



RAMAKRISHNA MISSION
VIVEKANANDA EDUCATIONAL AND RESEARCH INSTITUTE
(Deemed University)

declared by Government of India under Section 3 of UGC Act, 1956)
PO Belur Math, Dist Howrah 711202, West Bengal, India

PROFILE AND ACTIVITIES OF THE DEEMED UNIVERSITY
Updated – as on 1 August 2022

The Genesis:

This Deemed to be University in the hallowed name of Swami Vivekananda is a humble attempt by worldwide organization, Ramakrishna Mission, its Sponsoring Society, started by Swami Vivekananda himself 125 years ago, in order to actualize Swami Vivekananda's educational vision of harmoniously blending the best elements of the knowledge pursuits of the East and the West and to impart 'man-making' and character-building education to the youths so that they would not be only acquire knowledge and skills, but also become men and women of wholesome character, with 'heart to feel, head to think, hands to work' (*bhakti, jnana, karma* harmoniously blended), possessed of the qualities of integrity, truthfulness, honesty, purity, selflessness, feeling for the suffering and the underprivileged, etc. Swami Vivekananda wanted a harmonious blend of the *Sanatana Bharatiya Jnana Sampradaya-Parampara* (Eternal Indian Knowledge Systems and Tradition—its spiritual wisdom and remarkable insights into the whole spectrum of human knowledge) with the modern scientific and technological knowledge of the Western world.

More specifically, the University's 'Vision and Mission' are as follows:

Vision and Mission of the University:

Vision:

To be a great centre of learning blending the two sciences – 'natural and humanistic' – and harmoniously synthesizing the twin excellences of ancient Indian wisdom and modern scientific knowledge and technological skill, imparting life-building, character-making education to the youths for their individual improvement as well as for the collective good as envisioned by Swami Vivekananda.

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 Shradha (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.



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A Special Feature of the University:

Attempting a harmonious blend of spiritual wisdom of the East and modern scientific and technological knowledge of the West

The vision of the University is, as stated earlier, the actualization of Swami Vivekananda's educational vision, namely, to impart 'man-making' and character-building education to the youths so that they would not only acquire knowledge and skills, but also become men and women of character, possessed of the qualities of integrity, truthfulness, honesty, purity, selflessness, feeling for the suffering and the underprivileged, etc. Further, Swami Vivekananda wanted the blend of the ancient moral and spiritual wisdom of the East – the humanistic sciences – with the modern scientific and technological knowledge of the West – the natural sciences. The Deemed University is striving to achieve this unique blend by setting up two Schools: The School of Indian Heritage and School of Mathematical Sciences side by side so that scholars well versed in both could be created in a natural way by proximity and continuous exchange of ideas. The University is also trying to seriously explore the realization of Ramakrishna-Vivekananda ideal of Religious Harmony and Peace, as articulated by Swami Vivekananda in his famous two lectures: 'The Ideal of Universal Religion' and 'The Way to the Realization of a Universal Religion' through an institution for the study of and research into comparative religion and philosophy in its most liberal and widest form, through research programmes and the institution of Vivekananda Chair in Comparative Philosophy and Universal Religion.

'Thrust Areas' chosen – *Raison de'tre*

Swami Vivekananda prophesied on the eve of his passing away on 4 July 1902 that **"the spiritual wave that has come to Belur [Math] will last for fifteen hundred years and it shall be a great University. Do not think I imagine it; I see it."** He also said on the very last day of his life in the mortal frame that: **"Keeping the ancient Indian spiritual ideal and rooted in it, and blending it harmoniously with modern science and technology, we should establish a University at Belur Math."** This University therefore, bearing Swami Vivekananda's hallowed name is a humble attempt by Ramakrishna Mission to actualize his vision. The various 'thrust areas' of the University have been chosen keeping in mind the above vision of Swami Vivekananda. The motivation for the choice of the 'thrust areas' came essentially from the following considerations:

- (1) These 'thrust areas' are in a sense 'gap areas' in the sense that these areas scarcely receive attention in most of the conventional Universities in India.
- (2) These 'thrust areas' are meant to directly benefit the common man, particularly the underprivileged and the rural/tribal sections of the society, thereby fostering social commitment of higher education institutions in India as taught by Swami Vivekananda (which aspect, interestingly, the Ministry of Education and University Grants Commission have recently begun to emphasize).



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- (3) The Ramakrishna Mission has developed a high degree of expertise and a huge infrastructure and resources at least in some of these areas over several decades, almost a century in some cases, of its educational service.
- (4) Harmonious blend of the best elements of the East and the West – Western science and technology with the Ancient Indian Heritage, *Sanatana Bharatiya Jnana Sampradaya-Parampara* (Eternal Indian Knowledge Systems and Tradition).

The following 'thrust areas' have been chosen for the University bearing Swami Vivekananda's hallowed name:

- (1) (a) Disability Management and Special Education,
(b) General & Adapted Physical Education and Yoga
- (2) Agriculture, Integrated Rural and Tribal Development
- (3) Indian Heritage (spiritual, cultural, scientific, sports heritage) including values education for wholesome, integrated character building
- (4) Fundamental and Applied Science education and research (with emphasis on 'Translational Research')
- (5) Environment and Disaster Management

Schools/Faculties/Departments/Divisions running various Academic Programmes at the Belur Main Campus and the 'Off-Campus' Centres across the country through which the above 'thrust areas' are operationalized

The Deemed University has the following Campuses, each of them housing Specialized Faculties conducting various academic programmes to operationalize the above 'thrust areas' with the approval of the University Grants Commission, the Ministry of Education, Government of India as well as the various Regulatory Bodies/Agencies:

- (1) **Belur Main Campus:** Mathematical Sciences (Physics, Mathematics, Computer Science including Data Science), Indian Heritage (Sanskrit, Indian spiritual, cultural and scientific heritage, Yoga, Dhrupad Sangeet, Indian classical music), Sports Science.
- (2) **Coimbatore Campus:** Disability Management and Special Education, General & Adapted Physical Education and Yoga, Agriculture and Rural Development, Computer Science and Applications, Data Science, Business Analytics.
- (3) **Ranchi Campus:** Agriculture, Rural & Tribal Development, Agricultural Sciences with thrust on organic farming.
- (4) **Narendrapur Campus:** Agriculture & Rural Development, Integrated Rural Development and Management, Agricultural Bio-technology, Medical Biotechnology (in collaboration with Ramakrishna Mission Sevapratishthan Hospital, Kolkata), Molecular Biology, Pharmacognosy, Environment and Disaster Management.



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The various academic programmes are run by the following 'Schools' housing certain Specialized Faculty Centres located in the various Campuses mentioned above:

- (1) School of Rehabilitation and Sports Sciences
- (2) School of Agriculture and Rural Development
- (3) School of Indian Heritage
- (4) School of Mathematical Sciences
- (5) School of Environment and Disaster Management
- (6) School of Biological Sciences

In recognition of our unique thrust areas to create the human resource in the form of trained teachers for disability management, **UNESCO has honoured us by creating a Chair in the field of 'Inclusive Adapted Physical Education and Yoga'** to promote this unique area. In appreciation of the good work in this area, UNESCO has recently extended the Chair for another term of four years.

Also, in recognition of our social commitment, **the University has been awarded full membership of an organization called GUNI (Global University Network for Innovation), a Europe-based global organization networking Universities across the globe working with social commitment.**

It is a matter of joy and gratification that **National Assessment and Accreditation Council (NAAC) has awarded us the highest grade of A++ with Cumulative Grade Point Average (CGPA) 3.66 out of 4** (just a wee bit less than Indian Institute of Science, Bangalore, which got a CGPA of 3.67) making us achieve the distinction of ranking **SECOND** in the whole country among Universities accredited in the Revised Accreditation Format up to March 2018.



LATEST REPORT OF THE UNESCO CHAIR ACTIVITIES FOR THE FOUR-YEAR PERIOD (2017–2021) IN THE FIELD OF 'INCLUSIVE ADAPTED PHYSICAL EDUCATION AND YOGA'

| | | |
|---|---|--|
| 1 | Name of Chair | UNESCO Chair in 'Inclusive Adapted Physical Education and Yoga (1004)' |
| 2 | Date of Establishment | December 2012 |
| 3 | Name of Institution (with a photograph) | Ramakrishna Mission Vivekananda Educational & Research Institute (RKMVERI), Belur, Howrah-711202, India. |



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| 4 | Name of Chair and Co-Chair with designation (+ portrait photograph) | <p>Chair: Dr. R. Giridharan, Head, Faculty of General & Adapted Physical Education and Yoga, RKMVERI Coimbatore Email: giri.pd@gmail.com</p>  | <p>Co-Chair: Dr. Arkadeb Dutta, Head, Department of Sports Science & Yoga, RKMVERI Belur Email: arkadeb@gm.rkmvu.ac</p>  |
| 5 | <p>Significant contributions (300-500 words)</p> <p>Infrastructure development: At Belur campus in West Bengal, a five-storeyed multifaceted spacious building was constructed for conducting postgraduate teaching and research (M.Sc and Ph.D. in Sports Science and Yoga), with augmented laboratory facilities for research. At the Coimbatore campus in Tamil Nadu, a state-of-the-art infrastructure, 'Vivekananda Inclusive Sports Complex', has been established for training various categories of differently abled students on selective Paralympics sports disciplines throughout the year. It is proposed to send a contingent to the Paralympics to be held in Paris in 2024.</p> <p>Teaching: Pre-service and in-service training programmes at all levels viz. diploma, undergraduate and postgraduate were conducted at the Coimbatore Campus. New postgraduate and research programmes were introduced in the field of Sports Science and Yoga at the Belur Campus.</p> <p>Training: The Coimbatore Campus organized a Workshop on 'Wheelchair Accessibility and Sports' in collaboration with Leonard Cheshire Disability, London. The present UNES Chair, Dr.R.Giridharan, attended the Special Olympics Leadership Academy Level I, II & programme held at New Delhi and Kolkata.</p> <p>Research: Innovative research programme entitled "Spatial Perception Audio Game for Visually Challenged" for the enhancement of self-sustenance and self-dependence skills in daily life for the visually impaired was carried out in Department of Sports Science at the Belur Campus. A field project to improve the education of the tribal children was taken up under Division of Educational Research (DER-NCERT) and a project under ICSSR-SRC, improving the ability of students with visual impairment.</p> <p>Extension: As in previous years, the Chair organized annual events like 'Unified Play Day</p> | | |



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‘International Day of Yoga’, and ‘International Day for Persons with Disabilities’.

