop. The sessions of the workshop were conducted by Amar A Sharma, who is a full time amateur astronomer from Bangalore and discoverer of a celestial object (Mira, a variable-type star, which he observed while photographing a portion of the sky using a ccd camera).
- ✓ Dr Shamik Gupta organised the meeting: Quantum and Classical Systems with Long-range Interactions, International Institute of Physics, Natal-RN, Brazil, July 15-19, 2019 (Satellite Meeting of Statphys27)
- ✓ Dr Shamik Gupta, in collaboration with Dr Krishnendu Sengupta (IACS) have started (in August 2019) a joint monthly meet of faculty and students working in the area of condensed matter and statistical physics at (1) the Indian Association for the Cultivation of Science (IACS), (2) RKMVERI, (3) Saha Institute of Nuclear Physics and (4) Indian Institute of Science Education and Research Kolkata.

Seminars by invited speakers in the Department:

Title: N-body chaos and discreteness effects and the relaxation of self-gravitating systems

Speaker: Pierfrancesco di Cintio, University of Florence, Italy

Date: 19th February, 2020

Title: A geometrical description of granular physics

Speaker: Shankar Ghosh, TIFR Mumbai

Date: 14 February, 2020

Title: Basics of Nonlinear Dynamics

Speaker: M Lakshmanan, Bharathidasan University, Trichy

Date: 6 & 7 February, 2020

Title: Physics of Active Grains and Active Fluids

Speaker: Harsh Soni, IISc Bangalore

Date: 6 February, 2020

Title: Melting of the vortex lattice in a Type II superconductor: A story from images

Speaker: Pratap Raychaudhuri, TIFR Mumbai

Date: 5 February, 2020

Title: Genesis of Matter

Speaker: Eung Jin Chun, Korea Institute for Advanced Study, South Korea

Date: 2 January, 2020

Title: Signatures of extra-dimensions in astrophysical and cosmological observations

Speaker: Indrani Banerjee, IACS, Kolkata

Date: 29 April, 2019

Title: An Overture for String Theory

Speaker: Koushik Ray, IACS, Kolkata

Date: 3 April, 2019

Title: Many Bodies and Massive Bodies, a World in Hologram

Speaker: Arnab Kundu, SINP, Kolkata

Date: 20 March, 2019

Title: Synchronization in next generation microelectronic systems: flat hierarchies - can the 'reference clock' be abolished?

Speaker: Lucas Wetzel, Max Planck Institute for the Physics of Complex Systems, Dresden

Date: 18 March, 2019

Title: Cyclotron Resonance in Astrophysics

Speaker: Dipankar Bhattacharya, IUCAA, Pune

Date: 8 March 2019

Title: The sorrow of Bengal: Myth or Reality

Speaker: Kalyan Rudra, West Bengal Pollution Control Board

Date: 20 February, 2019

Title: Musical vibrations in the brain: A neurocognitive physics exploration through fractal microscope

Speaker: Shankha Sanyal, Jadavpur University

Date: 6 February, 2019

Computer Science

Department of Computer Science conducted a one-day corporate training on building real world database applications.

Mathematics

- ✓ Prof. Sukumar D. Adhikari was one of the organizers of the “Workshop on Additive Combinatorics” held at the International Center for Theoretical Sciences Bangalore from 24 February to 06 March 2020 (Workshop link <https://www.icts.res.in/program/wac20>).
- ✓ Prof. Adhikari and Prof. Stephan Baier gave series of talks at the workshop. Eight of the 24 selected participants at the workshop were from the department, which included faculty members, post-docs and PhD students.

Sanskrit and Philosophy

S No.	Title of Workshop	Name and place of the Resource Person(s)	Dates	Duration	Convener	No. of Participants
1	Vyākaraṇa Mahābhāṣya of Patañjali (Ekaśeṣāhnikam)	<p>Swami Atmapriyananda Maharaj, Vice Chancellor, RKMVERI (Inaugural Speech :)</p> <p>Prof.Narottam Senapati, Visva Bharati, Shantiniketan (Keynote Address)</p> <p>Dr.Sudhakar Mishra, Sri Sitaram Vaidic Adarsha Samskrita Mahavidyalaya (Special Lecture)</p> <p>Dr.Ch.K.Padmanabham, Rashtriya Sanskrit Sansthan, Sringeri Campus (Technical Session)</p> <p>Prof.Satyajit Layek, Sanskrit Department, Calcutta University, Kolkata (Valedictory Session)</p> <p>Dr.Parboti Chakraborty, Sanskrit Department, Rabindra Bharati University (Valedictory Session)</p>	23 – 29 Februry 2020	7 Days	Dr.Neeraj Kumar Bhargave Asst. Professor, Dept. of Sanskrit and Philosophy	40

IRDM

- ✓ The ARD Department along with IRDM Faculty Centre organised a 5-days training programme for 60 rural women on “Scientific Rearing of Goat and Sheep” during 26-30 December 2019, supported by the Department of Biotechnology, Government of India.
- ✓ The ARD Department alongwith IRDM Faculty Centre collaborated with the State Agricultural Management and Extension Training Institute and SasyaShyamala Krishi Vigyan Kendra to Organise a National-level e-SEMINAR titled “Strategic Agriculture for Rural Employment and Sustainable Development” on 30 June 2020.
- ✓ The ARD Department alongwith IRDM Faculty Centre participated in the National Seminar on ‘Agrochemical Inputs and its Extension Approaches towards Food and Bio-security: Prospects and Challenges (AEFS)” jointly organized by ATC/SAMETI, IRDM Faculty Centre and SasyaShamalaKrishiVigyan Kendra during 15-16 November, 2019.
- ✓ ERASMUS and tutorial meeting was organised by EDM department during 23rd – 24th January, 2020 in the presence of International delegates from the participatory institutes.
- ✓ Dr. J. Sen signed as a coordinator under the online courses of IIRS elearning programme for advanced learning on GIS and remote sensing.
- ✓ Organised a short training course on “Food Processing” during 18-23 November, 2019. Trainees including

IRTDM

S. No.	Event	Date / No. of participants	Highlights
1	Special Lecture on ‘How to prepare for competitive examinations’	30 April, 2019 No. of participants: 80	Dr. S.K. Barnwal, Principal Secretary to Chief Minister, Govt. of Jharkhand
2	One day Workshop on ‘Empowering Youth through Education and Skill (EYES)’	10 May, 2019 No. of participants: 360	
3	Invited Lecture on ‘Anthropology and Tribes of India: Anthropological Perspectives’	30 May, 2019 No. of participants: 150	Dr. Dipankar Chatterjee, Head, Dept. of IRTDM, RKMVERI delivered the lecture organized by Indira Gandhi National Centre for the Arts, Regional Centre Ranchi, Govt. of India
4	Special lecture session on Beekeeping practices	12.6.2019 and 3.7.2019	Dr. V. Dhote, Asst Prof., IRTDM, RKMVERI conducted a special session for the Farmers’ training on Beekeeping

5	International Yoga Day	21.6.2019 No. of participants: 50	Faculty and students of RKMVERI participated in a Yoga session organized by Ramakrishna Mission Ashrama, Ranchi to celebrate International Yoga Day
6	Special lecture session on Organic Farming	17.6.2019	Dr. A. Kumar, Asst Prof., IRTDM, RKMVERI conducted a special session on Organic Farming for the students of Jharkhand Rai University
7	Orientation of the newly admitted students	9 July 2019 No. of participants: 150	Swami Atmapriyananda, Honorable Vice Chancellor, RKMVERI delivered a motivational speech to inculcate the feeling of being a part of great institution in the hallowed name of Swami Vivekananda
8	Importance and scope of higher studies through distance mode of education	17 July 2019 No. of participants: 170	Dr. S. Mohanty, Regional Director, IGNOU, Ranchi - delivered a lecture highlighting the changing landscape of higher education scenario in India through distance mode of education.
9	Experience sharing on participation at Chula Right Livelihood Summer School Programme, Thailand	31 July 2019 No. of participants: 80	Sri Koustab Majumdar shared his learning experience at Thailand highlighting the changing approaches in rural development research and also shared the entire process to access such opportunities abroad for the rural development graduates
10	Special Lectures on the occasion of World Tribal Day	9 August 2019 No. of participants: 250	Special Lectures delivered by Dr. Dipankar Chatterjee, RKMVERI on 'Importance of Tribal Language for sustaining bio-cultural diversity' Smt Aruna Tirkey, Tribal Women Entrepreneur on 'Tribal Cuisines of Jharkhand'
11	Special Lecture on Youth Leadership	21 August 2019 No. of participants: 100	Sri Avinash Kumar, Faculty, Dept. of Yoga, Ranchi University delivered a lecture highlighting the role of Yoga in developing personality with leadership quality.
12	Special lecture on self-reliance	26, August 2019 No. of participants: 200	Swami Divyananda, Pro-Chancellor, RKMVERI delivered a speech mentioning the need of self-control and integrity in developing personality. He cited different

			examples from Kathopanishad for character development.
13	National Seminar on Regeneration of Rural India: Perspective, Issues and Way Forward	25-26 September 2019 No. of participants: 250	Sixty one scholars from 23 institutes representing eight states have presented their research findings.
14	Special Lecture on Jal Jivan Mission	28, October 2019 No. of participants: 150	Sri Amit Bhuin, State Coordinator, Jal Jivan Mission (JJM), Govt. of Jharkhand delivered a lecture on the importance of water and different initiatives by the govt. to conserve water through the new scheme. He also shared the job opportunity for rural development graduates under JJM scheme for the next five years

FDMSE

National Conference

- ✓ A Two-Day National Conference on “Inclusive Education and Adapted Physical Education: Traditional and New Approaches in Developing 21st Century Skills for Students with Special Needs” was organized by FDMSE &GAPEY on 21st and 22nd February 2020.
- ✓ Swami Nityadipanandaji, Ramakrishna Math, Kavundampalayam, Coimbatore, delivered the Presidential address. Dr. K. Balabhaskar, HoD - Adult Independent Living, NIEPMD, Chennai, delivered the keynote address.

Continuing Rehabilitation Program (CRE)

S. No.	Date	Title	No. of beneficiaries
1	29 th to 31 st Aug 2019	Addressing Barriers in the Environment and Universal Design	27
2	19 th to 21 st September 2019	Application of Technology in Education and Training	27
State level Conference			
1	14 th to 16 th November 2019	Addressing Barriers in the Environment and Universal Design	50

Workshop & Awareness Programs

S. No.	Program	Speaker/Resource Person	Date	No. of beneficiaries
1	A two-day computer literacy training program for students with visual impairment and their parents	Mr. Navarasan, Karna Vidya Foundation & Mr. Kumaresan, Book Share, Chennai,	30 th Sep & 1 st October 2019	16
2	A five day computer literacy training program for students with visual impairment and their parents	Mr. Navarasan, Karna Vidya Foundation & Mr. Kumarsen, Book Share, Chennai	27 th to 31 st May 2019	15
3	A Two day Training Program on "Teaching Individuals with Intellectual Disabilities - Praxis and Challenges	Experts from Coimbatore	21 st & 22 nd June 2019	30

APSSA Training Program

- ✓ A five-day Residential Training Program for the Resource Teachers working in Inclusive schools of Andhra Pradesh, sponsored by Samagra Shiksha Andhra Pradesh was organized from 27th Jan to 31st Jan 2020.
- ✓ In total 77 participants from Samagra Shiksha Andhra Pradesh comprising Resource Teachers, Physiotherapists and District Coordinators attended the training program.

