

ANNEXURE 17

Other Important Information

- (1) At the very inception of the University, recognizing Swami Vivekananda's vision of its eminence as embodied in this oft-quoted statement, namely, "the spiritual impact which has come to Belur [Math] will last fifteen hundred years and it shall be a great University; do not think I imagine it, I see it", the Government of India's Ministry of Finance issued a Notification declaring that all donations to the University will be 100% exempt from Income Tax, categorizing it as a "University of National Eminence." A scanned copy of this Notification is annexed hereto and marked as **Annexure 18**.
- (2) Recognizing the uniqueness of the 'thrust area' chosen for operationalization at our Coimbatore Centre, namely, 'General Adapted Physical Education and Yoga', UNESCO has established a Chair in our University in the field of 'Inclusive Adapted Physical Education and Yoga'. A detailed write-up on the activities of this UNESCO Chair is annexed hereto as **Annexure 19**.
- (3) Recognizing the uniqueness of our University as an institution with social commitment, a Europe-based Global Organization called 'Global Network of Universities for Innovation (GUNI) has given our University full membership of GUNI. A detailed write-up on GUNI and the activities thereof are annexed hereto and marked as **Annexure 20**.
- (4) The School of Mathematical Sciences in general and its Department of Mathematics in particular, has already attained a great reputation as performing high quality research. Mahan Maharaj, Professor of Mathematics, was awarded the prestigious *Shanti Swarup Bhatnagar Award* by the Council of Scientific and Industrial Research for his outstanding contribution in the field of Mathematics. More laurels followed: he was awarded *JC Bose Fellowship* by the Department of Science & Technology, Government of India and recently the *Infosys Award*. Although Mahan Maharaj subsequently left the University to join as Professor of Mathematics at Tata Institute of Fundamental Research (TIFR), Mumbai, all his work leading to the above awards were performed during his stay at the University with the all-out support and encouragement of the University authorities.
- (5) Among the several programmes taken up out of our University's urge for social commitment is the activity for all-round welfare of children all over the world. For this, we are linked to a global organization called Arigatou International, a Japan-based organization with Secretariats in New York, Geneva and Nairobi. 'Prayer and Action for Children (PAC)', is a wing of Arigatou International, along with its

other wings: 'Ending Child Poverty (ECP)', 'Global Network of Religions for Children (GNRC)', 'Ethics Education for Children (EEC)'. The Vice Chancellor of the University, Swami Atmapriyananda, is a member of the Advisory Council of PAC and attends the annual conferences of the Council held so far in various parts of the globe like New York, Geneva, Tokyo, Panama City, etc. Under the inspiration and small financial support of PAC, the University conducts a weeklong celebration on occasion of Children's Day, from 14 – 20 November every year, 14 November being the Children's Day in India and 20 November the Universal Children's Day as declared by the United Nations Organization. This week is called 'Global Week for the Holistic Welfare of Children' and at present the University covers the entire State of West Bengal, all its 19 districts. A detailed report of these activities and a profile of Arigatou International is annexed hereto and marked as **Annexure 21**.

- (6) In connection with the above, Swami Atmapriyananda, Vice Chancellor, wrote to the Education Minister of West Bengal Government to instruct all the schools, both Government-run and private managed, to observe the 'Week for Holistic Welfare of Children' from 14 – 20 November each year so that deep awareness is created in the young minds of the children as well as their teachers and parents about 'prayer and action' for the welfare of children all over the world. The Government of West Bengal, in deference to this letter, issued such a circular to all the schools in West Bengal so much so this has become almost imperative to follow for all the schools in the State. A copy of this Government circular wherein the letter from the Vice Chancellor of the University is specifically acknowledged is annexed hereto and marked as **Annexure 22**.
- (7) Swami Atmapriyananda, Vice Chancellor, was given "Dewang Mehta National Education Award for Outstanding Contribution to Education" at a function held on 28 November 2015 in Mumbai. The citation letter mentions that "the Dewang Mehta Award recognizes talent and leadership amongst the educational institutes across India. ...This award is in recognition of the leadership, development, innovation and industry interface of the Institute".
- (8) Ramakrishna Mission has been chosen as a global partner of UNESCO in recognition of its social commitment and activities for the all-round welfare of humanity in various spheres, particularly educational, cultural, medical and social spheres. Ramakrishna Mission Governing Body has nominated Swami Atmapriyananda, Vice Chancellor of the University, as its nominee to liaison these activities in India.