The Chair also conducted a 5-day Yoga Camp at Ramakrishna Mission Vidyapith, a remote tribal school in the State of Chhattisgarh for 300 tribal students.

Conferences: National level seminar/webinars organized: “Recent Trends: Research in Sports Science and Yoga”, “Scientific Approach to Sports Performance and Assessment”, “New Horizons in Sports Sciences: Achieving High Performance”, “Addressing Barriers in Environment and Universal Design” in collaboration with NIEPMD, Chennai, and “Swami Vivekananda’s Educational Vision vis-à-vis National Educational Policy 2020” wherein Ramesh Pokhriyal ‘Nishank’, the Hon’ble Minister of Education, Government of India, was keynote speaker.

Collaboration: Memoranda of Understanding (MoUs) were signed with three pioneering organisations: (i) National Institute of Mental Health and Neurosciences (NIMHANS) Bengaluru, a prestigious Institute under the India Government, (ii) Institute of Neurosciences Kolkata (INK), one of its kind in the Eastern India, (iii) The Dept. of Sports Science, University of Calcutta, in order to forge research collaborations in the fields of neuro-scientific and physiological aspects of inclusive physical education and yoga.

Human Resource/Manpower: Qualified faculty members were recruited to strengthen Chair activities at the Belur Campus, while at the Coimbatore campus faculty recruitment drive in the fields of Special Education and Adapted Physical Education is in progress.

We report with evident pleasure that our University as a whole was accredited by National Assessment and Accreditation Council (NAAC), an autonomous body under the Government of India, with the highest A++ grade (CGPA 3.66/4), ranking SECOND in India in the Revised Accreditation Format in 2018.

The details of the ‘Faculties’ and the academic programmes under the various ‘Schools’ being run by the University in its various Campuses are as follows:

- (1) **School of Rehabilitation and Sports Sciences:**
Disability Management and Special Education with the following Faculties:
 - (i) Faculty of Disability Management and Special Education, and
 - (ii) Faculty of General & Adapted Physical Education and Yoga, located at Ramakrishna Mission Centre in Coimbatore, Tamil Nadu,
 - (iii) Department of ‘Sports Science and Yoga’ at Belur main campus,The above Faculties/Department are running M.Sc. and Ph.D. in Sports Science, M.A. and Ph.D. in Yoga, B.Ed., M.Ed., Integrated (B.Ed.+M.Ed.) in Intellectual Disability, M.Phil., and Ph.D., Integrated (M.Phil.+Ph.D.), Diploma, Advanced Diploma in Special Education, Indian Sign Language Interpretation, Assistive Technology; B.Sc. in Physical Education, Health Education and Sports, B.P.Ed., M.P.Ed., M.Phil., and Ph.D., Diploma, PG Diploma



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programmes in General and Adapted Physical Education and Yoga, Special Olympics, Fitness, Yoga, Ancient Indian Sports (Kalaripayattu).

(2) **School of Agriculture and Rural Development:**

Agriculture, Rural & Tribal Development, with following Faculties:

- (i) Faculty of Agriculture, Integrated Rural Development and Management, Agricultural Bio-technology, located at Ramakrishna Mission Centre at Narendrapur, Kolkata, West Bengal, and
- (ii) Faculty of Agriculture, Integrated Rural & Tribal Development, Agricultural bio-technology, located at Ramakrishna Mission Centre at Ranchi, Jharkhand,
- (iii) Faculty of Agricultural Research and Education at Coimbatore, Tamil Nadu

The above Faculties are running M.Sc. and Ph.D. programmes in 'Agriculture and Rural Development', 'Rural Development and Management', B.Voc. in Sustainable Agriculture, 'Agriculture, Rural and Tribal Development', 'Agricultural Bio-technology'; Diploma in Organic Farming, B.Sc. in Agriculture, M.Sc. (Ag.) in Genetics & Plant Breeding, M.Sc. (Ag.) in Agronomy, PG Diploma in Food Technology, Ph.D. in Agricultural Biotechnology, Agriculture and Rural Development.

(3) **School of Indian Heritage:**

Indian Spiritual, Cultural, Scientific and Sports Heritage (including Values Education) with the programmes in the following areas:

- (i) Sanskrit Studies and Research,
- (ii) Indian Spiritual, Cultural and Scientific Heritage,
- (iii) Yoga Studies and Research,
- (iv) Classical Music with special emphasis on Dhrupad,
- (v) Values Education
- (vi) Bengali Studies and Research
- (vii) Philosophical Studies (Western and Eastern, with special emphasis on Vedanta, Yoga, Sankhya and Ramakrishna-Vivekananda philosophy)

The programmes being run in the above areas include: Sanskrit Studies and Research (Integrated 5-year M.A. programme completely taught in Sanskrit medium, Ph.D. in Sanskrit with special reference to Vedanta and Vyakarana), Research in Philosophy and Bengali (Ph.D. in selected areas in these subjects, focussing on Ramakrishna-Vivekananda, various School of Indian Philosophy, that is, *darshanas*), Diploma and Certificate Courses in Spiritual Heritage of India like the Upanishads, Bhagavad-Gita, Yoga Sutras of Patanjali, Srimad-Bhagavatam, Ramayana, Mahabharata, Ramakrishna-Vivekananda literature, and other ancient Sanskrit scriptures.



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Research activities in philosophy and Sanskrit has been greatly facilitated by the creation of 'Swami Abhedananda Chair' by the Ministry of Culture, Govt. of India with a permanent Corpus Fund.

(4) **School of Mathematical Sciences:**

Fundamental Science Education and Research with the following Departments:

- (i) Department of Mathematics,
- (ii) Department of Computer Science and Applications (including Data Science),
- (iii) Department of Physics.

These Departments are located at the Belur main campus, and at Coimbatore Centre and are running M.Sc., M.Phil., Ph.D. programmes in Physics, Mathematics, Computer Science and Applications and Big Data Analytics.

It may be recalled in this connection that it was **Swami Vivekananda who inspired Sir Jamshedji Tata to start an Institute in India for fundamental science education and research** during their travel together in the same ship to Chicago in 1893. The result of this dialogue between these two great minds and great sons of India is the present 'Indian Institute of Science' at Bengaluru, which is the pride of Indian science, a globally acknowledged premier Institute devoted to research and education in fundamental sciences.

(5) **School of Environment and Disaster Management:**

M.Sc. and Ph.D. programmes in 'Environment and Disaster Management' located at Ramakrishna Mission Centre at Narendrapur, Kolkata, West Bengal. This programme is being supported by **European Commission** in a collaborative venture through a Memorandum of Understanding (MoU). The **Government of West Bengal has created a Swami Vivekananda Chair in 'Environment and Disaster Management'** to reinforce and strengthen the various programmes in this important area.

(6) **School of Biological Sciences:**

The Department of Biomedical Science and Technology under this School conducts M.Sc. and Ph.D. programmes in Medical Biotechnology, Microbiology, etc. Integrated 5-year M.Sc. (3-year B.Sc. Hons + 2-year M.Sc.) programmes in the following two important areas, wherein trained personnel are the urgent need of the hour, are being planned and will be started from July-August 2022: (i) Medical Laboratory Science Technology, (ii) Medical Critical Care Science and Technology. The venues of these programmes are the Narendrapur Campus and Ramakrishna Mission Sevapratishthan Campus at Kolkata. The field of Biomedical Science and Technology, which is becoming increasingly important on account of the Covid-19 pandemic, is now the focus of special attention of our Deemed University. The specialized areas in this field which are emerging and exciting are: medical laboratory technology,



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critical care science and technology, immunology, digital biology and bioinformatics, digital image analysis, etc. Academic programmes (postgraduate and research) in these areas are being started from the academic year 2022-2023.

As is well known, Swami Vivekananda wanted a harmonious blend of the *Sanatana Bharatiya Jnana Parampara* (Ancient Indian Knowledge Tradition, its spiritual wisdom and remarkable insights into the whole spectrum of human knowledge) with the modern scientific and technological as well as philosophical and mathematical knowledge of the Western world. RKMVERI Deemed University established in his hallowed name is striving to achieve this unique blend by setting up the Schools of Indian Heritage, Mathematical Sciences, Rehabilitation and Sports Sciences, Environment and Disaster Management, Agriculture and Rural Development and Biological Sciences.