Special Lectures

S. No.	Name	Designation	Topic	Date
1	Dr. N. Anandan	Associate Professor, KG College of Health Science Coimbatore	Information Processing – Attention, Sensation and Perception	31 st August 2019
2	Mrs. Kasturi Sridhar	Sign Language Expert, Bangalore	Deafness, its Social & Medical Models and Indian Sign Language	14 th September 2019
3	Dr. P. Pramod	Principal Scientist – Salim Ali Center for Ornithology and Natural History, Coimbatore	Learning from Nature	3 rd October 2019
3	Ms. Brinda Chakrapani	Qualified professional in the art of Story-telling, Coimbatore	Holistic development of children with disability through the art of Story-telling	2 nd November 2019
4	Dr. Sandra Chandramouli	Consultant, Department of Pediatric	Visual Impairment in Children: Identification, Assessment, Rehabilitation & Prevention	25 th January 2020

		Ophthalmology and Strabismus, Aravind Eye Hospital, Coimbatore		
5	Dr. K. Renuga	Occupational Therapist, AMBIKA Pediatric Occupational Therapy Clinic	Occupational Therapy for Children with Intellectual Disabilities	25 th February 2020

GAPEY

S. No	SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS	Dates
1	One day workshop on 'Intellectual Property Rights (IPR)'	15 November 2019
2	National Conference on Inclusive Education and Adapted Physical Education: Traditional and New Approaches in developing 21st Century Skills for Students with Special Needs	21 & 22 February 2020
3	Guest lecture on "Yoga and Naturopathy"	1 February 2020

DETAILS OF PROJECTS / RESEARCH WORK UNDERTAKEN DURING THE YEAR

Physics

Shamik Gupta: MATRICS scheme of Science and Engineering Research Board (SERB), Government of India; Project period: 2020 – 2023; Total amount: 6 lacs + Overheads to RKMVERI

Shamik Gupta: TARE scheme of Science and Engineering Research Board (SERB), Government of India; Project period: 2019 – 2022; Total amount: 7.5 lacs + Overheads to RKMVERI

Amitava Bhattacharyya: Comprehensive Diagnosis of Novel Emergent Properties in Quantum Materials; Project Value: 19 Lakh

Amitava Bhattacharyya: Experiments at International Laboratories:

The following experiments scheduled during lockdown at RAL, Oxford, PSI, Switzerland, and DESY, Germany. Trying to prepare these samples in collaborating with several research groups.

- ✓ Inelastic X-ray scattering study on NdPt₂Si₂ and PtPt₂Si₂
- ✓ Gap symmetry of YCoC₂, Zr₅Pt_{2.9}C_{0.1}
- ✓ Spin liquid states in low dimensional systems

Amitava Bhattacharyya: Submitted International Research Proposals at Paul Scherrer Institute, Switzerland; German Electron Synchrotron DESY, Germany; Rutherford Appleton Laboratory, Oxford, UK). Titles of the proposals are as follows:

- ✓ MuSR study in the cage-type superconductors Sc₅Co₆Sn₁₈: A possible unconventional superconductor
- ✓ Multiband Superconductivity of Heavy Electrons in CsNi₂Se₂ single crystals with Muon
- ✓ Noncentrosymmetric BaPtSb with an Ordered Honeycomb Network: μ SR study
- ✓ Spin glass behavior in quasi-one-dimensional conductor Cs_{0.9}Ni_{3.1}Se₃: μ SR study
- ✓ Cu_{0.3}ZrTe_{1.2}: A possible multiband topological superconductor
- ✓ Study of Superfluid density in single-crystalline of FeTe_{0.55}Se_{0.45} with muon

Computer Science

Students' Summer Project (May-June 2019)

The CS and BDA students are encouraged to carry out a 1½ month summer project on a topic of their choice. The duration for this work was further extended into the third semester (July-Dec). There were evaluated by the presentations of their work.

Students' MSc Project (Jan-June 2019)

Students of BDA carry out corporate internship for four months between Jan-June for the degree project. This time they secured internship offers from IIT Patna (1), Tata Steel Jamshedpur (2), Reddy labs Hyderabad (3), Tata Consultancy Pvt Ltd (TCS) Mumbai (4), TCS Pune (1), TCS Indore (1), RS Software Kolkata (1), Autowiz Bengaluru (1) Z communications, Bengaluru (1). All of these fall under the category of paid internships. One student of computer science secured a paid internship at Aracnomesh Tech. Noida. Three students of BDA, and 11 students of CS did academic internship.

Sports Science and Yoga

- ✓ Improvement of general health, cardiovascular and metabolic risk factors in visually-impaired teenagers through yoga, meditation and orientation ability training- To LV Prasad Eye foundation-Hyderabad- By Kunal Sikder and Asis Goswami.
- ✓ Hepato-Ayurgenomics: combining Genetics and Ayurveda for personalized diagnosis and therapy against chronic liver diseases- To AYUSH- By Kunal sikder and Dr. Kalipada Pal
- ✓ Management of Pain in Knee Osteoarthritis by Yoga: Submitted to: CCRYN, ministry of AYUSH 2019-2020 under EMR research scheme by Dr Arkadeb Dutta, Dr Santiranjan Dasgupta.

Mathematics

Ongoing funded projects

Project: Gelfand-Kirillov dimension of simple modules over quantum polynomial algebras -

- ✓ Principal Investigator: Dr. Ashish Gupta
- ✓ Funding agency: National Board for Higher Mathematics (NBHM)
- ✓ Year of award: 2016

Project: Combinatorial Commutative Algebra

- ✓ Principal Investigator: Dr. Arindam Banerjee
- ✓ Funding agency: Department of Science and Technology
- ✓ Year of award: 2017

Project: Zero-sum constants, regularity of Diophantine equations and other problems in Combinatorial Number Theory

- ✓ Principal Investigator: Prof. Sukumar D. Adhikari
- ✓ Funding agency: Science and Engineering Research Board (SERB)
- ✓ Year of award: 2019

Other research Projects

Prof. Sukumar D. Adhikari

- ✓ Existence of monochromatic solutions of certain equations for finite colorings of integers and some external problems in combinatorics

- ✓ Zero-sum problems in additive combinatorics. A monograph is being written on this topic jointly with Prof. R. Thangadurai. There is also an ongoing project on weighted generalization of some classical results and applications of them.

Prof. Stephan Baier

- ✓ Restricted Diophantine approximation for number fields (with Dwaipayan Mazumder and Marc Technau)
- ✓ Large sieve inequalities for number and function fields (with Arpit Bansal and Rajneesh Kumar Singh)
- ✓ Central limit theorems for elliptic curves and modular forms (with Neha Prabhu and Kaneenika Sinha)

Dr. Sudeshna Basu

- ✓ Farthest point problems in Normed Linear Spaces with Prof. Lakshmi Kanta De

Dr. Arindam Banerjee

- ✓ Symbolic Powers of Ideals with Kanoy Das

Dr. Sagnik Chakraborty

- ✓ Retracts of polynomial rings (started sometime in late 2018) with Amartya Kumar Dutta, Neena Gupta and Nikhilesh Dasgupta (all from ISI, Kolkata).
- ✓ Integral closures of complete and analytic local rings (started sometime in early 2019) with R.V.Gurjar and Dibyendu Mondal (both from IIT, Mumbai).

Br. Dripta Mj

- ✓ Bayesian optimization of coastal profiles using nonlinear shallow water equations in collaboration D. Dutykh, University of Savoie.

IRDM

Project Title: Biotech Kisan Hub (2018-2020, likely to be extended)

Funding Agency: Department of Biotechnology, Government of India (INR10 Lac for the first two years). As an activity of the project, one 5-days training programme was organized for 60 rural women during 26-30 December, 2019 at the IRDM Faculty Centre. 100 Black Bengal goat were distributed freely among 50 trainee women of Hingalganj Block, South Paraganas district (Dr.Rupak Goswami and Dr.Sanchayeeta Misra, Co-PI).

Project Title: Human surface thermographic profiling as indicator of climate susceptibility and impact mitigation using social networking (Dr.Rupak Goswami acted as Co-PI)

Funding Agency: Department of Science and Technology, Government of India (2017-2020).

Other Projects:

- ✓ All India Network Project on Organic Farming. Indian Council of Agricultural Research, Govt. of India. [Rs. 6- 7 lakhs per annum] (Dr. Gautam Chatterjee, PI).

- ✓ A voluntary centre of 'All India Coordinated Maize Improvement Project, Indian Council of Agricultural Research' [Rs. 40,000 - 50,000 per annum] (Dr. Tapash Dasgupta, PI and Dr. Rambabu Raman, Subject Matter Specialist, Plant Breeding, Sasya Shyamala Krishi Vigyan Kendra, Co- PI).
- ✓ Structure-function analysis of the centromeres and its associated centromeric protein CENP-A of the human pathogenic *Candida parapsilosis* species complex. (ECR/2016/001138/LS). Science and Engineering Research Board (SERB), Govt. of India. 2017-2020. [Rs. 40.49 lakh] (Dr. Gautam Chatterjee, PI).
- ✓ Ongoing DST project 'Human Surface Thermographic Profiling as Indicator of Climate Susceptibility and Impact Mitigation through Localized Social Networking'. (Dr. P. K. Nag, PI).
- ✓ Ongoing ERASMUS project 'Strengthening Network Education, Research and Innovation in Environmental Health in Asia' (Dr. P. K. Nag, PI).
- ✓ A Project entitled "Development of potential AChE –inhibitors from North-East Indian Plants: Activity-Guided Isolation, Purification and Validation using transgene-AD mouse" submitted to DBT under Twinning Program 2017-18 in collaboration with North Eastern Hill University (NEHU), Shillong has been sanctioned. The order regarding fund release was issued on 2nd July 2020 to implement the project. (Dr. Alok K. Hazra, PI).
- ✓ A project on 'Developing Multi-stress tolerant breeding materials in rice and mustard through advanced breeding method' has been sanctioned by Department of Agriculture, Government of West Bengal [Rs 85 lakh; first instalment of Rs. 45 lakh has been released] (Dr. Tapash Dasgupta, PI and Dr. Ashutosh Sawarkar, CO PI).
- ✓ Establishment of 'Tissue culture laboratory and banana saplings commercialization' initially National Horticultural Mission, Government of India, sponsored the project and presently under commercialization phase. (Rs. 94.00 Lakh, PI: Dr. Tapash Dasgupta).