- (9) Another unique Project undertaken by our University since its inception is the VIVEKDISHA, which is an information and communication technology (ICT)-based Network of the University. VIVEKDISHA formally started working from 4 July 2008 and is providing a single window-based services like online education from secondary to undergraduate level, online teachers' training, Spiritual Heritage programmes, telemedicine services and research programmes. At present it has 21 VIVEKDISHA Centres (including 6 Ramakrishna Mission Centres) in West Bengal for Online and Offline education, teachers' training and other activities. The University has the provision to connect 25 Centres for videoconferencing through Internet Broadband facility anywhere at any time on the globe. 23 groups of eager spiritual seekers are attending our Spiritual Heritage classes from various countries of the globe, given mostly by the Vice Chancellor of the University. Professors from USA and UK (among them an ex-student of Ramakrishna Mission) are offering classes for the students of Ramakrishna Mission Vidyamandira at Belur. Presently, VIVEKDISHA caters to more than 10000 students who are on its e-rolls. A detailed writeup on this unique VIVEKDISHA Project, its ongoing activities and vision for the future is annexed hereto and marked as **Annexure 23**.
- (10) In recognition of the potential and strength of the University's 'School of Agriculture and Rural Development', Indian Council of Agricultural Research (ICAR), Government of India, has in its 21st Extended Finance Committee (EFC) meeting held on 15 July 2014 has recommended the inclusion of the University under the Network Project on Organic Farming (NPOF) to provide the technological backstopping on organic farming for niche crops and areas. The Network Project on Organic farming was started in the Tenth Five Year Plan with 13 centres and the present step to include 7 more centres provided the scope to include Ramakrishna Mission Vivekananda University in the Network Project, which has so far generated useful scientific information leading to development of organic package for 18 crops in systems perspective. ICAR envisioned that the organic research activity needed to be further strengthened specially for niche crops (especially hi-value crops) in the niche areas, preferably where organic farming is being practised by default. The decision to create 7 new centres to be added in the Network Project, in which Ramakrishna Mission Vivekananda University has been included, is an outcome of this vision of ICAR. Scanned copies of the document in this regard received from the Project Directorate for Farming Systems Research (ref.no.1-PD-Corr/14/3440 dated 14/19 August 2014) is annexed hereto and marked as **Annexure 24**.