In addition to the above, RKMVERI has stated the following two new Centres under the School of Indian Heritage, namely:

- (1) **VIVEKA-VYASA** (**Vivekananda Vedanta-Yoga-Adhyayana-Samshodhana-Alaya**), that is, Vivekananda Centre for Study and Research in Vedanta and Yoga), with emphasis on research and publications on Indian philosophy cross-referenced with Western Philosophy, Yoga psychology emerging areas in philosophy like Care Ethics, Humanistic Ethics, Environmental Ethics, Earth as the Mother, etc.
- (2) **VIVEKA-CHATAK** (**Vivekananda Chaitanya Tattva Anusandhan Kendra**), that is, Vivekananda Centre for Consciousness Research with emphasis on the theoretical study of the ancient Vedanta and Yoga texts relating to Consciousness or *Chaitanya* as well as exploration through scientific experimentation on the veracity of some of the claims made in these ancient texts.

The activities of these two Centres have been largely facilitated by the 'Swami Abhedananda Chair' established at the University by the Government of India, through its Ministry of Culture, with a permanent corpus fund. The Chairholder, besides conducting research activities, is also actively be involved in preparing books/booklets and papers for publication in various national and international journals.

Two journals, one at the level of the research scholars and another at the level of undergraduate and postgraduate students, fully in Sanskrit, called **PRAJNALOKA** and **PRATIBHALOKA** respectively are published by the Department of Sanskrit and Philosophy under the School of Indian Heritage. One more journal called **PRAJNANAM** which is presently tri-lingual (Sanskrit, Bengali and English) caters to students of various Colleges and University students.

Under the auspices of the 'Swami Abhedananda Chair', the Department of Sanskrit and Philosophy' runs three courses on *Sanskrita Bhasha Praveshika* for the promotion of Sanskrit among the general public as well as the College and University students at



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three levels: (i) Preliminary, (ii) Intermediate and (iii) Advanced. Intensive research work on Indian Philosophy (the Six Systems, *shad-dharshana*) with special emphasis on the various aspects of Vedanta, Samkhya and Vyakarana as well as Ramakrishna-Vivekananda philosophy based on the classic texts like Sri Sri Ramakrishna Kathamrita (The Gospel of Sri Ramakrishna), Sri Sri Ramakrishna Lilaprasanga (Sri Ramakrishna and his divine play or Sri Ramakrishna, the Great Master), the Complete Works of Swami Vivekananda and Swami Abhedananda, etc. A brief report of the research work in this regard including the M.Phil./Ph.D. theses completed and in progress is given below:

RESEARCH ON VEDANTA AND RAMAKRISHNA-VIVEKANANDA PHILOSOPHY UNDERTAKEN/COMPLETED BY THE Ph.D./M.Phil. SCHOLARS OF THE DEPARTMENT OF SANSKRIT AND PHILOSOPHY DURING THE PAST EIGHT YEARS – A SUMMARY

No. of M.Phil. theses: 14

List of themes of these M.Phil. theses:

- (1) Ashtavakra Gita – a critical study vis-à-vis Bhagavad-Gita
- (2) Shaiva Siddhanta philosophy
- (3) Comparative study of Shankara Bhashya and Vedanta-Desika Bhashya on the Ishavasya Upanishad
- (4) Mukti (jivanmukti, videhamukti, kramamukti) according to Shankara Bhashya on the Chhandogya Upanishad
- (5) Ramakrishna-Vivekananda Vedanta (called Vijnana Vedanta)
- (6) Vritti-prayojana according to Advaita Vedanta
- (7) Swami Shankarananda's Dipika on Kailvalya Upanishad
- (8) Sri Shankaracharya's Sadhana-panchaka – a critical study
- (9) Arthapatti-viveka according to Advaita Vedanta
- (10) Navya-Nyaya in Madhusudana Saraswati's Advaita Siddhi
- (11) Special qualities of a Mumukshu as described in Uddhava Gita
- (12) Saccidanandendra Saraswati's (1880-1975) new concepts in Advaita Vedanta
- (13) Analysis of the Samkhya Yoga of Bhagavad-Gita according to Nilakantha Dikshita's commentary, Bharata-bhava-dipa, on the Mahabharata
- (14) Critical and comparative analysis of the commentaries of Shankara, Ramanuja and Baladeva Vidyabhushana on the second chapter of the Bhagavad-Gita

No. of Ph.D. theses: 11

List of themes of these Ph.D. theses:

- (1) A critical and comparative study of the first Shatka of the Bhagavad-Gita according to Shankara, Ramanuja and Baladeva
- (2) Advaita Bhavana in Rabindra Sangeet



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- (3) A Bengali Translation and Critical Analysis of Amṛtatarāṅginī Commentary on the Bhagavad Gītā by Puruṣottamācārya
- (4) A critical study of the first Shakta of the Bhagavad-Gita based on Ramakantha's Saiva Bhashya and comparison with other Shaiva commentaries on the Gita
- (5) Veda-bhashya of Sri Sayanacharya – a critical study
- (6) Similes used by Sri Shankaracharya in his Brahma Sutra Bhashya – a critical study
- (7) The verses of the Bhagavad-Gita quoted in Sri Sri Ramakrishna Kathamrita by Sri Mahendra Nath Gupta – a critical study based on the Gita Bhashyas of Shankara, Ramanuja, Baladeva
- (8) Study of the Upanishads based on Sri Ramakrishna's harmonizing and non-sectarian interpretative framework
- (9) A comparative critical study of the commentaries on the Chatussutri of Brahma Sutras according to Advaita and Achintya Bhedaabheda schools of Vedanta
- (10) A comparative critical study of the commentaries of Shankaracharya and Sayanacharya on Ishavasya and Taittiriya Upanishads
- (11) The meaning of the Mahavakyas as reflected in the various Gitas found in the Bhagavata Mahapurana

List of dissertations on Vedanta and Ramakrishna-Vivekananda philosophy by M.A. students: 29

- (1) Study of the selected portions from Sri Shankaracharya's Prashnottara Malika
- (2) Understanding Sri Shankaracharya's Atmabodha
- (3) Meaning of injunction (vidhi) in Vedanta
- (4) Sri Ramakrishna's concepts of Nitya and Lila – a critical study
- (5) Uniqueness of the Prasthanatraya among the Advaita scriptures
- (6) Discussion on Sacchidananda in Sri Shankaracharya's Soundarya Lahari hymn
- (7) Discussion on Sakara and Nirakara in Advaita scriptures in the light of Sri Ramakrishna's teachings
- (8) Thoughts on Bhakti according to Sri Sampradaya of Ramanujacharya
- (9) Arthapatti-pramana according to Advaita Vedanta
- (10) Bhakti Yoga in the light of Ramarayakavi's Bhashyarkaprakasha
- (11) Compilation of the Shruti passages determining six-fold tatparya
- (12) Brahmananda valli of Taittiriya Upanishad – a study
- (13) A study of the Parthiva prakarana in Upadesha Sahasri of Sri Shankaracharya
- (14) Famous Loukika Nyayas found in the Nyaya-prasthanatraya Bhashya
- (15) Jiva-bheda (difference in Jivas) according to Sri Ramakrishna
- (16) The strength of Pratyaksha in Advaita Siddhi
- (17) Analysis of the Apourusheyatva of the Vedas
- (18) Analysis of Kshetra and Khetrajna according to the Bhagavad-Gita
- (19) 'Brahma-satyam, Jaganmithya' according to Sri Ramakrishna
- (20) Analytical study of Aparokshanubhuti of Sri Shankaracharya
- (21) The nature of Moksha and Moksha Upaya according to Sri Shankaracharya and Sri Ramanujacharya



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- (22) Sri Ramakrishna's unique concepts of Jnana-Vijnana-Bhavamukha
- (23) A comparative study of the conclusions of Purnaprajna and Shankara in the Brahma Sutra, janmadi etc.
- (24) Tattwamasi mahavakya vichara in Upadesha Sahasri of Sri Shankaracharya
- (25) Discussion on the Atmananda Prakarana in Vidyananda's Panchadashi
- (26) Discussion on the Mithyatva Lakshana in Advaita Siddhi of Madhusudana Sarasvati
- (27) Discussion on Pratyaksha Pramana according to Advaita Vedanta
- (28) Discussion on the Yogananda Prakarana in Vidyananda's Panchadashi
- (29) A critical study of the third chapter of the Bhagavad-Gita

Seminars, Workshops etc., on Vedanta, Sankhya, Mimamsa, etc.

- (1) International Workshop on "Advaitasiddhi of Madhusudana-sarasvati" in July-Aug 2022
- (2) International Workshop on Sāṃkhyakārikā in Jan-Feb 2022
- (3) International Workshop on Mīmāṃsā text Arthasaṅgrahaḥ of Laugākṣi-Bhāskara
- (4) Veda-Vedanta Saptaha (Weeklong celebration of Veda-Vedanta) from 29 February to 5 March, 2016, comprising a 3-day National Seminar on the Three Major Schools of Vedanta (Advaita, Vishistadvaita, Dvaita). Key-note address: Śāṅkara-rāmaṇuja-bhāṣya-svārasyam.
- (5) Lectures delivered on various abstruse topics of Advaita Vedanta: Pancadaśī, Mahāvākye saṃsargaviśiṣṭavākyārthaḥ kathaṃ na, Adhyāropāpavādaḥ, Śāṅkaravedānte Yogasātrasyopayagaḥ, Susuptau Avidyā, Tattvamasivakyaarthavicāre pūrvācāryasaraṇiṃ prati kascitpūrvapakṣaḥ.
- (6) Besides seminars and symposia conducted at periodic intervals, the Department of Sanskrit has a Weekly Colloquium called *manasollasah* wherein the Sanskrit Department students of all the five years of Integrated M.A. and also Ph.D. scholars participate to get trained in extempore speech in Sanskrit, composition of poetry on the spur of the moment on various themes given to them, reciting their self-composed poems and presenting their research papers, etc.