IRTDM

S. No.	Project/Seminar Title	Funding Agency	Principal Investigator	Amount
1	An ethnographic account on elderly and related public issues with reference to Tribals of Eastern India.	Indian Council of Social Science Research, Ministry of HRD, Govt. of India	PI- Dr. Dipankar Chatterjee	8 lakhs
2	Evaluation of Jharkhand Tribal Empowerment and Livelihoods Project	Dr. Ramdayal Munda Tribal Welfare Research Institute, Govt. of Jharkhand	PI- Dr. Dipankar Chatterjee Co PI- Dr. Deep Narayan Mukherjee and Dr. A.K. Dutta.	6 Lakhs
3	Ethnographic Study of three tribes of Jharkhand (Kol, Khond, Gorait)	Dr. Ramdayal Munda Tribal Welfare Research Institute, Govt. of Jharkhand	PI- Dr. Dipankar Chatterjee Co PI- Dr. Deep Narayan Mukherjee, Dr. S. Biswas and Sri Koustab Majumdar.	6.30 Lakhs

4	Study of Millets production and consumption pattern in last 20 years	Dr. Ramdayal Munda Tribal Welfare Research Institute, Govt. of Jharkhand	PI- Dr.Deep Narayan Mukherjee. Co-PI- Dr. Dipankar Chatterjee and Dr. S. Biswas and Dr. Adyant Kumar	5.50 Lakhs
5	Evaluation of RurBan clusters of Jharkhand and West Bengal	Ministry of Rural Development	PI- Dr.Deep Narayan Mukherjee. Co-PI- Dr. Dipankar Chatterjee and Dr. A. Sengupta	21 Lakhs

FDMSE

Project proposals: UGC-STRIDE Scheme

- ✓ The project proposals submitted by Dr. S. Parween, Dr. Sudha A., Dr. J.B. Dheesha and Dr. Saumya Chandra have been shortlisted. Final presentations will be done after receiving communication from UGC.

Project proposal: NCERT

- ✓ A project proposal titled 'Problem Based Learning Method to teach Science Concepts among Tribal Children' was resubmitted by Dr. Sudha A. to NCERT, having incorporated their suggestions on 16th March 2020. Communication is awaited.

FAR

The following projects were submitted to the DST-SERB during the year 2019-2020 and review of the projects by **DST-SERB is in progress -**

S. No.	Project name	Submitted by	Agency
1	Exploring the potential of Actinobacteria for its nematocidal activity and management of burrowing and lesion nematode in banana	Dr. N. Jaivel	DST-SERB
2	Developing the zero-valent iron nano composite for treating the wastewater	Dr. K.Vinoth Kumar	DST-SERB
3	A laboratory incubation study using omission techniques of nutrient release pattern	Dr. G. Yoganadhan	DST-SERB
4	Diversity of predatory mites and their predatory potential against phytophagous mites in rice ecosystems of Tamil Nadu	Dr. S. Suresh	DST-SERB
5	An analytical study on rain-fed ecosystem-farmers perception and their adaptation to climate change in Tamil Nadu	Dr. Masanaselvam	DST-SERB

OTHER ACTIVITIES DURING THE YEAR

Physics

Awards & Honors by the Members of the Department:

- ✓ Dr. Shamik Gupta (Associate Professor): selected as INSA (Indian National Science Academy) Visiting Scientist for the year 2020. (Hosted at the Indian Association for the Cultivation of Science (IACS), Kolkata; Joint project with Prof. Krishnendu Sengupta, IACS.)
- ✓ Dr. Shamik Gupta has been acting as Coordinator of the Affiliated Centre of the International Centre for Theoretical Physics (ICTP), Trieste, Italy at the Department of Physics, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math, Howrah
- ✓ Dr. Shamik Gupta has been appointed Regular Associate of the International Centre for Theoretical Physics (ICTP), Trieste, Italy for the period 1st January, 2020 -- 31st December, 2025
- ✓ Debraj Das (PhD Student) received offer for two post-doctoral positions at University of Bristol, Bristol, UK and Saarland University Saarbrücken, Germany
- ✓ Suchetan Das (PhD Student) received offer for a post-doctoral positions at Indian Institute of Technology (IIT), Kanpur

Sanskrit and Philosophy

Educational Tour

Date	Places visited	Participants
17 February 2020	Kamarpurkur & Jayarambati, with a halt at Antpur	107 (78 students+ 16 research scholars+ 10 teachers + 3 staff)

- ✓ Shawn Esmaili, A Graduate student from the University of California-Davis, visited and worked at the IRDM Faculty as a fellow of Global Fellowships for Agricultural Development (<https://caes.ucdavis.edu/outreach/geo/fellowships/GFAD>) from November 2019 to January 2020.
- ✓ Dr. Gautam Chatterjee acted as an external examination paper setter B. Sc. (Ag.) Honours End Term Examination of Bidhan Chandra Krishi Viswavidyalaya, in 2019.
- ✓ Dr. Gautam Chatterjee participated as an expert of organic farming to design and formulate course content of certificate course on 'Plant Health Management in Organic Farming' at National Institute of Plant Health Management, Hyderabad in 2019.
- ✓ Dr. Tapash Dasgupta acted as an Examiner of Ph.D. thesis evaluation of Institute of Agricultural Science, Benaras Hindu University and Bidhan Chandra Krishi Viswavidyalaya in 2019.
- ✓ Dr. Gautam Chatterjee acted as an External Examiner for setting question papers of B. Sc. (Hort.) Hons. End Term Examination, Bidhan Chandra Krishi Viswavidyalaya in 2019.
- ✓ Dr. Gautam Chatterjee participated as a Special Invitee in the First Meeting for the Committee constituted for Empirically Validating the results of SPNF Model at Professor Jayashankar Telangana State Agricultural University, Hyderabad in 2019.
- ✓ Dr. Tapash Dasgupta acted as an invited expert member of the 'State Varietal Release Committee' of Department of Agriculture, Government of West Bengal to evaluate the submission proposal of scientists and teachers to consider the release of new varieties in agricultural crops, 2019.
- ✓ Dr. Gautam Chatterjee and Mr. Supriyo Ghorui participated as experts and mentors to the 'Awareness and Motivation Workshop' for affiliated/ constituted colleges under the Jharkhand Higher Education on the Revised Accreditation Format of NAAC held at Ranchi University, Ranchi on 16 December and at Vinoba Bhave University, Hazaribag on 18 December in 2019.
- ✓ Dr. Tapash Dasgupta acted as an expert member in the selection committee of Assistant Professor and Associate Professor at Uttar Banga Krishi Viswavidyalaya, in 2019 and 2020.
- ✓ Dr. Tapash Dasgupta delivered a special lecture on "Marker assisted breeding in sesame" at Uttar Banga Krishi Viswavidyalaya, March, 2020.
- ✓ Dr. Tapash Dasgupta acted as a joint supervisor along with Dr. Inez-Slamet Loedin, IRRI in M.Sc (Ag.) dissertation supervision of Mr. Akash Datta, on the topic "Study of OsNAS genes and evaluation of genome edited lines in rice" as a part of joint collaborative research between Genetics and Plant Breeding Department, IRDM Faculty Centre, RKMVERI and International Rice Research Institute, Manila, Philippines. 2020.

- ✓ Dr. Gautam Chatterjee acted as a Resource person to deliver a lecture on 'Emerging Role of Centromeres in Genome Evolution to Chromosome Manipulation' in the ICAR sponsored Training Programme at ICAR-Central Research Institute for Jute and Allied Fibres in **2020**.
- ✓ Dr. Gautam Chatterjee acted as an External Examiner of M. Sc. (Ag.) thesis of Bidhan Chandra KrishiViswavidyalayain 2020.
- ✓ Dr. Tapash Dasgupta served as an expert member of Research Advisory Committee (RAC) of ICAR- Central Research Institute for Jute and Allied Fibres during 2017-2020.

IRTDM

1) Celebration of Constitution Day

Date and Venue: 26 November, 2019 and Faculty of Agriculture, Rural and Tribal Development, RKMVERI

Activities:

India is governed in terms of the constitution of India, which was adopted by the constitution Assembly on 26th November 1949 and came into force on 26th January, 1950. The Preamble of Indian Constitution records the aims and aspirations of the people of India and reflects the basic spirit of the Constitution. To spread the importance of the Indian Constitution, India observes November 26 as the Constitution Day of India. This year being the 70th anniversary of Constitution of India, it was celebrated across the nation on high spirits. Faculty of ARTD celebrated this day by organising pledge taking ceremony during the morning assembly followed by the read out of Preamble of the constitution by Dean, RKMVERI. The programme was attended by students, faculty and other staff of the faculty centre. Lectures and speech related to the fundamental duties of the constitution was delivered by students and faculties of the campus. Afterwards, every participants assembled at the conference room of the faculty centre to view the live telecast of the programme from the central hall of parliament.

Participants:

- ✓ No. of students participated - 200
- ✓ No. of Teaching staff / faculty participated - 11
- ✓ No. of Non-Teaching staff participated - 10
- ✓ No. of officials participated - 2

2) Celebration of National Youth day

Date and Venue - 12 January 2020 and Faculty of Agriculture, Rural and Tribal Development, RKMVERI

Activities:

There were about 400 students from 10 different schools of Ranchi participated in the event which was organized on the occasion of 157th birth anniversary of Swami Vivekananda. There were about 200 students from RKMVERI, Ranchi also participated actively in the programme. Many of them

performed different cultural programmes like Folk song, drama, speech etc. Smt. Anubha Rawat chowdhary, Honourable Justice, High Court, Jharkhand was the Chief Guest of the programme and Dr. S. K. Barnwal, IAS, Government of Jharkhand was also present as the Guest of Honour. Other respected dignitaries like Rev Swami Bhaveshananda, Secretary, RKM Ashrama, Ranchi along with others monks of the ashrama, Principals of several schools and the faculties of RKMVERI also present in the programme. A rally was organized in the morning comprising of students of RKMVERI, trainees of Divyayan KVK and the members of Vivekananda Kishor Dal.

No. of Participants:

Students	Faculty	Non-teaching staff	Officials	Others	Total No. of Participants
600	15	10	5	100	730

3) Annual Cultural Programme - *UMANG*

Like every year, Faculty centre organized the annual cultural programme titled *Umang* on 1 February, 2020. Sri Ravi Ranjan, Director, State Institute of rural Development, Ranchi was the chief guest on the occasion. The students of different batches performed dances, songs, skit, live art etc. that make the evening really colorful. On that occasion, best student of every batch and the best student of the campus were awarded based on their last year's performance in scholastic and non-scholastic activities. **No. of Participants:**

Students	Faculty	Non-teaching staff	Officials	Others	Total No. of Participants
250	15	10	05	50	330

4) Alumni Meet 2020:

The third Alumni Meet was held at the Faculty of ARTD on 2 February, 2020. The programme was graced by several dignitaries that includes Revered Swami Bhaveshananda Maharaj, Administrative Head, Faculty of ARTD, RKMVERI, Dr. S.K. Barnwal, IAS, Govt. of Jharkhand, Sri Prashant Das, Chief Field Officer, UNICEF, Ranchi and Ms Dipti Diana Kullu, HR Manager, JSLPS. Alumni meet started with formal registration at 9 am. The registration team headed by Dr. Sudarsan Biswas and Sri Supratim Patra. A total of 67 alumni attended the programme from different parts of India. The inaugural session of the meet started with Vedic invocation followed by opening song. Dr. B.C. Saha, Dean of the ARTD Faculty delivered the welcome address highlighting the significance of Alumni meet for the growth of the institution. Swami Bhaveshananda briefed the phases of development of the faculty centre since its inception in 2006. Alumni shared their experiences with the present students. The first session ended with vote of thanks by Dr. Dipankar Chatterjee, Head, Division of Rural and Tribal Development. In afternoon session, panel discussion was organized followed by the special lecture by the invited dignitaries. Finally, new body was elected and constituted to carry forward the work of Alumni association. The new body thanked the alumni in reposing their faith in them and pledged to work selflessly for the growth of association. The amazing day ended with felicitation of Alumni with a memento and specially designed t shirt. The events concluded with final vote of thanks by Dr. A Sengupta followed by group photographs.