- (11) Indian Council of Agricultural Research (ICAR), Government of India, has given the University the honour of entering into a Memorandum of Understanding (MoU) with ICAR for cooperation in agricultural research and education which has opened the doors of nearly 100 ICAR Institutes all over India for the benefit of the University's Agriculture and Rural Development faculty and students as well as for their own students who want to pursue research with our University. A copy of this MoU with ICAR is annexed hereto and marked as **Annexure 25**.
- (12) Indian Council of Agricultural Research (ICAR), Government of India, has established a Krishi Vigyan Kendra (KVK) in our University for agricultural extension activities with focus on farmers' welfare. This KVK has been functioning effectively from our Narendrapur Campus and has the potential to grow into a great Centre of Excellence. A detailed writeup on the KVK—the concept, its ongoing activities, vision for the future etc.—is annexed hereto and marked as **Annexure 26**.
- (13) The University has signed an MoU on behalf of its 'School of Indian Heritage' in general and the Department of Sanskrit Studies in particular for academic cooperation in terms of exchange of scholars and faculty, research, etc., with Sri Venkateswara Vedic University, Tirupaty, and several programmes have since been conducted under this MoU. A copy of this MoU is annexed hereto and marked as **Annexure 27**.
- (14) The University has signed an MoU for academic cooperation in areas of common interest in regard to publication, research, translation studies, etc., with the *Grantha Vibhag* (Publication Division) of Visva-Bharati, the only Central University in West Bengal created to perpetuate the legacy of Rabindranath Tagore whose educational vision overlaps largely with that of Swami Vivekananda. The main 'thrust area' that this MoU intends to particularly focus on is the newly emerging and all-important area of 'Translation Studies'. To start with, planning is going on for starting an M.Phil. Course, meant to be a precursor to research programmes in this area leading to Ph.D. and D.Litt., jointly run under the banner of Ramakrishna Mission Vivekananda University (RKMVU) and Visva-Bharati (VB). This is a new area fast developing in various Universities in advanced countries. Our country has hardly half a dozen Departments in our more than 650 Universities in the area of 'Translation Studies' and this is therefore a unique and important step. A copy of this MoU signed between RKMVU and VB is annexed hereto and marked as **Annexure 28**.
- (15) The University is planning a 'Vivekananda Archives' at the huge Central Library complex in the Belur main campus to preserve archival material on Ramakrishna-

Vivekananda in particular and Indian Spiritual and Cultural Heritage in general. A Concept Note on 'Vivekananda Archives' is annexed hereto and marked as **Annexure 29.**

- (16) Among the activities undertaken with a view to social commitment is the all-important and urgent concern for global peace and harmony. Mention has already been made under Item (5) above, of Arigatou International, a Japan-based organization with Secretariats in New York, Geneva and Nairobi, with the following wings: 'Prayer and Action for Children (PAC)', is a wing of Arigatou International, along with its other wings: 'Ending Child Poverty (ECP)', 'Global Network of Religions for Children (GNRC)', 'Ethics Education for Children (EEC)', whose Advisory Council has Swami Atmapriyananda, Vice Chancellor, as an invited member. While this noble activity for the all-round welfare of children is an important component of global peace and harmony, the most worrying and most urgent activity is 'inter-religious understanding' and 'interfaith dialogue'. In the present scenario of religious intolerance and acrimony, the promotion of inter-religious understanding and harmony is of vital importance. The University is deeply and seriously engaged in this activity through several global organizations mentioned below, of which he is an active member / associate, for which he undertakes global tours more than once every year:
- (i) 'Elijah Interfaith Institute', an Israel based organization actively engaged in promoting religious harmony and peace,
 - (ii) 'Religions for Peace', another global organization engaged actively in promoting religious harmony and peace,
 - (iii) Sarvayoga International, Italy, engaged actively in the cultivation of promotion of Indian yoga arts and science as a tool for world peace and harmony, covering the entire Europe,
 - (iv) Italian Yoga Federation, Italy, with a similar vision as Sarvayoga International, but focused on Italy specifically,
 - (v) Elijah Board of World Religious Leaders, an arm of Elijah Interfaith Institute, Israel,
 - (vi) Council for Parliament of World Religions based in USA, an offshoot of the celebrations held in Chicago to mark the centenary of the famous Parliament of Religions in Chicago in 1893 wherein Swami Vivekananda emerged as the most famous star speaker and which saw him transformed from an unsophisticated wandering monk to a world prophet, an apostle of peace and harmony,
 - (vii) Prayer and Action for Children, an arm of Arigatou International, with HQ in Tokyo, Japan, and Secretariat in New York, already referred to,

- (viii) Guerrand Hermes Forum for the Interreligious Study of Mysticism and Spirituality', a Project of the Elijah Interfaith Academy and Elijah Board of World Religious Leaders, with the Forum meets usually held in Marrakesh, Morocco,
- (ix) Religions for Peace, a global organization working for religious cooperation, tolerance, peace and harmony (Swami Atmapriyananda, Vice Chancellor, was a Co-Chair of ACRP—Asian Conference of Religions for Peace),
- (x) Kyiv Interfaith Forum, Ukraine, Kyiv, for which Swami Atmapriyananda, Vice Chancellor, travelled to Ukraine for a world conference.