Consolidated list of Workshops conducted from 2015 to 2022:

- (1) International Workshop Series 6, 'Close Reading of the śāstras (śravaṇa-manana)' in *Advaita-siddhi of Madhusudana-sarasvati*--5 July to 13 August 2022
- (2) International Workshop Series 5, 'Close Reading of the śāstras (śravaṇa-manana)' in *Dhātvartha-nirṇayaḥ in Vaiyākaraṇa-Bhūṣaṇasāra of Kaṇḍa-Bhaṭṭa*--15 February to 15 March 2022
- (3) International Workshop Series 4, 'Close Reading of the śāstras (śravaṇa-manana)' in *Kriyā-svarūpa in Pāṇinīya-Vyākaraṇa* -- 17 January to 5 February 2022
- (4) International Workshop Series 3, 'Close Reading of the śāstras (śravaṇa-manana)' in *Sāṃkhya-kārikā of Iśvarakṛṣṇa* -- 3 January to 3 February 2022



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- (5) International Workshop Series 2, 'Close Reading of the śāstras (śravaṇa-manana)' in *Vyākaraṇa-śatakoṭiḥ in the aphorism Arthavada-dhāturapratyayaḥ Prātipradīkam* – 30 Dec 2021 to 13 Jan 2022
- (6) International Workshop Series 1, *Close Reading of the śāstras (śravaṇa-manana) in the Mīmāṃsā text Arthasaṅgrahaḥ of Laugākṣi-Bhāskara* – 2 to 28 August 2021
- (7) National Workshop in *Vyākaraṇa Mahābhāṣya of Patañjali (Ekaśeṣāhnikam)* – 23 to 29 Feb 2020
- (8) National Workshop in *Vyākaraṇa Mahābhāṣya of Patañjali (Samarthā-hnikam)* – 5 to 12 Jan 2019
- (9) National Workshop in *Navya-Nyaya* – 16 to 19 Aug 2017
- (10) *Motivational Workshop for Sanskrit Teachers* in collaboration with Samskrita Bharati – 02 April 2017
- (11) National Workshop in *Manuscriptology* – 21 Nov to 6 Dec 2016
- (12) Workshop in *Manuscriptology* in collaboration with Sri Venkateswara Vedic University, Tirupati – 29 Mar to 13 April 2016
- (13) National Workshop in *Translation into Sanskrit* – 2 Nov to 6 Nov 2015

**RESEARCH ACTIVITIES ON RAMAKRISHNA-VIVEKANANDA PHILOSOPHY
VIS-À-VIS WESTERN PHILOSOPHICAL THOUGHT
UNDER THE 'SWAMI ABHEDANANDA CHAIR'
FOR THE PERIOD FROM 1 DECEMBER 2021 TO 15 JULY 2022**

INDIVIDUAL RESEARCH OF THE CHAIR PROFESSOR, Dr PAROMITA ROY:

A. Research Articles in Philosophy and Care Ethics

1. Upanishadic thought, Swami Vivekananda's educational philosophy vis-à-vis the concept of 'Intellectual Midwifery' of Socrates
2. Ethics of Care as viewed from the perspective of inter-connectedness and inter-relatedness – Buddhist concept of *pratitya-samutpada* and modern cell biological concepts
3. Swami Vivekananda's Atman-centric Ethics without reference to religion

B. Books (original and translation)

1. The Concept of 'One Health' – Philosophical Underpinnings
2. The place of prayer in Jainism and Buddhism
3. Translation into Bengali: "The Soul of Man" by Swami Ramakrishnananda
4. Translation into Bengali: "Classical Indian Philosophies: Their Synthesis in the Philosophy of Sri Ramakrishna"



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Design of General Ethics Syllabus and study materials for the Ph.D. scholars

A comprehensive syllabus is being prepared incorporating the important ideas and theories in Western Ethics and putting them in perspective in the framework of the Indian Wisdom tradition (Bharatiya Jnana Parampara) and also to mark the subtle differences as well as similarities in the Western and Indian understanding of Ethics.

Design of Research methodology syllabus for the Ph.D. scholars

A comprehensive syllabus is being prepared incorporating the different research methodologies, both Western and Eastern. The philosophical concepts of the Western philosophers, such as the Socrates' midwifery, Cartesian method of Rene Desacartes, Immanuel Kant's Transcendental Dialectic, etc., are placed alongside the research methodology followed in the Upanishads such as Prashna, Taittiriya and the Brhadaranyaka Upanishads wherein the researcher, the seeker of Truth is gradually led to deeper and deeper realms of thought through an open-ended exploration into the inner Consciousness. It is also shown how the understanding of "Anubandha-catushtaya" forms the key in the research methodology developed by the ancient Indian commentators and researchers into the Shastras.

C. Research on Swami Vivekananda's Four Yogas

E.1. Paper on "Swami Vivekananda's Four Yogas – an overview and their synthesis, a unique contribution of Swami Vivekananda for the modern age" presented by Dr.Paromita Roy, the 'Swami Abhedananda Chairholder' at a recent Webinar to mark the International Day of Yoga on 21 June 2022.

RESEARCH UNDER THE GUIDANCE/SUPERVISION OF THE CHAIR PROFESSOR, Dr PAROMITA ROY:

E.2. Research Projects undertaken by two Ph.D. scholars on the 'Four Yogas of Swami Vivekananda' under the supervision/guidance of the 'Swami Abhedananda Chair' Professor, Dr.Paromita Roy:

E.2.1. Swamiji's Exposition of Karma Yoga vis-à-vis Western Philosophical thought (Socrates, Kant, Bradley, Thomas Hobbes, Henry Sidgwick)

E.2.2. Swamiji's exposition of Jnana Yoga vis-à-vis Western Philosophical thought (Socrates, 'Allegory of the Cave' in Plato's Philosophy, World of Reality and the World of sensible particulars, British philosopher Francis Herbert Bradley and his seminal work entitled *Appearance and Reality*)

E.2.3. Swamiji's unique exposition of Raja Yoga and Patanjali Yoga Sutras

E.2.4. Swamiji's exposition of the Bhakti Yoga and comparison with Narada Bhakti Sutras



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F. Research Project undertaken on Vedanta by the Ph.D. scholar, Smt. Subarna Paul, under the 'Swami Abhedananda Chair'

Translation into Sanskrit of *Introduction to Vedanta Darsana* (forming part of the Bengali discusses in simple and lucid language the twelve schools of Vedanta)

G. Seminars/symposia – Paper presentation by research Scholars

G.1.. "Swami Vivekananda's Karma Yoga vis-à-vis Western philosophical thought" by Smt. Subarna Paul – presentation made at a webinar on 19 June 2022

G.2. "Swami Vivekananda's Bhakti Yoga discussed in the light of the Christian Mystics' Love of God" by Smt. Dhriti Rani Saha – presentation made at a webinar on 20 June 2022 (three Christian mystics chosen among the innumerable mystics: St. Francis of Assisi, Joan of Arc, and Teresa of Avila)

RESEARCH PROJECTS IN PROGRESS

A. Individual Research Activity by the 'Swami Abhedananda Chair' Professor, Dr Paromita Roy

A.1. Research Articles:

1. Vasudaiva Kutumbakam: Solidarity in hours of crisis with reference to the Philosophy of Swami Vivekananda
2. Yoga samanvaya of Swami Vivekananda

A.2. Books/Booklets

1. Prayer in Sikhism
 2. Prayer in Islam
 3. Prayer in Judaism and Christianity
- B. Under the Supervision/Guidance of the Chair Professor: prepared by the research scholars:**
1. Comprehensive Book containing references to the Four Yogas and Yoga Samanvaya in *Sri Sri Ramakrishna Kathamrita* (both in original Bengali and the English translation, *The Gospel of Sri Ramakrishna*)
 2. Comprehensive Book incorporating comparative analysis of the Four Yogas of Swami Vivekananda and the Four Yogas of Swami Abhedananda
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MISCELLANEOUS RESEARCH PROJECTS IN PROGRESS

Setting up of a Departmental research library with all the essential texts, rare materials, etc., in Western philosophy, Indian philosophy, religion, Ramakrishna-Vivekananda literature etc., for easy and ready access any time of the day.



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RESEARCH IN BIOLOGICAL SCIENCES

To promote research in the field of Biological Sciences, a new Centre called JIVAN has been started. A brief description of JIVAN is given in the Note below:

JIVAN (Jiva-Vijnan-Anweshan-Niketan) – Centre for Research in Biological Sciences

In collaboration with Ramakrishna Mission Seva Pratishthan

JIVAN is a research initiative of the School of Biological Sciences of RKMVERI Deemed University, in collaboration with Ramakrishna Mission Sevapratishthan (a 600-bed General Hospital nearly 90 years old located in Kolkata). Its objective is to bring together biological scientists with vast research experience in laboratories of reputed Institutes and the medical doctors working in the field in order to create a synergy, taking on board eminent statisticians and computer scientists also to explore the fascinating emerging areas like the use of digital image analysis and artificial intelligence techniques in the medical field. The following **Five Working Groups** in the various important areas of Biological Sciences are actively engaged in working out the plans and programmes for research, teaching-training, extension services under JIVAN:

1. Microbiology
2. Cardiology & Metabolic Disorder
3. Hematology & Hemato-Oncology
4. Neuroscience
5. Medical Statistics and Digital Data Analytics

Each of the above Groups has, on an average, 5 persons who are biological scientists who are teaching and research faculty of the University as well as practising medical doctors interested in medical and biological research. The Statistics Group comprises mathematicians and statisticians from the reputed Indian Statistical Institute, Kolkata, and some of them are computer scientists engaged in research in medical image analysis.