No. of Participants:

Present Students	Alumni	Faculty and Staff	Others	Total No. of Participants
82	67	20	15	184

FDMSE**Faculty Development Program**

- ✓ A One Day Faculty Development Program on Significance of Intellectual Property Rights (IPR) in Higher Education was organized on 1st November 2019.

International Day of Persons with Disabilities

- ✓ International Day of Persons with Disabilities was observed on 3rd December 2019.
- ✓ Dr. M. Anjum Khan (Asst. Prof.) Avinashiligam University, Coimbatore, was the Chief Guest.

FAR**Rural Agricultural Work Experience (RAWE) Exhibition**

- ✓ RAWE exhibition was conducted on 5th November 2019 by final year B. Sc. (Ag.) students. Thirty two farmers from nearby villages of Vidyalaya and 10 B. Sc. (Ag) students from TNAU, Coimbatore visited the exhibition. From our Vidyalaya, 13 Heads of Institutions, 40 staff members, 650 college students and 210 school students visited the exhibition. During the exhibition, farmers were explained about the novel agricultural practices like minimal water rice cultivation, rice cultivation using wastewater and low-cost sub-surface irrigation and other methodologies.

Crop production

- ✓ Crop production is a branch of agriculture that deals with practical way of growing crops. Third year students underwent the paddy crop production in the Vakkilnaikkar thottam farm field (1.3 acres), under the VU-AGR 301 crop production course and got fruitful results.

GAPEY

1. As a part of Faculty Development Programme GAPEY organised a short term course on “**ENHANCED DIGITAL LITERACY AND APPLICATIONS TRAINING**”. Experts from Cognizant Technology Solutions were the resource persons. The programme was spanned across 7 sessions from 1 June 2019 to 3 August 2019.

2. As a part of Staff Development Programme ***“Environmental Awareness and Camping Ethics”***, our Faculty members Dr. R. Giridharan, Dr. A. Sathiya Moorthy, Dr. M. Ravi, Dr. E. Saravanan visited Salim Ali Centre for Ornithology, Nilgiris Biosphere Nature Park and Vidya Vanam CBSE Senior Secondary School at Thoovaipathy, Anaikatti Hills, Coimbatore on 17.08.2019.

3. As a part of Development Programme for teaching staff, two sessions were organised on 8th and 22nd September 2019, on the topic ***“ADVANCED STATISTICS AND ITS APPLICATION IN SPORTS”***, with Dr. G. Ravindran, Principal, Sri Koviloor Andavar College of Physical Education, Karaikudi as the resource person.

4. Faculty Development Programme for the teaching staff on ***“Presentation and Public Speaking Skills”*** was organized on 30.01.2020. Mr. T.M. Srikanth, Retired Journalist, Times of India and Director, Vidya Vanam Senior Secondary School (CBSE), Anaikatti was the Resource Person.

5. Faculty Development Programme for the non teaching staff on ***“Office Management and Documentation”*** was organized on 01.02.2020. Sri K. Purusothaman, Typist and Sri D. Vasantha Prasanth, Record Clerk, Sri Ramakrishna Mission Vidyalaya College of Arts & Science were the Resource Persons.

TRAINING PROGRAMMES AND COMPETITION ORGANIZED

1. Yoga for All: In connection with International Day of Yoga, yoga asanas was taught to the students’ of Panchayat Union Middle School, Periyanaickenpalayam as an initiative towards involving the local community for the social cause on 23.06.2019. Dr. M. Ravi, Assistant Professor, coordinated this program

2. Leadership Training Camp: Leadership Training Camp was held from 29.09.2019 to 04.10.2019 at Vidya Vanam School, Thuvaipathy, and Anaikatti. Six staff members and 49 students participated in the camp. The Valedictory function was conducted on 04.10.2019.

3. Run for Unity: Rashtriya Ekta Diwas was observed on 31st October 2019, in commemoration of 144th Birth Anniversary of Sardhar Vallabhbhai Patel. A mini marathon “Run for Unity” was organized by the Student Literary Association. Pledge was taken to stress the importance of unity, integrity and security of the nation.

3. State Level Yoga and Kalari Competition: State Level Yogasana and Kalari Competitions were organized on 08.02.2020 at Vidyalaya Indoor Stadium. 60 Competitors from 5 schools and a total of 419 competitors (Boys – 213; Girls – 165; Special Children – 41) from 20 schools took part in Kalaripayattu and Yogasana competitions respectively from Coimbatore, Erode, Tirupur and Nilgiri Districts. Swami Jnanapurnananda Maharaj, Ramakrishna Mission Vidyalaya was the Chief Guest who distributed medals & certificates for the winners.

5. Swachh Bharat / Vidyalaya Programme: Our staff and students involved in the Swachh Bharat programme during the following days –

Date	Place of Cleaning
12.07.2019	Cleaned the premises of Research Block southern side
10.10.2019	Cleaned the premises of Periyanaickenpalayam Police Station
03.02.2020	Cleaned the areas inside the Gate No 1
04.02.2020	Cleaned the premises of Periyanaickenpalayam Police Station

PROGRAMMES FOR PERSON WITH DISABILITIES

1. District Level Special Olympics Athletic Meet: GAPEY organized District Level Special Olympics Athletic Meet on 30.08.2019. Swami Divyaprajananda Maharaj, Assistant Administrative Head, RKMVERI inaugurated the sports meet. A total of 120 students from FDMSE Special Education Unit, Vidya Vikasini Opportunity School, Kaumaram Prashanthi Academy and Amaze Special School participated. In the valedictory function Sri C. K. Thangamani, Coimbatore, DDAWO, Sri S. Shankar Subbiah, Agate Infotech, Chennai were the chief guest and distributed prizes.

2. Team India - Wheelchair Basketball Camp: Ramakrishna Mission Vivekananda Educational and Research Institute, Faculty of General & Adapted Physical Education and Yoga along with Wheelchair Basketball Federation of India Jointly organize Indian Wheelchair Basketball Training Camp at Ramakrishna Mission Vidyalaya Indoor Stadium, Coimbatore from 14.11.2019 to 26.11.2019. The inaugural function held on 17.11.2019, Dr. R. Giridharan, Associate Professor and Head, Faculty of GAPEY, welcomed the gathering. Mrs. P. Madhavi, President, Wheelchair Basketball Federation of India and Captain N. Vinod Sankar, Commandant, Air Force Administration College, were introduced to the athletes who gave a motivational talk on "Elite Sports Participation and Performance by Persons with Disabilities".

Team India uniform release and valedictory function was organized on 25.11.2019. Dr. R. Giridharan, welcomed the dignitaries, Swami Garishthanandaji Maharaj, Administrative Head, RKMVERI, Coimbatore campus and Secretary, SRMV, Swami Divyaprajanandaji Maharaj, Assistant Administrative Head, RKMVERI, Swami Anapekshanandaji Maharaj, Secretary, SRMV Polytechnic College, Commorade T.V. Thomas, (Nov Sena Medal) Director, Corporate Planning & Personnel, Captain Ramesh Babu, Geneal Manager (CSR & Indigenisation), Mazagon Dock Shipbuilders Ltd, Mumbai were the chief guest. The dignitaries released the team India uniform and distributed personal kit bag to the players.

3. Special Walkathon : 50 volunteers with 2 staff members to conduct and participate the Special Walkathon organized by Kaumaram Prashanthi Academy (school for children with special needs) to create awareness and inclusion of people with special needs in every walk of life on 08.12.2019.

4. Inclusive Sports Meet: Two Inclusive Sports meet for Persons with Disabilities were organized on 20.09.2019 and 11.03.2020.

5. RKMV Trophy State Level Tournaments in Adapted Sports: RKMV Trophy State Level Tournaments in Adapted Sports namely Paraplegic Cricket, Para Sitting Volleyball, Volleyball for Visually Impaired & Football for Intellectually Challenged was organized by Faculty of General & Adapted Physical Education and Yoga on 13th & 14th December 2019.

6. Coimbatore District Level Sports Meet for Persons with Disabilities: GAPEY organized Coimbatore District Level Sports Meet for Persons with Disabilities on 30.01.2020. Swami Brahmanyandha Maharaj, Ramakrishna Mission Vidyalaya inaugurated the sports meet. A total of 179 athletes with various disabilities like Intellectual disability, Visual Impairment, Hearing impairment & Physically Challenged participated. In the valedictory function Swami Brahmanyandha Maharaj, Ramakrishna Mission Vidyalaya, Sri R. P. Ravichandran, District Sports Officer, Coimbatore District, Ms. Priya Gowrisankar, Technical Director, Besten Group of Companies were the Chief Guests and distributed the prizes. RKMV Trophy State Level Tournaments in Adapted Sports namely Paraplegic Cricket, Para Sitting Volleyball, Volleyball for Visually Impaired & Football for Intellectually Challenged was organized by Faculty of General & Adapted Physical Education and Yoga on 13th & 14th December 2019.

7. Unified Play Day: Ramakrishna Mission Vivekananda Educational and Research Institute, Faculty of General & Adapted Physical Education and Yoga organized Unified Play Day on 28th February 2020.

Unified Play Day began with the march past of the participating children. The prayer song was sung by Vidyalaya higher secondary school visually impaired students and cultural demonstrated by Faculty of disability management and special education therapy unit and TAT Kalanilayam School intellectually challenged children. The following Physical Activities were demonstrated by the intellectually challenged children partnered with the normal children from Coimbatore district schools.

- ✓ Yoga,
- ✓ Free Hand Exercises,
- ✓ Kolam
- ✓ Social Group Behaviour,
- ✓ Handkerchief Exercises
- ✓ Hoops and
- ✓ Flag Drills

Swami Garishthanandaji Maharaj presided over the function and inaugurated the Play Therapy. Sri CA.M. Bhaskar, FCA, Chartered Accountant, president, auditors association of southern India, Coimbatore inaugurated the Other Therapy stall. Sri.Gunasekaran J, Sittruli Foundation, Founder, Managing Proprietor inaugurated the Sport competition. SriPadmini Chenapragada Director, Program Development Indian Wheelchair Tennis Tour, inaugurated the Physiotherapy stall.

A total number of 439 students (232 Boys, 104 Girls) from 43 integrated schools, 127 parents and 53 Special education teachers participated in the Unified Play Day.

Unified sports competition was conducted for the following categories. Intellectual disabilities: 5-a-Side Football (Boys) and Bocce (Girls). The competitions were inaugurated by Sri. Gunasekaran J and He distributed trophies & certificates to the winners and runners.

S. no	Category	Gender	Game	Winner	Runner
1	Intellectually challenged children	Boys	5-a-side-Football	FDMSE	Sri Prasanthini Academy
		Girls	Bocce	Sri Prasanthini Academy	FDMSE

OTHER MISCELLANEOUS INFORMATION

Physics

Setting up of Research Laboratory:

Material Science Research Laboratory has been set up in the Department.