A brief profile of Swami Atmapriyananda, Vice Chancellor, particularly highlighting his involvement in the above activities of social commitment is annexed hereto and marked as **Annexure 30**.

- (17) Swami Atmapriyananda, Vice Chancellor, is an invited member of various Committees set up by the UGC and West Bengal State Government's Higher Education Department. For example, (i) UGC Committee to frame guidelines and work out a detailed Scheme for 'Fostering Social Responsibility in Higher Education Institutions' mooted by MHRD, (ii) UGC Committee for the 'Introduction of Yoga Studies and Research in Universities', once again mooted by MHRD, (iii) Advisory Committee on Higher Education formed by the WB State Government "to review matters relating to Institutions of higher education including, *inter alia*, the standard and quality of teaching imparted, research conducted by such institutions, syllabus and course curriculum followed by them, scope of further improvement in the field of function of Universities and Colleges, and any other issue relating to higher education".
- (18) The University has been requested by the Central Council for Research in Yoga & Naturopathy (CCRYN), Ministry of AYUSH, Government of India, to conduct a month-long Yoga Training Programme (from 21 May to 20 June 2016) in residential areas of Kolkata (including suburbs and some districts of West Bengal) in connection with the International Day of Yoga to be celebrated as per United Nations Organization declaring 21 June each year as International Day of Yoga. The University has already initiated this Programme to be conducted in about 100 venues with about 100 people to be trained in each venue for one month from 21 May to 20 June 2016, so that altogether about 10000 persons will receive Yoga training for holistic wellness.
- (19) Another important programme for children called 'Gadadhar Abhyudaya Prakalpa (GAP)' (Gadadhar being the childhood name of Sri Ramakrishna), and a

holistic Health Project called 'Vivekananda Swasthya Pariseva Prakalpa (VSPP)' conceived by Ramakrishna Mission during the 150th birth anniversary celebrations of Swami Vivekananda in 2013 and running successfully for four years and continuing till now. Ramakrishna Mission Vivekananda University was involved in this Prakalpa (Project) and served the children in the Hooghly District medically, educationally and culturally, including supply of nutrition to expectant mothers and monitoring the health of Low Birth Weight (LBW) babies through three organizations forming a Cluster and run by the alumni of Ramakrishna Mission educational institutions. A detailed report of this GAP and SVPP is annexed hereto and marked as **Annexure 31**.

(20) The University has been able to develop a fairly strong Publication Wing which publishes annually important books on concentration and meditation, spiritual life, Yoga, Sri Ramakrishna and Swami Vivekananda, etc. Translation of some very important books on these subjects from English to Bengali has become a healthy trend and a tradition. The number of titles of the books published over the years is 29 and they may be classified into the following categories: (i) Bengali translations of some classic texts, (ii) original books in English, (iii) original works in Sanskrit, (iv) Sanskrit translations of Bengali/English books, (v) Bengali translations of Sanskrit texts. A complete list of these publications is annexed hereto and marked as **Annexure 32**. Apart from these, the following publications are in the pipeline:

- (i) An exhaustive compendium (running to about 800 – 1000 pages) of books, manuals, papers, articles, etc., on the subject of science – spirituality interface, physics – philosophy interface etc. – compiled by Prof Gopal Chandra Bhar,
 - (ii) A thesis on the 'Economic Thoughts of Mahatma Gandhi and Swami Vivekananda – Comparative Study' by Swami Krishnanathananda who was awarded PhD for this thesis by the University of Kalyani,
 - (iii) A thesis on the 'Swami Vivekananda's Idea of Development and the Role of the Ramakrishna Mission as a Development Organization in India' by Dr Sandipan Sen who was awarded PhD for this thesis by the University of Calcutta.
- (21) One of the unique achievements of the University is the publication of Armenian translation of some of the important works of Swami Vivekananda – his four yogas, namely, Jnana Yoga, Bhakti Yoga, Karma Yoga and Raja Yoga, his lectures titled 'My Master', his famous talks given to a group of intimate disciples at Thousand Island Park in USA, called 'The Inspired Talks'. This is the first time, to our knowledge, that any of the books on Indian spiritual heritage and philosophy have been translated in the Armenian language. Thanks to one of the monks

serving at the University who is Armenian in origin holding a Russian passport, this translation work has been possible. It is planned to upload these translations in the University website thus making it globally accessible through the Internet so that people of Armenia and others with knowledge of Armenian language will be exposed to Swami Vivekananda's thoughts and through these to Indian philosophical heritage and thoughts. **Annexure 33** attached hereto gives the title pages of the books mentioned above translated into Armenian.

- (22) While on the subject of publications, there has been a series of high level publications by Swami Samarpanananda who is attached to the University and teaches Spiritual Heritage courses being run under the 'School of Indian Heritage' besides teaching Hindi to the students of Integrated 5-year M.A. Course in Sanskrit. All his books have a bearing on spirituality discussed in the most modern language understood by today's youth as well as men and women living in a world of mad rush for materialistic pursuits. These books were published by reputed publishing houses like Harper Collins and MacMillan and have become best-sellers and the first in the series, *Tiya*, being the story of a parrot seeking its real home, and the later creation *Param* were highly appreciated by our late President of India, Dr APJ Abdul Kalam. His words of encomium read, *inter alia*, as follows: "It [*Tiya*] is indeed a great creation. ... For the first time I have read a great book in the past five years. "*Param* is indeed a beautiful creation. ... I congratulate you for [sic] bringing out such a beautiful creation once again." *Tiya* is the best seller in English among the Harper Collins publications and has been already translated into 4 Indian languages, namely, Hindi, Bengali, Gujarati, Kannada and Marathi and Indonesian. An audiobook has also been prepared on *Tiya*. A contract has been signed with a famous Movie Company, Edgeworks, New York, for making an animation movie. Two more books in the series are titled *Param* and *Junglezen Sheru*. One more in the series in the offing (to be released in July 2016) is *Carving a sky* to be published by Harper Collins. Another serious reading for the moderns torn by the conflict between true religious faith and mad religious fanaticism is *The World of Religions* that covers eight major religions of the world, namely, Hinduism, Buddhism, Jainism, Sikhism, Zoroastrianism, Judaism, Christianity and Islam, delineating the universal principles of each of these religions. Swami Samarpanananda is also an accomplished Hindi poet and has to his credit a book containing a collection of his poems in Hindi. Title pages of all these books are annexed hereto and marked as **Annexure 34**.

- (23) Ramakrishna Mission Vivekananda University has been chosen by Morarji Desai National Institute of Yoga, a national Institute devoted exclusively to the study

and promotion of Yoga, to act as Nodal Institution in 12 States to monitor and oversee 'Swami Vivekananda Yoga Wellness Centres' started by the Ministry of AYUSH, Government of India, across the country. Presently, the Registrar of the University, Swami Hariharananda, is the Nodal Officer for this Project. Details about the Yoga Wellness Centre Scheme is annexed hereto and marked as **Annexure 35**.