Recent Developments and Future Plans for the School of Biological Sciences:

During the last year (2021), the raging Covid-19 pandemic notwithstanding, the School of Biological Sciences, under its Department of Biomedical Science and Technology, set up a Research Unit, mainly for Translational Research benefiting the common man (called 'lab to bedside' research) called JIVAN (Jiva-Vijnan-Anweshan-Niketan), Centre for Research in Biological Sciences. As mentioned already, JIVAN is a unique synergy of basic biological scientists on the one hand and medical doctors/clinicians on the other and has 5 vibrant working groups on various fields of biomedical research. We have also established state-of-art cell culture facility during the last academic year. Four new research faculty members have been recruited: Dr. Arnab Basu, Dr. Pushkar Malakar, Dr. Brahmachari Manash Deep and Dr. Dipak Manna, of whom two hold the prestigious Ramalingasway Fellowship of the Dept. of Biotechnology and one the Ramanujan



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Fellowship of the Dept. of Science and Technology, Govt. of India. A total of six research scholars are presently working in the department and Brahmachari Somnath has submitted his thesis on 'investigating drug resistance in Multiple myeloma' for the award of the degree of Ph.D. To our knowledge, ours is the only University/Institute in the whole country wherein Medical Biotechnology and Agricultural Biotechnology teaching and research activities are being conducted under a single roof. We have received research funding from various organizations like, KolkataGives, Kolkata; Karuna Trust, Bengaluru (from Padma Shri Dr.H. Sudarshan), and Dr. Manish Nandi, a doctor based in Texas, USA. Within a short span of about one year and a half, a total of 7 research papers were published in internationally renowned journals and 2 more papers are in the pipeline. The School of Biological Sciences has signed **Memoranda of Understanding (MoUs) with other research institutions for multidisciplinary research:**

- (1) Ramakrishna Mission Seva Pratishthan (Vivekananda Postgraduate and Research Institute of Medical Sciences), Kolkata;
- (2) University of Calcutta; Institute of Neuroscience, Kolkata (INK);
- (3) Tata Medical Centre (TMC);
- (4) Chittaranjan National Cancer Institute (CNCI), Kolkata.

Agricultural Biotechnology group of teachers and research, in existence for nearly a decade since the very inception, are working in collaboration with the Biotechnology group. In last two years, nearly 40% of the students who successfully completed their M.Sc. programme, are pursuing their Ph.D. abroad (in the USA and Europe) and in renowned Institutes in India (IITs, IISERs, CSIR, and DAE research institutes). Students are well placed in the agro-based industries and also in academia. Some of our students have also opened their start-ups in various agricultural domains and are gaining paced success over time. Faculties are actively engaged in research, receiving national-level competitive grants and showcasing their research in high-impact journal publications (8 publications in 2021-2022 academic year). We have established a fully functional Organic Farming Centre and Quality Testing Laboratory which are engaged in extension activities for the beneficiaries and farmers apart from research. A fully functional tissue culture centre is also in place, engaged in teaching and research. We have also received 5 research projects from various agencies like ICAR, DBT-SERB, DBT, West Bengal State Medicinal Plant Board and UGC-DAE CSR.

Academic Programmes being started during the current academic year 2022-2023:

We have initiated process for upgrading our syllabus in Medical Biotechnology to include facets of Drug development, Entrepreneurship and Nanotechnology. We also envision including vaccine development as a unit in the new syllabus which has been recently updated in July 2022. The following two programmes, relevant and urgent to meet the emerging needs are being started from the current academic year 2022-2023, under the Department Biomedical Sciences and Technology in the School of Biological Sciences:

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- (1) M.Sc. in Critical Care Science and Technology,**
 - (2) M.Sc. Laboratory Science and Technology**
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Both these courses are planned to create a talent pool for addressing the niche requirement of specialists in critical care and laboratory sciences. A MoU in this regard is being signed with the Peerless Hospital & BK Roy Research Institute, Kolkata. These programmes will generate employment in the urgently needed areas of Critical Care and Laboratory Techniques. Four different hospitals with expertise in various specializations like pulmo-cardiology, neurology, oncology (cancer biology) with whom MoU has already been signed will provide all advanced facilities in these specialized critical care. We are also relentlessly pursuing the opportunities for grants from the Departments of Science & Technology, and Biotechnology, Govt. of India for augmenting and reinforcing our research infrastructure and facilities.

In Agricultural Biotechnology, the already existing Centre in Organic Farming is being developed into a Centre of Excellence in Organic Farming System Research with a focus on plant microbiome projects to conduct fundamental bio-molecular research in the areas of agricultural biotechnology, which will provide facilities for teaching and research with state-of-the-art plant biotechnology facility. Further, a house of sophisticated high-end instrumentation facilities to conduct research on specific areas of plant molecular biology, agricultural microbiology, biotechnology of medicinal plants, etc. is on the cards. The University has also brainstorming on starting a course of Integrated B.Sc.-M.Sc. programme in Biotechnology with specializations in either plant/agricultural biotechnology or medical biotechnology in the last three semesters through a synergy between the School of Agriculture & Rural Development and the School of Biological Sciences.

CREATING A RESEARCH ECOSYSTEM—SETTING UP A RESEARCH & DEVELOPMENT CELL AS PER THE UGC GUIDELINES IN THIS REGARD

It may be mentioned in this context that in tune with and in compliance of the National Education Policy (NEP) 2020 and as per the elaborate UGC Guidelines in this regard, the University has set up a Research & Development (R & D) strictly following the essential points delineated in the UGC's Booklet on the *raison d'être* for setting up such a Cell (excerpts from the 'Foreword' by the Hon'ble Chairman, University Grants Commission to the Booklet giving the Guidelines for the setting up of an R & D Cell in Higher Education Institutions):

"National Education Policy (NEP) 2020 envisages the promotion of quality research within the Higher Education System. Research, innovation and development are important aspects to enhance quality education by the Higher Education Institutions (HEIs). Societal challenges of our country can only be addressed by having a strong and vibrant higher education ecosystem with an emphasis on research, innovation and technology development. The integration of Research, Innovation and Technology Development is the foundation of Atma-Nirbhar Bharat (self-reliant India). I am delighted to present the 'Guidelines for Establishment of Research and Development Cell (RDC) in HEIs'. The establishment of RDC in HEIs will enable attainment of targets of Atma-Nirbhar Bharat and is expected to play a pivotal role in catalyzing research culture mandated in NEP 2020. The purpose of these guidelines is to put in place a robust mechanism for developing and strengthening the research ecosystem within HEIs,



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aligned with the provisions of NEP-2020. The essential elements of such an ecosystem, viz., generation of knowledge and facilitation of research, innovation and technology development for industrial & societal benefits, are addressed by human resource, intellectual capital, governance and financial resources, information management system, research promotion & guidance, Integrity and ethics, capacity building and research monitoring. The Guidelines are to create a conducive environment for enhanced research productivity; to encourage collaboration across industry, government, community-based organizations, and agencies at the local, national, and international levels and to facilitate greater access to research through mobilization of resources and funding. The establishment of RDC in HEIs will help in creating new knowledge, creating a research ecosystem for reliable, impactful, and sustained research output and facilitating intellectual growth that would promote quality research and contribute meaningfully towards the goal of a self-reliant India.”

**DEVELOPMENT OF ‘ENTERPRISE RESOURCE PLANNING (ERP)’
FOR EFFECTIVE GOVERNANCE AND MANAGEMENT**

It is now common knowledge that the implementation of the ERP in educational institutions in general and higher education institutions in particular has become the *sine qua non* of effective, efficient and excellent governance. Its benefits, which can hardly be overemphasized are now well known and flow in multiple channels to cover all the stakeholders. Some of them are listed below.