Academic Visits by members of the Department:

Shamik Gupta: June 2019: University of Rome La Sapienza, Rome, Italy

Amitava Bhattacharyya: November 2019, Rutherford Appleton Laboratory, Oxford, UK, for international research collaboration and experiments.

List of Academic Visitors in the Department:

- ✓ Professor Shankar Ghosh, TIFR Mumbai, India; Visit period: 12th to 16th February, 2020
- ✓ Dr. Pierfrancesco di Cintio, University of Florence, Italy; Visit period: 8th to 27th February, 2020
- ✓ Professor Muthuswamy Lakshmanan, Bharathidasan University, India; Visit period: 4th to 7th April, 2020
- ✓ Dr. Rishu K Singh, IIT Bombay, India; Visit period: 27th to 31st January, 2020
- ✓ Professor Thierry Dauxois, Ecole Normale Supérieure de Lyon, France; Visit period: 23rd to 26th January, 2020
- ✓ Professor Punit Parmananda, IIT Bombay, India; Visit period: 21st to 24th January, 2020
- ✓ Professor Mustansir Barma, TIFR Hyderabad, India; Visit period: 12th to 20th November, 2019
- ✓ Professor Yoshiyuki Yamaguchi, University of Kyoto, Japan; Visit period: 9th to 18th August, 2019
- ✓ Nalla Siva ganga kumari, Assistant Professor ,Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam, Andhra Pradesh, India
- ✓ Sam Rajan, Assistant Professor, Department of Physics, CMS College, Kottayam-686001, Kerala, India

Computer Science

Department infrastructure development

- ✓ A lecture studio equipped with sound proofing, PTZ HD USB Camera, 53" large format display, Intel NUC computer, Epson ELPDC13 HD Document Camera, Shure podium mic, Yamaha mixer for audio was set up in the existing premises in MB202. This facility came in handy during the lockdown period for holding online classes by the RKMVERI faculty residing in Belur.

- ✓ By the generous funding of Indian Oil Corporation Pvt. Ltd amounting to 40 lacs a fully air conditioned computer lab equipped with 30 state of the art computing infrastructure (Ryzen 7 CPU, 16 GB RAM, 24" LCD monitor), one HP Hi-Performance GPU Server, an Ultra short throw LCD projector was setup. This lab was inaugurated on 13 March 2020 by J P Sinha, Executive Director, ERPL, IOCL. Five more officials from IOCL were also present during the inauguration.

Students' Summer Project (May-June 2019)

The CS and BDA students are encouraged to carry out a 1½ month summer project on a topic of their choice. The duration for this work was further extended into the third semester (July-Dec). There were evaluated by the presentations of their work. All (but one Students' MSc Project (Jan-June 2019)).

Students of BDA carry out corporate internship for four months between Jan-June for the degree project. This time they secured internship offers from IIT Patna (1), Tata Steel Jamshedpur (2), Reddy labs Hyderabad (3), Tata Consultancy Pvt Ltd (TCS) Mumbai (4), TCS Pune (1), TCS Indore (1), RS Software Kolkata (1), Autowiz Bengaluru (1) Z communications, Bengaluru (1). All of these fall under the category of paid internships. One student of computer science secured a paid internship at Aracnomesh Tech. Noida. Three students of BDA, and 11 students of CS did academic internship.

Sports Science and Yoga

Projects submitted/sanctioned:

- ✓ Improvement of general health, cardiovascular and metabolic risk factors in visually-impaired teenagers through yoga, meditation and orientation ability training- To LV Prasad Eye foundation-Hyderabad-By Kunal Sikder and Asis Goswami.
- ✓ Hepato-Ayurgenomics: combining Genetics and Ayurveda for personalized diagnosis and therapy against chronic liver diseases- To AYUSH- by Kunal sikder and Dr. Kalipada Pal.
- ✓ Management of Pain in Knee Osteoarthritis by Yoga: Submitted to: CCRYN, ministry of AYUSH 2019-2020 under EMR research scheme by Dr Arkadeb Dutta, Dr Santiranjan Dasgupta

Mathematics

- ✓ Prof. Sukumar D. Adhikari visited Harish-Chandra Research Institute, Prayagraj for the period October 01-10, 2019 for collaborative research work with Prof. R. Thangadurai.
- ✓ Prof. Sukumar D. Adhikari is writing a book on zero-sum problems in additive combinatorics with Prof. R. Thangadurai.
- ✓ Prof. Sukumar D. Adhikari evaluated the PhD thesis of Ms. Shikha Singh of Central University of Jharkhand. He took the viva voce exam on Jan. 20, 2020.
- ✓ Dr. Sagnik Gupta attended the viva voce of Mr. Nikhilesh Dasgupta (student of Dr. Neena Gupta) at Indian Statistical Institute Kolkata as an external expert on October 31, 2019.

Sanskrit and Philosophy

Outreach Programmes semester-wise:

Jul – Dec 2019

Sl. No.	Name of the programme	Duration	Total no. of participants
1.	Preliminary course in Communicative Sanskrit	6 months	46
2.	Intermediate course in Communicative Sanskrit	6 months	45
3.	Advanced course in Communicative Sanskrit	6 months	23

Jan – Jun 2020

Sl. No.	Name of the programme	Duration	Total no. of participants
1.	Preliminary course in Communicative Sanskrit	6 months	88
2.	Intermediate course in Communicative Sanskrit	6 months	18
3.	Advanced course in Communicative Sanskrit	6 months	25
4.	Paniniya pravesa – Laghusiddhanta Kaumudi	6 months	38
5.	Paniniya pravesa – Siddhanta Kaumudi	6 months	12

IRDM

- ✓ Dr. RupakGoswami rendered reviewership for the following journals:
 - Journal of the Royal Society Interface
 - International Journal of Disaster Risk Reduction
 - Cogent Food and Agriculture
 - Space and Culture, India
- ✓ Dr. TapashDasgupta acted as a reviewer for the following journals:
 - Journal of Environmental Biology
 - Bangladesh Journal of Botany
 - Nucleus
 - International Journal of Agriculture, Environment and Biotechnology

IRTDM

- ✓ Faculty, staff and students participated in the Independence Day celebration organized at Divyayan Campus on 15 August, 2019.
- ✓ *Vidyarthi Brata* – A traditional initiation ceremony for the freshers was organized on 19.8.2019.
- ✓ Faculty centre observed 'Parthenium Awareness Week' by uprooting the parthenium from the Divyayan campus on 22.8.2019 and organized special lectures under the supervision of Dr. Adyant Kumar and Dr. Sudarsan Biswas.
- ✓ Celebrated teachers' day to commemorate the birth anniversary of Dr. Sarvapalli Radhakrishnan by organizing speech and cultural programme on 5.9.2019.
- ✓ Celebrated 125th year of Swamiji's Chicago Address on 11.9.2019
- ✓ Participated in the event of Farm Women Day organized by Divyayan KVK on 15.10.2019.
- ✓ Celebrated National Unity Day by organizing 'run for unity' on 31.10.2019
- ✓ Faculty, staff and students participated in the Guru Nanak Jayanti celebration organized at Ramakrishna Mission Ashrama on 12 November, 2019.
- ✓ Faculty, staff and students celebrated Bhagwan Birsa Munda Jayanti on 15.11.2019 by organizing special lectures on life and history of Birsa Munda.
- ✓ Fresher's welcome ceremony was held on 21.11.2020.
- ✓ Faculty, staff and students participated in the Republic Day celebration organized at Divyayan Campus on 26 January, 2019.
- ✓ Saraswati Puja was celebrated in the campus on 30.1.2020
- ✓ Annual sports meet was held 9-10, 2020 March.
- ✓ In response to the *Swachh Bharat* movement, during the reporting period faculty centre observed the last Saturday of every month, as a mark of *Swaccha Bharat Abhiyan* by organizing short speech and campus cleaning activities.

FDMSE

Faculty members acted as RCI visiting experts

S. No.	Name	Place	Date
1	Dr. P. Ramakrishna	All India Institute of Speech and Hearing (AIISH), Mysuru	15 th & 16 th April 2019
		CSI Training Centre for the Teachers of the Hearing Impaired, Kollam	15 th July 2019
2	Dr. S. Logesh Kumar	St. Ann's College for Diploma in Special Education (MR), Kurnool	15 th & 16 th April 2019

Student's exposure visit

Students visited various organizations, farm fields and research institutions in various parts of Tamil Nadu and India during the academic year. Some of the places visited are:

- 1) Wheat Research Station, Government Botanical Garden in Udhagamandalam,
- 2) Wind Mill Farm in Udumalpet,
- 3) Uzhavar Santhai, Regulated Market, Agmark
- 4) Laboratory and Central Warehousing Corporation in various parts of Coimbatore,
- 5) ICAR-KVK and Kallar Farm in Mettupalayam,
- 6) Sugarcane Breeding Institute in Coimbatore

Krishi Vigyan Kendras



**(1) SASYA SHYAMALA KRISHI VIGYAN KENDRA,
ARAPANCH, SOUTH 24 PARGANA DISTRICT**

**(2) DHAANYAGANGA KRISHI VIGYAN KENDRA,
SARGACHI, MURSHIDABAD DISTRICT**

**Report for the period from
1 April 2019 to 31 March 2020**

Introduction:

Krishi Vigyan Kendra (KVK) is a frontline extension institute established by the Indian Council of Agriculture Research (ICAR), Ministry of Agriculture, Government of India for transfer of technology in the field of agriculture, horticulture, animal husbandry, aquaculture etc.

‘Sasya Shyamala’ Krishi Vigyan Kendra was established in 2013 under the aegis of Ramakrishna Mission Vivekananda Educational and Research Institute, run through its off-campus center at Ramakrishna Mission Ashrama, Narendrapur to cater to the district of South 24 Parganas.

‘Dhaanyaganga’ Krishi Vigyan Kendra was established in 2019 under the aegis of Ramakrishna Mission Vivekananda Educational and Research Institute, run through its off-campus center at Ramakrishna Mission Ashrama, Sargachi to cater to the district of Murshidabad.

Both the KVKs are actively engaged in dissemination of technologies to the farmers, farm women and rural youths and development of farm sector in the districts of South 24 Parganas and Murshidabad.

Mandate of the KVKs:

Assessment, Refinement and Demonstration of Technologies and Technology products.

Activities of the KVKs:

The following activities have been undertaken by the KVKs run under the aegis of the University -

(a) On-Farm Testing (OFT) to assess the location specificity of agricultural technologies under various farming systems.

(b) Frontline Demonstration (FLD) for out scaling farm innovations and to showcase the specific benefits/worth of technologies on farmers' fields.

(c) Training for capacity development of farmers, farm women, rural youths and extension personnel to update their knowledge and skills in modern agricultural technologies and enterprises.

(d) Knowledge and Resource Centre for improving overall agricultural economy in the operational area.

(e) Conduct frontline extension programmes and provide farm advisories using Information Communication Technology (ICT) and other media on varied subjects of interest to farmers.

(f) Documentation, characterization and strategic planning of farming practices.