(24) **e-PG Pathashala Scheme of the UGC:** The e-PG Pathashala project was started for production of e-content in 77 subjects at postgraduate level in different subject across all disciplines of social sciences, arts, fine arts & humanities, natural & mathematical sciences and linguistics and languages. The project is coordinated and monitored by a Standing Committee constituted by the UGC. The Standing Committee is the apex level decision making body for the e-PG Pathashala. Dr Asis Goswami, UNESCO Chairholder and Dean of Faculty of General and Adapted Physical Activity of Ramakrishna Mission Vivekananda University was invited to develop e-content at PG level for the subject Physical Education, Sports and Health Education (during July, 2014). The project and the Memorandum of Agreement was submitted to the UGC whereby Dr. Asis Goswami was to act as Principal Investigator and Dr. P.K. Nag as Co-Principal Investigator. The Project proposal was prepared after consulting the syllabus of more than 10 Universities in India offering Physical Education course at Master's level. It was decided that the e-content will consist of 16 Papers including core and optional papers (given in Table 1). Each paper would have about 40 teaching modules containing four quadrants as mentioned in the project guideline by UGC (given in Table 2). The PI attended a number of meetings and workshops to learn the system of e-content production. The Quadrants 1 and 2 were the most difficult components of the total production since it required plagiarism free text content and development of video lectures based on the text content. The vastness of the project could be understood from the fact that each paper will have text of not less than 3000 words and each video of 30 min duration; in total 582 modules meant 582 booklets and 582 videos (equivalent to short films). A detailed Report on this e-PG Pathashala Project is annexed hereto and marked as **Annexure 36**.

(25) Massive Open Online Course (MOOC) is another important emerging area that is becoming increasingly popular worldwide. In our country, the Ministry of Human Resource Development (MHRD), Government of India, has taken up MOOC Scheme in all seriousness. The Principal Investigator of the e-PG Pathashala project on "Physical Education, Sports and Health Education" and Dr Alagesan, Professor of the Faculty of 'General & Adapted Physical Education and Yoga' at Coimbatore

Centre of the University were invited to attend a one-day Orientation Workshop of Paper Coordinators who have submitted completed papers and are capable of delivering MOOCs held on 24 May 2016 at INFLIBNET Centre, Ahmedabad, to make an appraisal of repurposing of e-content developed for e-PG Pathshala into MOOCs. Apart from Dr. Asis Goswami and Dr. Alagesan of Ramakrishna Mission Vivekananda University, Dr. AGK Sinha of Punjabi University is expected to attend the Workshop as a team member of the subject area. A detailed Note on MOOC and the University's contribution are briefly mentioned in an email dated 21 August 2015 and 9 May 2016 received by the Vice Chancellor from Dr Asis Goswami, UNESCO Chair-holder are annexed hereto and marked as **Annexure 37**.

- (26) Ramakrishna Mission Vivekananda University, Belur Math, has campus wide network in our main campus which caters to Information Technology (IT) needs of two schools, School of Mathematical Sciences and School of Indian Heritage and the administrative building. Apart from the Schools, Internet facility is provided to VIVEKDISHA extension project as well as multimedia department. There are future plans to extend the network to students' hostels restrictively and to guest house. As far as two Schools are concerned, there are in total eight departments in them – Computer Science, Data Science, Physics, Mathematics, Sanskrit, Indian Spiritual Heritage, Bengali, Classical Music and Yoga Studies. The IT infrastructure is the responsibility of the Department of Computer Science. We have also extended independent IT infrastructure to the following Departments in Belur Math campus: Computer Science, Physics, Mathematics and Sanskrit and Indian Spiritual Heritage Departments. Further one independent infrastructure has been setup for all the Departments under the 'School of Agriculture and Rural Development' in the 'Off-Campus' Centres at Narendrapur and Ranchi. Currently the number of computers that are using campus wide services is around hundred and growing. The University runs its own web server (apache, drupal, wordpress), mail transport server (exim), mail exchange server (dovecot), web-mail application (sogo), our own domain name server (bind), both external and internal, dhcp server for dynamic configuration of clients (isc-dhcp-server), masquerading firewall (shorewall), transparent web proxy (squid), web-site blocking (squidguard), web content filtering (dansguardian), light directory service (openldap), time server (ntpd), debian software archive (apt-cacher-ng), instant messaging (ejabber). All these are open source software based on linux. The University shares its pool of sixteen static IP addresses with the departments so that the departments can have their own fully functional Internet server accessible