Enterprise Resource Planning (ERP) is the key software for institutions which helps them to manage and control their operations and all activities regardless of their periodicity. This software type is most useful when institutions have a lot of data points from various channels and need distilled information to take key decisions and implement correction measures. Higher education institutions deal with a lot of data pertaining to admissions, fees, online classes, assessments, final exams, grading, and certifications which require a level of automation to eliminate manual errors. Processing and storing all this information and easy retrieval makes ERP indispensable for these institutions. ERP software uses vary per stakeholder and some of the tangible benefits of such an integrated system are:

Educator/Teacher:

In today’s world, where all teaching, learning, and grading are online, the ERP could act as a facilitator for the teacher, replacing most physical tasks with the clicks of buttons. Sharing lesson plans, course materials, and grades are easier with an ERP platform. Most data captured from students are recorded for future reference and the risks of human error are reduced to a minimum. Additionally, educators can access specific student data across departments that will help them understand the student journey better and provide personalized learning experiences. As educators, the onus of delivering lessons per the curriculum is made easier with an ERP platform and tracking progress is faster. The other uses of an ERP to the educator are:



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-
- ✓ Automates repetitive tasks
 - ✓ Eases submissions and grading
 - ✓ Allows for better collaboration with students and other departments
 - ✓ Easy uploads of course materials
 - ✓ Access to a repository of teacher trainings
-

Student:

If used well, a good ERP solution eases the learning process for the student. The shift to virtual classrooms has not been easy for some students, even though they are considered to be digital natives. With automated assignment reminders, lesson query resolutions, submissions, and grades, the process of interaction with the teachers is made easy. Access to individual portals for notifications, information, updates, download/upload assignments, timetable, exam notifications, fee reminders and more, makes for easier task management and completion. Whether it is institution policies or learning guides, students can also access information whenever and wherever they choose to. This makes the learning process a seamless and streamlined experience. The other uses of an ERP to the student are:

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- ✓ Anytime, anywhere access to updated course materials
 - ✓ Paced learning
 - ✓ Faster resolution of lesson queries
 - ✓ Peer-to-peer learning
 - ✓ Progress updates in a single view
-

Educational Institutions:

An ERP can bring in savings in costs and time for the management of an institution. By interconnecting all functional and operational departments in the institution, data regarding students, faculty and administration are stored and retrieved on demand. Some platforms provide real-time analytics on cost leakages across departments which might hinder performance and result in assets being used sub-optimally. An ERP software for educational institutes also enables them to manage their online brand presence, faculty reviews, and student progress. Having this organized data handy is most beneficial when it comes to making course corrections related to a particular department or process. Administrative tasks can be automated and more focus can be channeled into the quality of education. ERPs also come with data security which is paramount to keep student and parent trust and augment brand perception in today's age. The chances of information leakages are less when compared to on-premise solutions or physical maintenance of documentation. The other uses of an ERP to the institution are:

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- ✓ Online brand management
 - ✓ Automated marketing activities
 - ✓ Smoother admissions processes
 - ✓ Automated fee collections
 - ✓ Faster comparison of department metrics
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A robust ERP must be efficiently used to its maximum capacity in order to be able to deliver the expected outcomes. An important factor that educational institutions need to keep in mind while implementing an ERP solution is its scalability. As more students opt for online education, software must be ready to hold and integrate the influx of new data with old records. Newer data points are generated almost on a daily basis with regard to student leads and marketing activities and how well an institution captures and makes sense of it will depend on how good the ERP solution is. With multiple ERP offerings in the market tailored for educational institution use, appropriate diligence must be carried out to pick the one that suits all stakeholder requirements. Pre-pandemic, investments into digital infrastructure such as an ERP were considered useful but optional, but no more—it is now not only essential, but a *sine qua non* for effective management and governance of any institution.

Keeping in mind the essentiality of ERP as briefly delineated above, our Deemed University has developed an ERP system on our own, with the help of indigenous computer software and hardware experts among the monk-faculty and administrators and some outside experts. As one can appreciate, the development and fine-tuning of the ERP system is a continuous process and newer innovations are being constantly attempted to make the ERP system suitable for our conditions. While the ERP is now fully functional and in place, fine-tuning and customizing to our ever-growing newer needs is going on.

CENTRES FOR INTERDISCIPLINARY RESEARCH

1. CENTRE FOR 'ONE HEALTH'

Another exciting recent development is the proposed **Centre for 'One Health'**, the concept of 'One Health' gaining tremendous importance in the recent years. The concept is the integration of soil health, plant health, animal health, human health (at the individual and collective (community) levels as these are now being recognized as forming a continuum. The urgency of an integral, holistic approach to health is being now as never before, particularly in the wake of the devastating Covid-19 pandemic. The global pandemics of Covid-19 that has so far killed more than 5 million people and devastated life and economy of every continent, country and community have demonstrated more than ever before the fragility of public health before the viruses originating from the animal kingdom. Earlier series of regional pandemics during the past two decades – SARS, MERS, H1N1, H5N1, Ebola, Zika, Nipah – had struck an alarm bell that return period of global pandemics may be much more frequent in future than in the past. Hence prevention of pandemic disasters has acquired centre stage in the global discourse on reimagining public health for sustainable development.

The discourse has been further widened to include increasing incidences of microbial diseases of both animal and plant origins – bacteria, viruses, parasites and fungi – and the growing resistance of these microorganisms due to inappropriate use of antimicrobials on



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humans, animals, and plants. The discourse has also included emergence of new pathogens and exacerbation of existing burden of diseases due to anthropogenic climate change, loss of biodiversity, deforestation, degradation of environment and deteriorating quality of air, water and soil.

There is a growing realization that human, animal and plant health are interdependent and bound to the health of the ecosystem of which they are inseparable components. Health of all living organisms on the planet is intrinsically intertwined and therefore naturally driven interdependence of species can be disturbed only at the peril of the species. This has given rise to the concept of 'One Health' as a collaborative approach for understanding and managing risks for planetary health of all living organisms and encouraging a more sustainable balance of the delicate ecosystem. The concept was initially advanced by the veterinary scientists and has gradually found traction among medical, environmental, agricultural, botanical, soil, aquatic, and other related disciplines.

Globally three UN agencies – WHO, FAO, UNICEF – and two international organisations, the World Organisation for Animal Health (OIE) and the World Bank joined hands to develop a strategic framework for Contributing to 'One World, One Health' in 2008. A number of academic, scientific, and civil society organisations around the world followed with new programmes on education, research and advocacy on one health. One Health Platform was set up in 2015 as a multi-disciplinary resource centre on one health across disciplines and sectors. Earlier in 2009 the 'One Health' Commission was established in the USA to promote a global movement on 'One Health'. The Commission has mapped 'One Health' initiatives around the world. Since 2016, the International Day of 'One Health' is celebrated on 3 November every year.

Considering the growing global concern for an integrated approach to human, animal and plant health, and the unique position of India as an ancient civilization with strong philosophical tradition of Knowledge or Awareness of Oneness (called *ekatva vijnana* in the Upanishads or Vedanta) wherefrom the concept of 'One Health' flows as a natural consequence, with its large population of humans and animals highly vulnerable to epidemic diseases, the urgent need for multi-disciplinary education, research and advocacy on 'One Health' in India, it was decided that a Centre for 'One Health' shall be set up at the Ramakrishna Mission Vivekananda Education and Research Institute (RKMVERI). This Centre shall run educational and academic programmes and courses, conduct research, and promote awareness, extension and advocacy on 'One Health' across disciplines involving agricultural, veterinary, environmental, medical sciences with philosophical and spiritual underpinnings as the bedrock on which the whole edifice of Oneness stands. This non-dualistic knowledge (*advaita jnana*), forming the fundamental basis of any effort in the field of Oneness will thus become practical as envisioned by Swami Vivekananda in his famous thoughts on 'Practical Vedanta' who said famously: "The dry, abstract Advaita must become living – poetic – in everyday life."

Our Deemed University, RKMVERI, is uniquely placed to start this multi-disciplinary Centre for 'One Health' as it has strong in-house capabilities in research and education in the form of the various Schools mentioned at the beginning of this writeup, wide



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extension activities, and large networking with scientific, academic and research institutions across disciplines and sectors. Further RKMVERI is ideologically founded on the bedrock of the ancient Indian philosophical and spiritual knowledge systems and tradition of 'Oneness of All Existence' and its modern interpretation and implementation in various manifestations in the lives and teachings of Sri Ramakrishna and Swami Vivekananda whose watch words were 'harmony' and 'synthesis'. Romain Rolland, the great French savant and Nobel Laureate, in his famous biography of Swami Vivekananda wrote: "In the two words equilibrium and synthesis Vivekananda's constructive genius may be summed up."

The Vision of this multi-disciplinary Centre for 'One Health' is to achieve global recognition over a period of the next five years as one of the leading centres of excellence on multi-disciplinary education, research, extension and advocacy on 'One Health'.

A comprehensive Task Force, comprising 25 persons from various disciplines – physics, agricultural biotechnology, agricultural sciences like soil science, animal/veterinary science, fisheries, human health, occupational health, rural development, medical science and technology, molecular/cell biology, neuro-genetics, public health related medical profession, social work and service, disaster management, philosophy (Eastern and Western), statistics, pharmaceuticals, political science, management and administration, etc., – has been formed to give a concrete shape to this 'One Health' initiative and evolve a concrete action plan that is easily implementable, thus making Advaita (Oneness) "living, poetic in everyday life" as Swami Vivekananda said.

The following three Divisions comprising scientists, doctors (both laboratory and practising medical scientists as well as socially in the area of public health and primary health) have been formed to work out the nitty-gritty and the action plan:

- (1) Education and Training Division,
- (2) Research and Innovation Division,
- (3) Extension and Outreach Division.