(g) Production of quality seed and planting materials of different field and horticultural crops, fish seed, kids, chicks, ducklings etc.

(h) Provide soil health cards to the farmers

Thrust areas:

- ✓ Introduction and dissemination of High Yielding Varieties and improved management practices for major crops, improved breeds of livestock and Integrated Farming System.
- ✓ Technology dissemination for Improvement of Soil health and reclamation of saline soil.
- ✓ Introduction and extension of technologies and contingency plan to mitigate the losses for natural calamities and in flood prone areas.

- ✓ Promotion and recommendation of high value crops and enterprises for better income generation of farmers.
- ✓ Production of quality seed and planting materials of different crops and supply to the farmers.
- ✓ Scientific composite fish culture, air-breathing fish farming and ornamental fish culture for better income and alternative livelihood option of fishermen communities.
- ✓ Promotion of income generation through non-conventional fishery with culture of Bhetki, Parse, Khaira etc.
- ✓ Biodiversity conservation and culture extension of indigenous endangered fish species viz. Punti, Maurala etc.
- ✓ Promoting scientific backyard poultry farming by women SHGs and introduction new poultry breed with special reference to layer birds.
- ✓ Propagation of ornamental bird rearing by SHGs and its linkage to market.
- ✓ Productivity enhancement of farm animals by scientific cross breeding programme.

**ACTIVITIES OF SASYA SHYAMALA KRISHI VIGYAN KENDRA
DURING THE YEAR**

FRONTLINE DEMONSTRATIONS (FLDs)

FLDs are carried on technologies which are either already developed by ICAR Research Institutes and other state agricultural universities (SAUs) or in the pipeline. Total 44 FLDs on different technologies related to agriculture, horticulture, plant protection, fisheries and animal husbandry were carried out during 2019-20.

Sl. No.	Discipline	Variety/Technology	Area (ha)/ No. of demonstration	Total no. of beneficiaries
1.	Crop production	System of rice cultivation (SRI)	2 ha	9
2.		Drum Seeder technology for rice	1 ha	6
3.		Maize-mungbean intercropping	2 ha	8
4.		Cultivation of baby corn	2 ha	7
5.		Rice-fallow intensification with lathyrus	2 ha	16
6.	Plant breeding and seed science	Performance of variety LSFH 171 of sunflower	0.13 ha	5
7.		Performance of variety Dibakar of sunflower	0.13 ha	5
8.	Soil health management	Leaf colour chart (LCC) technology in rice	1.2 ha	5
9.		Brown manuring technology in rice	0.6 ha	3
10.		Green manuring technology in rice	1.2 ha	5
11.		Leaf colour chart (LCC) technology in maize	2.2 ha	8
12.	Plant protection	Integrated Pest Management (IPM) of Stem Borer Complex in boro rice	2.25 ha	15
13.		Fruit Borer Management in tomato	1 ha	10
14.		Integrated Pest Management (IPM) in jute	1 ha	10
15.		Diamond Back Moth management in cabbage	1 ha	10
16.		Rhizome rot management through Trichoderma application in elephant footyam	0.5 ha	10
17.	Horticulture	Improved package of practices with variety Centauro in broccoli	0.266 ha	8
18.		Improved package of practices with variety Thai Asha (Green) in capsicum	0.033 ha	4
19.		Improved package of practices with variety Early Nantes in carrot	0.066 ha	4
20.		Improved package of practices with variety Kalash in Beet	0.01 ha	6
21.		Improved package of practices with variety Falguni in French bean	0.798 ha	10
22.		Improved package of practices with variety Surabhi in coriander	0.266 ha	10
23.		Improved package of practices with variety Meghna in bitter gourd	0.066 ha	7
24.		Improved package of practices with variety Bidhan Kusum in elephant footyam	0.798 ha	6
25.		Improved package of practices with variety Suranjana in turmeric	0.133 ha	4

26.		Improved package of practices with variety NS 506 in tomato	0.133 ha	4
27.		Improved package of practices with variety Sheetal in cauliflower	0.133 ha	6
28.		Improved package of practices with variety Mohar in cabbage	0.133 ha	7
29.		Improved package of practices with variety Big Boss in knolkhol	0.266 ha	8
30.	Livestock	Cultivation of fodder crops (Hybrid Napier, Fodder Maize Var. African Tall)	5 units	5
31.		Rearing of Khaki Campbell Ducks	6 units	6
32.		Scientific rearing of Turkey birds	2 units	2
33.		Scientific rearing of Kaveri chicks	34 units	34
34.	Fisheries	Scientific rearing of ornamental birds (<i>Badrika</i>)	3 units	3
35.		Freshwater Fishery diversification with Chital, Clown knife fish farming in culture pond	7 units	7
36.		Brackishwater Species Diversification like Culture of Seabass	7 units	7
37.		Magur fish Breeding & culture	7 units	7
38.		Culture techniques for Crab farmers of Sunderbans	7 units	7
39.		Low cost ornamental fish feed for better coloration and growth	7 units	7
40.		Fish culture with periphyton technology	7 units	7
41.		Culture of Improved Carp varieties - Jayanti Rohu	7 units	7
42.		Ornamental fish culture	30 units	30
43.		Ornamental fish village - 20 ornamental fish unit for Breeding and rearing	20 units	20
44.	Other enterprise	Enterprise development through Oyster mushroom cultivation	65 units	65
Total			23.311 ha and 214 units	430

Cluster Front Line Demonstrations (CFLDs)

CFLDs were conducted in total 7 blocks (Baruipur, Bishnupur I, Basanti, Canning I, Canning II, Budgebudge I and Budgebudge II) involving 445 demonstrations in 2019-20. The details are furnished below:

Crop	Variety	Area (ha)	Number of beneficiaries
Pulses			
Lentil	IPL 316, Moitree and PL 8	10	56
Green Gram	Virat and IPM 02-3	10	172
Oilseeds			
Mustard	NRCHB 101, PM 30, PM 28 and YSH 0401	20	64
Sesame	Tilottama	10	32
Sunflower	Dibakar	50	121
Total		100	445

TRAINING

Training programmes (both on-campus and off-campus) are conducted for practicing farmers and rural youths of the villages, and extension functionaries working in different Line Departments of the district, members of self-help groups (SHGs), Farmers' Clubs, NGO representatives and other stakeholders of agriculture, horticulture, livestock and fisheries. Summary of the training programmes conducted during 2019-20 is given below:

A) Farmers & Farm Women (On and Off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Weed Management	2	34	0	0	16	4	20	0	0	0	50	4	54
Nursery management	1	1	2	3	5	7	12	0	0	0	6	9	15
Integrated Crop Management	7	51	22	73	149	65	204	7	1	8	207	88	295
Nutrient management	2	15	3	18	28	5	33	0	0	0	43	8	51
Production of low volume and high value crops	1	4	28	32	4	5	9	0	0	0	8	33	41
Off-season vegetables	2	17	4	21	19	27	27	0	0	0	36	12	48
Nursery raising	1	17	0	17	6	8	8	1	0	1	24	2	26
Cultivation of summer vegetables	2	10	33	43	14	8	22	0	0	0	24	41	65
Nutritional Gardening	1	3	3	6	6	14	20	0	0	0	9	17	26
Multi-tier Technology	2	26	0	26	26	8	34	0	0	0	52	8	60
Layout and Management of Orchards	1	16	0	16	11	3	14	0	0	0	27	3	30
Nursery Management	1	4	6	10	2	14	16	0	0	0	6	20	26
Post harvest technology and value addition	1	10	12	22	0	0	0	1	0	1	11	12	23

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Soil fertility management	4	43	13	56	38	25	63	1	0	1	82	38	120
Production and use of organic inputs	2	4	6	10	10	8	18	0	1	1	14	15	29
Management of Problematic soils	1	8	5	13	2	1	3	6	3	9	16	9	25
Nutrient Use Efficiency	2	6	0	6	20	3	23	2	37	39	30	38	68
Soil & water testing	1	2	1	3	21	11	32	0	0	0	23	12	35
Dairy Management	2	0	0	0	0	25	25	0	45	45	0	70	70
Poultry Management	4	11	5	16	40	95	135	0	0	0	51	100	151
Others	1	0	0	0	9	16	25	0	0	0	9	16	25
Integrated Pest Management	3	4	0	4	71	13	84	0	0	0	75	13	88
Integrated Disease Management	2	18	1	19	33	7	40	0	0	0	51	8	59
Bio0control of pests and diseases	1	0	0	0	23	6	29	0	0	0	23	6	29
Production of bio control agents and bio pesticides	2	8	2	10	44	7	51	0	0	0	52	9	61
Carp fry and fingerling rearing	1	0	0	0	30	0	30	0	0	0	30	0	30
Composite fish culture	3	30	10	40	25	20	45	0	5	5	55	35	90
Hatchery management and culture of freshwater prawn	2	28	12	40	14	6	20	0	0	0	42	18	60
Shrimp farming	1	0	0	0	30	0	30	0	0	0	30	0	30
Others (Bhery fisheries)	1	0	0	0	30	0	30	0	0	0	30	0	30
Fish feed	1	7	3	10	14	6	20	0	0	0	21	9	30

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
preparation													
Seed Production	6	75	8	83	81	23	104	10	5	15	166	36	202
TOTAL	64	452	179	597	821	440	1226	28	97	125	1303	689	1992

B) RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Seed production	4	8	7	15	69	20	89	1	0	1	78	27	105
Mushroom Production	2	7	10	17	18	16	34	0	0	0	25	26	51
Value addition	1	10	12	22	0	0	0	1	0	1	11	12	23
Sheep and goat rearing	1	7	5	12	14	4	18	0	0	0	21	9	30
Quail farming	1	0	0	0	0	25	25	0	0	0	0	25	25
Poultry production	3	12	23	35	26	12	38	0	40	40	38	75	113
Ornamental fisheries	3	27	13	40	15	5	20	20	10	30	60	30	90
Pearl culture	1	0	0	0	30	0	30	0	0	0	30	0	30
Fish feed preparation & its application	1	7	3	10	14	6	20	0	0	0	21	9	30
Bhetki culture	1	10	15	25	5	5	10	0	0	0	15	20	35
Mud crab fattening	2	30	10	40	0	0	0	10	5	15	40	15	55
Magur Seed Production	1	10	15	25	5	5	10	0	0	0	15	20	35
Climbing perch culture	1	25	0	25	0	0	0	0	0	0	25	0	25
Air breathing fish culture	3	30	10	40	25	20	45	0	5	5	55	35	90
Off-season vegetable production	1	15	0	15	16	2	18	0	0	0	31	2	33
TOTAL	26	198	123	321	237	120	357	32	60	92	465	305	770

C) Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Plant protection	1	12	0	12	6	0	6	0	0	0	18	0	18
Seed production	2	28	16	44	26	0	26	0	0	0	54	16	70
Productivity enhancement in fisheries through Best Management Practices	1	15	10	25	5	5	10	0	0	0	15	20	35
TOTAL	4	55	26	81	37	5	42	0	0	0	87	36	123