from Internet to the world. The Departments which have Internet servers are Computer Science, Mathematics, Physics, Sanskrit and Indian Spiritual Heritage. Library and Computer Centre also have servers accessible from Internet. These computers have at least their own web servers (apache) and mail servers (exim4). Along with this we also host websites for Narendrapur campus, Ranchi campus (incomplete), and a few sister institutions, Ramakrishna Mission Shilpayatana and Ramakrishna Mission Shilpavidyalaya. This is because it does not cost us much when the infrastructure is already in place. The campus wide network is fully designed and created by the Department of Computer Science locally. Right from the beginning it was meant to provide fail safe operation for 24x7. We also have fault tolerant design at a few choke points. We do not have fault tolerance everywhere because of the cost involved. Even then it is an astonishing fact that our availability is in high 99% for the past several years, at least since last five years. The campus wide network was designed in 2005 with the design progressively modified till the current year without major structural changes. This was because we kept the future requirements in the mind. The network has scaled well to the requirements a decade later and we hope will continue to do so. The only thing that is still not upgraded in the 100mbps distribution network in the main administrative building which we did not go to 1gbps initially was again because of funds crunch. Yet the backbone in administrative building was conceived to be a 1gbps link and we were able to install a 1gbps backbone link between the access switches, distribution switches and the core switches.

Details in this regard including all the technical knitty-gritty are annexed hereto and marked as **Annexure 38**.

- (27) Another unique feature of Ramakrishna Mission Vivekananda University is the setting up of a Multimedia Studio at the University main campus at Belur Math. This Multimedia Studio has been set up to cater to the various photographic, videographic and other digital media related needs of the University. The studio has high quality professional equipment that can produce very good quality audio, video and still photographs. All such media can be produced within the studio premises. Outdoor shootings are also being performed with the studio equipment. Currently, the media captures for all events at the University such as various seminars, important events (like Convocation, Festivals, etc.), interviews, meetings, and many other events. Recently the University was granted a unique project by UGC called 'e-PG-Pathshala Scheme' that needed the production of a large number of video lectures. All these were recorded, edited and produced for final release in house in the Multimedia Studio itself with the help of professors who in turn trained the students. The Studio also has low capacity video editing

facility. A detailed note on this Multimedia Studio is annexed hereto and marked as **Annexure 39**.

- (28) Air Pollution is one of the greatest environmental problems in the world today. The University is doing its bit in helping fight this menace by active participation in a major governmental effort in this area. A faculty member of the Physics department is a member of the Research and Development Committee of the West Bengal Pollution Control Board (WBPCB) and is directly involved in evaluating and commissioning various projects to control this menace and other pollution hazards.

Whereas the city of Kolkata is fairly covered with stations monitoring air pollution round the clock, the same cannot be said of the city of Howrah. Setting up such stations in Howrah had been a problem in the past because of various reasons, one of the principal reasons being locational responsibility. Fortunately, the University has achieved that level of trust and the WBPCB has requested it to allow a monitoring station to be set up in its Belur main campus to which the University has responded positively and the process has already been initiated and a MoU will be signed soon. WBPCB will bear the entire cost of the project initially and it would also bear all the subsequent maintenance costs.

Sound Pollution is another hazard that is affecting the lives of children and elderly people in cities and industrial areas of India today. There are various sources of sound pollution and one which is particularly dangerous because of its instantaneous effect. This source is the decibel level of firecrackers. In West Bengal the existing law limits the sound of firecrackers to 90 db whereas in the rest of India the permitted level is 125 db. Powerful lobbies, citing business losses, filed a case in the Supreme Court National Green Tribunal against this. The NGT subsequently asked for a reconsideration of this limit by carrying out scientific investigations to support the upper limit of 90 db. As per the directions of the Court, a Committee was set up comprising a physicist and doctors who would do the investigation. The Vice-Chairperson of the Committee happens to be a faculty member of the Physics department of RKMVU and he was entrusted the responsibility of selecting appropriate personnel and laboratory sites where the very sensitive experiments can be carried out. All these experiments were videographed in real time. Subsequent medical findings by the doctors (among the best ENT specialists in Kolkata) in the Committee established the harmful effects of high decibel sound on humans and the report was submitted to the NGT.