Three more Centres mentioned below are in the planning stage and these projects are likely to be implemented during the academic year 2022-2023:

2. CENTRE FOR ARTIFICIAL INTELLIGENCE AND AFFECTIVE COMPUTING

This will be an interdisciplinary Centre across the following Departments/Schools of the University:

-
- ✓ Mathematical Sciences,
 - ✓ Indian Heritage,
 - ✓ Agriculture and Rural Development,
 - ✓ Rehabilitation and Sports Sciences,
 - ✓ Biological Sciences,
 - ✓ Environment and Disaster Management.
-



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3. CENTRE FOR NONLINEAR DYNAMICS AND CHAOS

This will also be an interdisciplinary Centre under the following Schools:

- ✓ Mathematical Sciences,
 - ✓ Agriculture and Rural Development,
 - ✓ Rehabilitation and Sports Sciences,
 - ✓ Biological Sciences,
 - ✓ Environment and Disaster Management
-

4. CENTRE FOR HUMANISTIC SCIENCES AND HUMANITARIAN STUDIES

This will also be an interdisciplinary Centre covering all the various Schools:

- ✓ Mathematical Sciences,
 - ✓ Indian Heritage,
 - ✓ Agriculture and Rural Development,
 - ✓ Rehabilitation and Sports Sciences,
 - ✓ Biological Sciences,
 - ✓ Environment and Disaster Management
-

EXTENSION/OUTREACH SERVICE ACTIVITIES

- (1) **VIVEKDISHA**--An ICT-based Network of the University.
 - (2) **Krishi Vigyan Kendras (KVKs):**
 - (i) 'Sasya Shyamala' KVK located at Arapanch (under the Ramakrishna Mission Ashrama, Narendrapur Centre, 24-Parganas District)—already established and functioning for more than five years
 - (ii) 'Dhaanyaganga' KVK under Ramakrishna Mission Ashrama, Sargachhi, Murshidabad District—already established and functioning for the past three years
-

ACTIVITIES OF THE 'VIVEKDISHA'

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's Expert Centre at Belur Math.



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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 Website:

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 have 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. Values 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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KRISHI VIGYAN KENDRAS (KVKs) RUN UNDER BY THE UNIVERSITY

The University runs the following two KVKs under its aegis as sanctioned to it by Indian Council for Agricultural Research (ICAR), Ministry of Agriculture, Government of India:

- (1) 'Sasya Shyamala' KVK located at Arapanch under Ramakrishna Mission Ashrama, Narendrapur, Dist. 24-Parganas, West Bengal and
- (2) 'Dhaanyaganga' KVK located at Ramakrishna Mission Ashrama, Sargachhi, Dist. Murshidabad, West Bengal.

Both these KVKs have a common mandate, scope and activities in their respective districts for the benefit of the farmers, to reach the discoveries made by the scientists in their laboratories to the farmers in their lands: 'lab-to-land' as it is commonly termed. Given below are the ICAR mandate, scope and activities of the KVKs which are being followed and implemented in letter and spirit by the two KVKs under the University at Arapanch and Sargachhi respectively. Some details about KVK is given in the Appendix below.

ABOUT KRISHI VIGYAN KENDRAS – CONCEPT, MANDATE AND FUNCTIONS:

1. The KVK Concept:

Krishi Vigyan Kendra (KVK) is a project of ICAR for testing and transfer of Agricultural technologies to bridge the gap between production and productivity and to increase self-employment opportunities among the farming communities. The trainings offered here follow the principles of "learning by doing" and "seeing is believing". It offers skill and knowledge oriented trainings in multidisciplinary areas like crop production and plant protection, horticulture, Animal Sciences and Fisheries, Home Science and Agricultural extension. The KVK is the light house of knowledge to the farming community of the State.

2. The KVK Mandate:

- 2.1. Organising vocational training programmes in agriculture and allied enterprises and other extension activities.
- 2.2. On-farm testing on farmers' fields of proven technologies in crop production, horticulture, livestock production, fisheries etc.
- 2.3. Conducting front line demonstrations on major cereal crops, oilseeds as well as horticultural crops.
- 2.4. In-service training to the field level extension officials.

3. The KVK Functions:

The growth of Indian agriculture is dependent on 103 million farm families cultivating 140 million hectares of land. It is impossible to reach such a huge number of farmers. The effective dissemination and transfer of appropriate technologies to needy farmers is very much essential for increasing agricultural production in the country. It is very difficult for farmers to gather latest information of technologies from various research institutes.



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Keeping this in view ICAR granted its sanction for establishment of Krishi Vigyan Kendras (the farm science centres) in May 1992 and by March 1993 a network of 376 Krishi Vigyan Kendras (KVKs) were in place covering most of the districts of the country to function as 'single window system', wherein all the necessary information is made available to the farmers of the region through a single window as it were. As of January 2020, there were 721 KVKs covering all the districts of all the States in India, including additional KVKs in some larger districts.

Based on a bench mark survey of selected villages for socio economic appraisal and to understand the existing practices of the farmers, the KVKs were able to identify the technological gaps and critical needs and requirements of the farmers followed by farming operational modalities like training, demonstration and on-farm trials. Simultaneously the farm development work was also started as an important requirement for the strengthening of training cum demonstration infrastructure of the KVKs.

Apart from conducting these demonstrations various innovative approaches were undertaken for providing the environment friendly packages to meet the farmers' problem. An overwhelming response of the farmers to these eco-friendly practices later paved the way for forming various farmers' interest groups and self-help groups. These informal groups of self-experimenting farmers that provides an opportunity for sharing their innovations and practices among them. Further the KVKs started the Innovative "Farm Women's Club" for involvement of farm women in the dissemination of various technological interventions at faster rate.

The KVK has excelled in bringing the modern technological packages at the farmers' doorstep with the help of various instructional units. The KVK today has sufficient resources to impart training skills for not only the farmers but also the rural youth. The training schedule typically incorporates the existing needs and problems of the farmers for making a positive impact. The trainings are conducted both at the on-campus and off-campus locations. It invariably emphasizes the providing both the short term as well as long durational courses specifically to impart practical orientation to these courses. The KVK has started the instructional units for not only imparting the skills but also for providing the critical inputs as per the demand and need of the farmers. Wherever the response of the farmers to technologies under the Lab-to-Land Programmes and the on-farm-trials demonstrated by the KVKs was multi-fold, the need to take the assistance from the other funding agencies arose and the KVKs' bold initiatives resulted in convincing the various State and Central Govt. funding agencies to provide financial support for the innovative schemes and projects for further extending its extension programmes.



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Given below are the details of:

- (1) Projects sanctioned by the various funding agencies of the Central and State Governments – Indian and Foreign Agencies (marked as Appendix 1 – A+B) plus Grants sanctioned on various projects for the 'Integrated Agriculture, Rural & Tribal Development' at Ranchi 'Off-Campus' Centre (Appendix 2 – marked as C):
- (2) TOTAL AMOUNT RECEIVED FOR PROJECTS IN RECENT YEARS: Rs.14,58,41,042/- (Rupees Fourteen crore Fiftyeight lakh Fortyone thousand Fortytwo only)

APPENDIX 1

**DETAILED LIST OF PROJECTS SANCTIONED BY VARIOUS FUNDING AGENCIES
OF THE CENTRAL AND STATE GOVERNMENTS IN RECENT YEARS**

A. Received from Indian agencies:

| Sl. No. | Project Title | Principal Investigator | Start Date | Duration | Funding Agency | Amount sanctioned (in Rupees) |
|---------|--|------------------------|------------|-----------|---|-------------------------------|
| 1 | "Using Women Farmers' Social Networks to Improve the Delivery of Agricultural Information through Information and Communication Technology in Selected Rural Areas of West Bengal" | Dr. Sanchayeeta Misra | 01.04.2022 | 24 Months | Indian Council of Social Science Research (ICSSR), Govt. of India | 7,00,000/- |
| 2 | "Modelling the livelihood impact of Technology Transfer Projects in Natural Resource Management using Fuzzy Logic Cognitive Mapping" | Dr. Rupak Goswami | 01.04.2022 | 24 Months | Indian Council of Social Science Research (ICSSR), Govt. of India | 7,00,000/- |



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| | | | | | | |
|---|---|------------------------|------------|-----------|---|---------------------|
| 3 | "Human Surface thermographic profiling as indicator of climate susceptibility and impact mitigation through localized social networking" | Prof. Pranab Kumar Nag | 02.05.2018 | 36 Months | SPLICE - Climate Change programme, Department of Science & Technology, Govt. of India | 69,42,650/- |
| 4 | Developing multi-stress Tolerant high yielding breeding materials in rice and Indian Mustard through modern breeding program". | Prof. Tapash Dasgupta | 28.03.2020 | 36 Months | Agriculture Department (Govt. of West Bengal) | 84,65,000/- |
| 5 | "Development of Potential AChE-inhitor from North East Indian Plants: Activity guided Isolation, Purification and Validation using trans-gene AD mouse" | Dr. Alok Kumar Hazra | 01.06.2020 | 36 Months | Department of Biotechnology (NER-BPMC), Govt. of India | 25,23,360/- |
| 6 | " Ionizing radiation- induced mutagenesis and rapid identification of mutant genes for the improvement of traditional aromatic rice" | Dr. Kishor Kumar | 30.03.2022 | 36 Months | UGC-DAE-CSR, Govt. of India | 258000/- (1st Year) |
| 7 | "Impact Assessment of Agricultural Researc and Extension Organization : The Case of Intenational Plant Nutrition Institute (IPNI) in India" | Dr. Rupak Goswami | 17.07.2018 | 18 Months | International Plant Nutrition Institute (IPNI), Govt. of India | 1,10,000/- |