D) Vocational training programmes for Rural Youth

Crop / Enterprise	Training title	Duration (days)	No. of Participants		
			Male	Female	Total
Mushroom Cultivation	Scientific cultivation of mushroom and their pest management	3	12	13	25
Livestock production and management	Poultry farming with special reference to broiler, layer and turkey	3	20	15	35
	Backyard Poultry Farming	1	0	40	40
	Scientific Goatery farming	3	21	9	30
	Scientific duck farming	3	19	20	39
	Homestead quail farming	1	0	25	25
Fishery and Aquaculture	Advance aquaculture practices for entrepreneur and NGOs	5	40	0	40
	Breeding and culture of ornamental fishes	5	0	30	30
TOTAL		24	112	152	264

E) Sponsored Training Programmes

Sl. No.	Title	Thematic area	Duration (days)	Client (PF/R Y/EF)	No. of courses	No. of participants	Sponsoring Agency
1	One day training on jute under NFSM-Commercial Crops-Jute	Crop production	1	PF	1	50	Directorate of Jute Development, Kolkata

2	One day workshop on Jute Agrotexile-cum-demonstration	Crop production	1	PF	1	50	ICAR-NINFET, Kolkata
3	Refresher Course	Plant protection	3	EF	1	18	Coromandel Intl. Ltd.
4	Seed Production of Oilseed	Seed Production	2	PF	2	60	Dept. of Agriculture, Govt. of West Bengal
5	Technologies for organic farming and marketing of organic products	Organic farming	4	PF/RV	1	30	NABARD
6	Soil health management for sustainable agriculture	Soil health management	3	PF/RV	1	30	RKVY
7	Soil health management for sustainable agriculture	Soil health management	3	PF/RV	2	30	RKVY
8	Homestead quail farming	Poultry farming	1	RV	1	25	ICAR-IVRI
9	Integrated fish farming	Fisheries	3	RV	1	50	NFDB
10	Integrated fish farming	Fisheries	3	RV	1	50	NFDB
11	Air breathing fish breeding and culture	Fisheries	3	RV	1	50	NFDB
12	Indian Carp Disease and its treatments	Fisheries	3	RV	1	30	RKVY
13	Ornamental fish Disease and its treatments	Fisheries	3	RV	1	30	RKVY
14	Shrimp Disease and its treatments	Fisheries	3	RV	1	30	RKVY
15	Ornamental fish breeding and culture	Fisheries	5	RV	1	30	ICMARD-Kolkata
16	Advance aquaculture practices for entrepreneur and NGOs	Fisheries	3	RV	1	50	ICAR-CIFA, Rahara
17	Air breathing fish breeding and culture	Fisheries	3	RV	1	50	NFDB
TOTAL					19	663	-

EXTENSION ACTIVITIES

A) Extension activities like field day, kisan mela, film show, method demonstration, workshop, group meeting, diagnostic visit, exposure visit, soil test campaign, self help group conveners meetings, mahila mandal conveners meetings, animal vaccination camp etc. were conducted in which total 11,227 farmers participated.

B) Special programmes like PM Kisan Samman Nidhi Scheme, Webcasting of PM's inauguration of National Animal Disease Control Programme (NADCP), Live telecast of Launching Program on DD Kisan, Celebration of World Fisheries Day and World Soil Day, Fertilizer Application Awareness Training Programme, Celebration of Constitution Day, Inauguration of second and third batch of Diploma in Agricultural Extension Services for Input Dealers (DAESI) in SSKVK (Nodal Training Institute) and Kisan Divas were organized in the KVK during 2019-20 in which total 1183 farmers participated

C) Programme under Scheduled Caste Sub Plan (SCSP) in collaboration with ICAR-IVRI and ICAR-CIFA were conducted in Canning II and Sonarpur blocks, respectively. In collaboration with ICAR-IVRI, KVK had distributed 20 numbers of chicks (Cauveri breed) (two weeks old), 50 kg poultry feed and one kit of poultry medicines to each farmer. About 150 farmers were distributed with fish fingerlings by KVK in collaboration with ICAR-CIFA.

SEED PRODUCTION

A) In Instructional Farm of KVK and through village seed production programme, during 2019-20, KVK has produced 179 quintal seeds of rice, lathyrus, greengram, mustard, turmeric, elephant footyam and dhaincha, 66,500 planting materials, 11.3 tonnes of vermi-compost, bio-fertilizer and bio-pesticide, 8932 birds, and 6.9 lakh fish fingerlings.

B) Another programme funded by ICAR, Seed Hub programme for pulse seed production was undertaken by the KVK in which 70 quintal of foundation and certified greengram seeds were produced.

ACTIVITIES OF *DHAANYAGANGA KRISHI VIGYAN KENDRA*
DURING THE YEAR

TARGET AND ACHIEVEMENT DURING THE YEAR:

ON FARM TRIAL											FRONT LINE DEMONSTRATION												
No. of technologies tested:											No. of technologies demonstrated:												
Number of OFTs		Number of farmers									Number of FLDs		Number of farmers										
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
5	5	55	SC		ST		Others		Total			09	09	150	SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
			13	0	4	0	30	8	47	8	55				38	0	09	0	104	0	151	0	151

Training											Extension activities												
Number of Courses		Number of Participants									Number of activities		Number of participants										
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
86	86	3390	SC		ST		Others		Total			1065	1065	7637	SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
			735	186	425	57	1567	426	2727	669	3396				1289	312	118	67	4681	1170	6088	1549	7637

Seed production					Planting material (in Lakh)				
Target			Achievement		Target			Achievement	
440.0			447.84		0.80			0.86	

ON FARM TRIAL DETAILS:

SL NO	TITLE
OFT-1	Assessment of plant protection schedules against brown plant hopper in transplanted <i>kharif</i> rice
OFT-2	Assessment of some management practices against Fusarium wilt disease of lentil
OFT-3	Assessment of Suitable Short duration Variety for Rice- Mustard- Sesame Cropping System
OFT-4	Assessment of feeding of concentrate feed & mineral mixture on kid birth wt, mother milk production & kid survivality % in Black Bengal goat
OFT-5	Assessment of unconventional silk worm pupae as a replacer of mustard oil cake in the diet of Labeorohita

FRONT LINE DEMONSTRATION:**(A) ON CEREALS:**

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Paddy	Integrated Crop Management	FLD 1: Variety – Sampriti
2	Paddy		FLD 2: Variety- Ajit
3	Paddy		FLD3: Variety- Swarna Sub 1
4	Paddy		FLD 4: Paira cropping of kharif rice in jute field
5	Paddy	Weed Management	FLD 5 : Post emergence application of Triafemon+Ethoxysulfuron
6	Wheat	Integrated Crop Management	FLD 1: Variety- HD 2967 + Spraying of Boron @ 0.25% twice
7	Wheat		Variety: BHU 35 + Spraying of Boron @ 0.25% twice
8	Brown-top Millet	Integrated Crop Management	Crop Diversification with Introduction of Millet for Rainfed Agriculture
9	Foxtail Millet		

(B) ON OILSEED:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Mustard (2018-19)	Integrated crop management	Var. YSH-0401 + S soil application+ B spray @ 0.25% twice
2	Mustard (2018-19)	Integrated crop management	Var. NRCHB-101 + S soil application+ B spray @ 0.25% twice
3	Mustard (2019-20)	Integrated crop management	Introduction of NRCHB-101 + soil application of B& S + 2 spraying of B
4	Sesame (2019)	Integrated crop management	Introduction of Var.Sabitri+T.viridae

(C) ON PULSE:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Lentil (18-19)	Integrated crop management	Var. WBL-77 +Spraying of 5% NPK and 0.25% B at 35-45 DAS + 0.25% B & 0.05 % Mo during grain setting
2	Lentil (19-20)	Integrated crop management	Var. PusaAgeti +Spraying of 5% NPK and 0.25% B at 35-45 DAS + 0.25% B & 0.05 % Mo during grain setting
3	Lentil (19-20)	Integrated crop management	Var. WBL-77 +Spraying of 5% NPK and 0.25% B at 35-45 DAS + 0.25% B & 0.05 % Mo during grain setting
4	Gram (18-19)	Integrated crop management	Var. Bidisha +Spraying of 5% NPK and 0.25% B at 35-45 DAS + 0.25% B & 0.05 % Mo during grain setting
5	Gram (19-20)	Integrated crop management	Var. Bidisha +Spraying of 5% NPK and 0.25% B at 35-45 DAS + 0.25% B & 0.05 % Mo during grain setting
6	Lathyrus (19-20)	Integrated crop management	Var. PusaAgeti +Spraying of 5% NPK and 0.25% B at 35-45 DAS + 0.25% B & 0.05 % Mo during grain setting 35

(D) ON VEGETABLES:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Broccoli	Production of low volume high value crops	Broccoli Var. ()+ INM

(E) ON FIBRE CROPS:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Jute	Integrated crop management	Var: JRO-204 + T. viridae

(F) ON FODDER CROPS:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Oats (kent)	Increasing area coverage under fodder cultivation	Variety- Kent+STB nutrient appln
2	Maize	Integrated crop management	Maize(Var-J1006)
3	Cowpea	Integrated crop management	Cowpea(Bundel-2) +STB nutrient appln
4	Sorghum PC-23	Increasing area coverage under fodder cultivation	Sorghum PC-23

(G) ON LIVESTOCKS:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Poultry (2018-19)	Breed replacement +feed management	Vanaraja + min. mixture
2	Sheep and goat	Promotion of improved breed	Garole Sheep
3	Duckery (2018-19)	Breed replacement +feed management	Khaki Campbell +Mineral Mixture
4	Duckery (2019-2020)	Promotion of improved breed	Khaki Campbell duck breed

(H) ON FISHERIES:

SL NO	CROP	THEMATIC AREA	Technology Demonstrated with detailed treatments
1	Common carps	Species up-gradation	Amur carp fingerling as a component of composite fish culture
2	Common carps	Composite Fish Culture	IMC's stunted fingerling in large waterbody
3	Others (Chichlids)	Species Diversification	All male GIFT Tilapia culture in jute rotting pond
4	Others (Feeding Mgt.)	Proper utilization of feed	Indigenous tray feeding system

DETAILS OF TRAINING (INCLUDING SPONSORED TRAINING):**I] ON CAMPUS****A.FARMERS AND FARM WOMEN:**

SL NO	THEMATIC AREA	NO OF COURSES
1.	Seed production	5
2.	Integrated fish farming	2
3.	Organic manures production	1
4.	Sustainable agriculture	4
TOTAL		12

B.RURAL YOUTH:

SL NO	THEMATIC AREA	NO OF COURSES
1.	Mushroom Production	1
2.	Rural Crafts	1
3.	Poultry production	1
4.	Ornamental fisheries	1
5.	Composite fish culture	6
6.	Others	2
TOTAL		12

C.EXTENSION PERSONNEL:

SL NO	THEMATIC AREA	NO OF COURSES
1.	Mushroom Production	1
TOTAL		1

II] OFF CAMPUS**A.FARMERS AND FARM WOMEN:**

SL NO	THEMATIC AREA	NO OF COURSES
1.	Weed Management	3
2.	Resource Conservation Technologies	1
3.	Crop Diversification	1
4.	Seed production	2
5.	Nursery management	2
6.	Integrated Crop Management	10
7.	Integrated nutrient Management	2
8.	Off season vegetables	1
9.	Exotic vegetables	1
10.	Others (Vegetables)	1
11.	Processing and value addition (Spices)	1
12.	Production and use of organic inputs	4
13.	Dairy Management	2