West Bengal retains the upper limit of 90 db. The impact of this study has been such that the Delhi Government has requested WBPCB to help in implementing the same in the state of Delhi. A fairly informative note on these two, namely, Air and Sound Pollution Projects as prepared by Prof Debashis Gangopadhyay, Head of the Department of Physics, is annexed hereto and marked as **Annexure 40**.

- (29) Recently Indian Space Research Organization (ISRO) has started a project to empower Panchayat Raj Institutions by space based information support. ISRO has requested academia to participate in this venture by supplying educated manpower in the form of students and faculty. The University has agreed to participate in this project as this benefits the nation and also helps in inculcating a sense of participatory role among youth in nation building. The University will participate with 10 faculty members and at least 35 students from the Departments of Agriculture and Rural Development and the Department of Physics and will take the responsibility for asset mapping in at least 12 Gram Panchayats and 1 adopted village. As many students studying in RKMVU have a rural background, this participation will make them feel integrated into the basic fabric of India. The sense of alienation that prevails in many backward areas of our country can be effectively fought with such programmes. This is one of the social fall outs of this programme. A fairly informative note on these two, namely, Air and Sound Pollution Projects as prepared by Prof Debashis Gangopadhyay, Head of the Department of Physics, is annexed hereto and marked as **Annexure 41**.

- (30) Enterprises are moving at a fast pace. The world has witnessed a revolution in technology and India is at the epicenter of this change thus generating huge employment opportunities for the youth of the nation. There is immense untapped potential in the big data industry, globally and *Big Data Analytics is already the big thing!*

What is Big Data:

With the rise of mobile commerce, social media, and the ever expanding web technologies, large amount of data is being gathered and stored. Organizations have realized the need to utilize these large volumes of data to fuel effective and better decision making.

What Is Big Data Analytics:

Data has become ubiquitous with the exponential growth of emerging digital technologies. Managing this burgeoning volume of data every

day is the latest challenge for enterprises wanting to harness it for business value. Big Data is more than a factor of size; it opens a world of opportunities to find new and valuable insights from the myriad data sources, generating data at varying speeds and types.

With the intellectual and financial support of Tata Consultancy Services (TCS) Ltd., the University is starting a new Department in this emerging and fast growing area called the Department of Data Science which will launch a new course, M.Sc. in 'Big Data Analytics' from the academic year 2016-17.

A detailed write-up on Data Science, Big Data Analytics Programme and TCS Support through a Memorandum of Understanding (MoU) (along with a copy of the MoU signed on 23 May 2016) is annexed hereto as **Annexure 42**.

- (31) Another milestone in the University's innovative programmes is the setting up of a Positional Astronomy Centre (PAC) which is the first of its kind for any University in West Bengal. It will have two important components: (1) Teaching and Research and (2) Outreach Programme.

(1) Teaching and Research:

A cosmology and astrophysical observational set up is being planned over the next 3-5 years. This is being done by building up relevant infrastructure for M.Sc. coursework which can be enhanced to carry out research in the subject.

(2) Outreach Programme:

There will be a vigorous Outreach Programme, particularly for educational institutions in the Howrah region. This Programme will be at various levels: school, College and University.

A famous astronomer, when asked what benefit the study of astronomy has given him, quipped: "It has taught me humility". The University hopes that gazing at the sky to become familiar with the moon and the stars and the celestial objects will help human beings to fight less on the *terra firma!*

The details in this regard are annexed hereto and marked as **Annexure 43**.