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| | | | | | | |
|----|---|------------------------------|------------|-----------|--|-------------|
| 8 | Fostering Network in Education, Research & Innovation in Environmental & Occupational Health | Prof. Pranab Kumar Nag | 15.05.2016 | 36 Months | European Commission | 54,00,000/- |
| 9 | Structure-function analysis of the centromeres and its associated centromeric protein CENP-A of the human pathogenic Candida parapsilosissensulato species complex. | Dr. Gautam Chatterjee | 26.05.2017 | 36 Months | Science and Engineering Research Board (SERB), Dept. of Science & Technology (DST), Govt. of India | 40,49,734/- |
| 10 | Establishment of a biotech-KISAN Hub in Sunderban area of South 24 Parganas District of West Bengal; | Dr. Rupak Goswami | 14.03.2018 | 24 Months | Department of Biotechnology Govt. of India | 10,00,000/- |
| 11 | Atomic Structure Calculations: Effect of External Plasma and Spatial Confinement | Dr. Prasanta Kumar Mukherjee | 15.01.2014 | 3 years | Science and Engineering Research Board (SERB), DST, Govt. of India | 30,24,000/- |
| 12 | Telescope for the 'Positional Astronomy Centre' for education and research | Dr. Debashis Gangopadhyay | 26.03.2014 | 3 Years | Dept. of Science & Technology, Govt. of West Bengal | 45,00,000/- |



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| | | | | | | |
|----|---|---------------------------|------------|----------|---|-------------|
| 13 | Single crystal growth, understanding and optimizing strongly correlated electron based thermoelectric materials | Dr. Amitava Bhattacharyya | 25.01.2016 | 5 Years | Dept. of Science & Technology, Govt. of India | 35,00,000/- |
| 14 | Algebraic and Geometric Topology | Prof. Samik Basu | 16.03.2016 | 3 Years | National Board of Higher Mathematics (NBHM), Dept. of Atomic Energy (DAE), Govt. of India | 2,88,500/- |
| 15 | On certain aspects of curvature operator and Riemannian functionals | Dr. Atreyee Bhattacharya | 01.10.2015 | 5 Years | Dept. of Science & Technology, Govt. of India | 95,00,000/- |
| 16 | On topology of manifolds admitting PSC Riemannian metrics and Stability of L^2 -norm of Wyle curvature tensor | Dr. Soma Maity | 01.04.2015 | 5 Years | Dept. of Science & Technology, Govt. of India | 95,00,000/- |
| 17 | G.K. Dimensions of Simple Modules over quantum polynomial algebra and skew polynomial extension | Dr. Ashish Gupta | 25.03.2016 | 2 Years | NBHM, DAE, Govt. of India | 3,02,500/- |
| 18 | Asset mapping under EPRIS project of ISRO | Dr. Debashis Gangopadhyay | 17.11.2016 | 3 months | NRSC, ISRO, Govt. of India | 90,000/- |



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| | | | | | | |
|----|---|----------------------------|------------|---------|---|-------------|
| 19 | Projective modules, complete intersections and orbit spaces of unimodular rows | Dr. Md Ali Zinna | 19.01.2017 | 5 Years | Dept. of Science & Technology, Govt. of India | 95,00,000/- |
| 20 | Combinatorial Commutative Algebra | Dr. Arindam Banerjee | 01.09.2017 | 5 Years | Dept. of Science & Technology, Govt. of India | 35,00,000/- |
| 21 | Approximation Algorithms for Guarding Polygons | Prof. Subir Kumar Ghosh | 13.06.2018 | 3 Years | SERB, DST, Govt. of India | 6,60,000/- |
| 22 | Rare events in synchronizing systems | Dr. Shamik Gupta | 15.11.2018 | 3 Years | SERB, DST, Govt. of India | 8,25,000/- |
| 23 | Zero-sum constants, regularity of Diophantine equations and other problems in Combinatorial Number Theory | Prof. Sukumar Das Adhikari | 19.03.2019 | 3 Years | SERB, DST, Govt. of India | 6,60,000/- |
| 24 | Imprecision and Uncertainties in Quantum Measurements: A Theoretical Study using the Large Deviation Theory | Dr. Shamik Gupta | 21.02.2020 | 3 Years | SERB, DST, Govt. of India | 6,60,000/- |
| 25 | “Collective dynamics of interacting nonlinear oscillators driven by coherent noise” | Dr. Shamik Gupta | 29.12.2020 | 3 Years | SERB, DST, Govt. of India | 40,11,392/- |
| 26 | State-of-the-Art 4K Closed Cycle Refrigerator for Understanding and Optimizing Novel Emergent Properties Of Quantum Materials | Dr. Amitava Bhattacharyya | 13.01.2021 | 3 Years | SERB, DST, Govt. of India | 32,26,806/- |



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| | | | | | | |
|---------------------|---|---|------------|--------------------------------|--|---|
| 27 | Effect of different GTPase/ATPases on growth, physiology and virulence of Staphylococcus aureus | Dr. Arnab Basu | 23.09.2021 | 4 Years | Department of Biotechnology Govt. of India | 88,88,000/- |
| 28 | Understanding Honeycomb Layered Oxides' Unconventional Magnetism | Dr. Amitava Bhattacharyya | 30.03.2022 | 3 Years | UGC-DAE CSR, Govt. of India | 16,13,280/- |
| 29 | Algebraic analogue of a result of Mumford | Dr. Sagnik Chakraborty | 13.05.2022 | 3 Years | SERB, DST, Govt. of India | 6,60,000/- |
| 30 | Dynamics and Chaos in strongly coupled QFT: Deformations and Boundaries | Dr. Bobby Ezhuthachan | 14.06.2022 | 3 Years | SERB, DST, Govt. of India | 30,72,443/- |
| 31 | SERB International Research Experience for the year 2022-2023 with Thomas Prokscha at Muon Spin Spectroscopy at PSI, Paul Scherrer Institute (Psi), Switzerland | Dr. Amitava Bhattacharyya | 12.05.2022 | 6 months | SERB, DST, Govt. of India | 15,31,306/- |
| 32 | All India Network Project of Organic Farming | Dr. Gautam Chatterjee | 15.07.2015 | Continuous (ongoing each year) | ICAR-IIFSR, Govt. of India | Per annum: 10,00,000/- (Received Rs.57,44,829/- so far) |
| 33 | Ramanujan Fellowship | Dr. Pushkar Malakar | 01.06.2022 | 5 years | SERB, DST, Govt. of India | 1,19,00,000/- |
| 34 | For JIVAN Project – research in the School of Biological Sciences | Centre for Research and Biological Sciences | 17.07.2022 | Continuous (ongoing each year) | Kolkata Gives Foundation | 37,63,126/- |
| Total Rs.(A) | | | | | | 12,10,69,926/- |



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B. Grants received from foreign agencies:

| | | | | | | | |
|---------------------|--|--|------------|--|--|---|---|
| 1 | 'One Health Project' | | | | Continuo us (ongoing each year) | 'Karuna America'- Karuna Trust, Based in Bengaluru HQ | US Dollar 100000 (Approx INR 80,00,000/- |
| 2 | Research in idiopathic dilated cardiomyopathy and hypothyroidism | Centre for Research and Biological Sciences | 19.04.2022 | | Continuo us (ongoing each year) | Dr. Manis Nandi | US Dollar 4831 INR 3,73,680/- |
| 3 | "SciTech4Climate Indo- Pacific Climate-Smart Agriculture Initiative : Project B: Ganges coastal zone climate smart agricultural production" | Dr. Rupak Goswami | 01.06.2022 | | 16 Months | Common- wealth Scientific and Industrial Research Organisation (CSIRO), Australia | AUS \$ 30000 (INR 16,35,000/-) |
| Total Rs.(B) | | | | | | | 1,00,08,680/- |

| | |
|--|-----------------------|
| Total Grant from Indian and Foreign Agencies Rs.(A+B) | 13,10,78,606/- |
|--|-----------------------|



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APPENDIX 2

DETAILED LIST OF PROJECTS SANCTIONED BY VARIOUS FUNDING AGENCIES OF THE CENTRAL AND STATE GOVERNMENTS DURING THE LAST TWO YEARS (DURING THE PERIOD FROM 1 APRIL 2020 TO 31 JULY 2022) SPECIFICALLY BY THE RANCHI (JHARKHAND) 'OFF-CAMPUS' CENTRE IN THE SPECIALIZED AREA OF 'AGRICULTURE, RURAL & TRIBAL DEVELOPMENT'

| Sl. No. | Project Title | Principal Investigator | Duration | Amount sanctioned in Rupees |
|--|---|----------------------------|----------|-----------------------------|
| 1 | Post-project Evaluation Study of Sansad Adarsh Gram Yojana | Dr. Deep Narayan Mukherjee | 6 Months | 2066416/- |
| 2 | Evaluation Study of 100 cluster of phase -1 under Shayama Prasad Mukherjee RURBAN Mission | Dr. Deep Narayan Mukherjee | 5 Months | 2414020/- |
| 3 | Science, Technology and Innovation Hub for creating sustainable livelihood opportunities of Schedule Tribes in Angara Block, Ranchi district, Jharkhand | Dr. Avijit Kr Dutta | 3 Years | 9102000/- |
| 4 | Ethnographic Study of Ten tribes of Jharkhand | Dr. Dipankar Chatterjee | 9 months | 630000/- |
| 5 | Study of Millet Production and Consumption pattern in last 20 years in Jharkhand | Dr. Deep Narayan Mukherjee | 1 Year | 550000/- |
| Total Rs.(C) | | | | 1,47,62,436/- |
| GRAND TOTAL OF THE GRANT ON PROJECTS: (A+B+C) | | | | 14,58,41,042/- |

(Grant Total: Rupees Fourteen crore Fiftyeight lakh Fortyone thousand Fortytwo only)