14.	Poultry Management	5
15.	Animal Nutrition Management	1
16.	Feed & fodder technologies	1
17.	Women empowerment	2
18.	Farm machinery & its maintenance	2
19.	Integrated Pest Management	5
20.	Integrated Disease Management	5
21.	Bio control of pests and diseases	1
22.	Integrated fish farming	1
23.	Carp breeding and hatchery management	1
24.	Carp fry and fingerling rearing	1
25.	Composite fish culture	2
26.	Hatchery management and culture of freshwater prawn	1
27.	Others (Fisheries)	1
28.	Group dynamics	1
TOTAL		60

VOCATIONAL TRAINING PROGRAMMES FOR RURAL YOUTH:

SL NO	CROP / ENTERPRISE	IDENTIFIED THRUST AREA	TRAINING TITLE*	DURATION (DAYS)
1.	Livestock	Creation of Paravets for rural service	Skill development training of Rural youth and Women for induction as Pranimitra	15
2.	Fish	Creation of skilled people for fish cultivation	Skill development training of Rural youth and Women for induction as Meenmitra	15
3.	Jute handicraft	Rural craft	Skill training on preparation of handicrafts from jute	15
4.	Poultry bird	Poultry bird management and organic manure production	Poultry bird rearing & organic manure production from poultry bird waste	5

EXTENSION ACTIVITIES:

NATURE OF EXTENSION ACTIVITY	NO. OF ACTIVITIES
Field Day	8
Exhibition	1
Film Show	0
Method Demonstrations	14
Farmers Seminar	0
Workshop	0
Group meetings	14
Lectures delivered as resource persons	23
Advisory Services	392
Scientific visit to farmers field	88
Farmers visit to KVK	460
Diagnostic visits	14
Exposure visits	10
Animal Health Camp	6
Celebration of important days (specify)	14
Swatchta Hi Sewa	3
Jal shakti Abhiyan	7
Plantation Programme Campaign	1
World nature day	1
World food day	1
Fertilizer Application	2
World constitution day	2
World fishery day	1
Vigilance week	1
World soil day	1
Kishan Vigyan Diwas	1
TOTAL	1065

PRODUCTION AND SUPPLY OF TECHNOLOGICAL PRODUCTS:**I. VILLAGE SEED PRODUCTION:**

Crop	Variety	Quantity of seed	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided							
					SC		ST		Other		Total	
					M	F	M	F	M	F	M	F
Seed production started in 2018 and Seed produced and harvesting in 2019												
Mustard	NRCHB-101	206.05	943087	50	247	77	22	8	1769	223	2038	308
	YSH-0401	30.7	221100	05	167	19	12	5	1137	136	1316	160
	PM-30	20.2	96725	03	7	0	61	11	473	23	541	34
Lentil	WBL-77	110	984500	45	637	38	35	19	3745	448	4417	505
Khesari	Bidhan Khesari-1	2	15700	02	15	9	1	1	44	8	60	18
Gram	Anuradha	1	6700	01	8	2	0	0	23	0	31	2
Total		369.95	2267812	106	1081	145	131	44	7191	838	8403	1027
Seed Production Started 2019												
Mustard	NRCHB-101	Harvested		18	Yet to Sale/Distribute							
	YSH-0401	Harvested		11								
	PM-30	Harvested		7								
Lentil	WBL-77	Harvested		43								
	PusaAgeti	Harvested		3								
Kalai	PU-35	0.50	5000	1								
Gram	Bidisha	Harvested		5								
	RVG-202	Harvested		1								
	RVG-203	Harvested		1								
	CR-304	Harvested		1								
Paddy	Ajit	Harvested		3								
Lathyrus	Ratan	Harvested		1								

II. FARM PRODUCTION:

Crop	Variety	Quantity of seed	Value (Rs)	Number of farmers to whom seed provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Seed production started in 2018 and Seed produced and harvesting in 2019											
Mustard	YSH-0401	4.3	43000	55	3	0	0	143	14	198	17
Mustard	NRCHB-101	3.95	39500	35	6	2	2	137	14	174	22
Mustard	PM-30	4.8	48000	48	11	7	6	155	13	210	30
Mustard	TBM-204	0.13	1300	0	0	0	0	7	0	7	0
Lentil	HUL-57	0.80	8000	12	0	0	0	28	0	40	0
Lentil	IPL-406	0.26	2600	4	0	0	0	8	0	12	0
Lentil	Subrata WBL-58	0.45	4500	5	2	0	0	13	3	18	5
Lentil	IPL-220	0.10	1000	0	0	0	0	5	0	5	0
Lentil	WBL-77	0.48	4800	9	0	0	0	15	0	24	0
Khasarie	BIDHAN-1	1.30	13000	13	3	0	0	47	4	60	7
Gram	Bidisha WBG-29	1.06	10600	24	2	0	0	27	0	51	2
Gram	Ujjwal	0.38	3800	7	0	0	0	12	0	19	0
Gram	Anuradha	0.38	3800	9	0	0	0	10	0	19	0
Grand Total		18.39	183900	221	27	9	8	607	48	837	83
Seed Production Started 2019											
Mustard	NRCYS-2	Harvest ed									
	PM-25										
	PM-30										
	PM-28										
Lentil	WBL-77										
	IPL-220										
	PL-8										
	KL-320										
Paddy	Shatabdi	17.50	44610	72	9	0	0	711	83	783	92
	Sahabhagi	11.20	33600	89	22	0	0	392	57	481	79

	GB-3	8.80	22440	38	27	0	0	301	74	339	101
	SS-1	4.0	10200	0	0	0	0	20	0	20	0
Jute	JRO-2407	1.10	11000	7	5	0	0	43	0	50	5
Moong	IPM-02-14	.20	2400	0	0	0	0	10	0	10	0
Black Gram	IPU-02-43	1.20	12000	12	2	3	1	37	5	52	8
Gram	Ujjal	Harvest ed									
	Anuradha										
Lathyrus	Ratan										
Grand Total			136250	218	65	3	1	1514	219	1735	285

III. PRODUCTION OF PLANTING MATERIALS:

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Vegetable seedlings											
Cauliflower	PAN-1008	20000	30000	2	0	0	0	4	0	6	0
Cabbage	SONARA-8989	20000	30000	2	0	0	0	4	0	6	0
Brinjal	OMAXE	5000	10000	1	0	0	0	2	0	3	0
Carrot	Gent next	5000	10000	1	0	0	0	2	0	3	0
Broccoli	Green magic (Sakata)	20000	30000	2	0	0	0	4	0	6	0
Lettuce	Sokuntola	500	500	0	0	0	0	1	0	1	0
Cherry tomato	Sokuntola	500	500	0	0	0	0	1	0	1	0
Capsicam		1500	3000	1	0	0	0	1	0	2	0
Chrysanthemum	Local	300	1500	0	0	0	0	0	0	0	0
Marigold	Pusabasan ti	200	1000	0	0	0	0	0	0	0	0
Fruits											
Mango	Himsagar	200	8000	32	18	5	5	101	39	138	62
Others Litchi	Bombai	200	6000	32	18	5	5	101	39	138	62
Medicinal and Aromatic											
Stevia	Sughigh A2	12000	60000	0	0	0	0	0	0	0	0
Forest Species Neem	Local	600	3000	32	18	5	5	101	39	138	62
Total		86000	193500	105	54	15	15	322	117	442	186

IV. PRODUCTION OF BIO-PRODUCTS:

Name of product	Quantity (Kg)	Value (Rs.)	No. of Farmers benefitted							
			SC		ST		Other		Total	
			M	F	M	F	M	F	M	F
Bio-agents	120	24000	27	5	40	3	98	38	165	46
Mushroom spawn	150	10500	4	0	12	0	35	2	51	2
Total	270	34500	31	5	52	3	133	40	216	48

V. PRODUCTION OF LIVESTOCK MATERIALS:

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Sheep	Garole	84	228000	0	12	0	30	0	0	0	42
Goat	Black Bengal	90	224000	0	22	0	48	0	0	0	70
Ducks	Khaki campbell	300	36000	0	5	0	0	0	25	0	30

VIVEKDISHA –

**An ICT-based Network of
Ramakrishna Mission Vivekananda Educational and
Research Institute**

VIVEKDISHA, a unique service activity of the Ramakrishna Mission is an information and communication technology (ICT)-based network of Ramakrishna Mission Vivekananda Educational and Research Institute. It provides single window-based services like online education from secondary to undergraduate level, online teachers' training, Spiritual Heritage programmes, teachers' workshops and research programmes. It supports students, teachers and researchers through its interactive website. During 2019-20, Vivekdisha served more than 16000 students through its multimedia-based interactive online classes which were held six days per week.

The regular programmes of VIVEKDISHA are run in 25 remote centres and are monitored from the University expert centre at Belur Math.

ONGOING ACTIVITIES:

1. ONLINE CLASSES:

Physics, Chemistry, Mathematics, Biology, Value Education, and Communicative English for students of the level of classes six to twelve are taught mostly through multimedia presentations i.e., through texts, pictures, animations, real visual clips, video recordings from laboratory or operation theatres to make teaching-learning process more effective, joyful and fruitful.

The medium of instruction is Bangla and English. VIVEKDISHA also facilitates conducting chemistry and economics classes for under-graduate students from USA and UK.

2. OTHER FACILITIES PROVIDED BY THE VIVEKDISHA WEB-SITE:

The VIVEKDISHA web-site facilitates students of schools, colleges, and universities to take practice tests in different subjects at various levels. The questions are set in English and other Indian languages as well. Some edited videos of the online classes and some projects on various science subjects are available on the web-site. A 360° Studio provides a panoramic view of any place. It also provides an e-library which is a repository of valuable books with pictures, supporting documents, and important information.

3. CONTENT GENERATION:

The contents of the multimedia presentations of different science subjects at the school and college levels were developed in Bangla or in English in order to fulfil the needs at local, national, and international (for Bangladesh students) levels. The content of the lessons was developed, based on the syllabi of the Boards of education of various states as well as the Central Board.

Concept building and integrating different topics with the context of the lessons has been the main focus point of content generation.

4. SPIRITUAL HERITAGE PROGRAMME FOR INTERNATIONAL AUDIENCES: VIVEKDISHA fulfills the spiritual need of the devotees residing abroad by enabling them to log in to the online classes from their homes. At present bilingual classes on "Sri Sri Ramakrishna Kathamrita" (The Gospel of Sri Ramakrishna) and "Srimad Bhagavad-Gita" are conducted to which people from United Arab Emirates, United States of America, United Kingdom, Canada, and Germany regularly log in.

5. PREPARATION OF INTEGRATED SCIENCE TEXT BOOKS INCORPORATING CONTEMPORARY RESEARCH FINDINGS:

VIVEKDISHA has prepared the contents for four books in Bangla which facilitates the building up of the fundamental concepts of science among students with an integrated approach, relating to various other subjects.

6. VALUE EDUCATION:

Students of various age groups were exposed to multimedia presentations depicting the universal message of Sri Ramakrishna and Swami Vivekananda, along with a facility for interactive discussion.

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