

RAMAKRISHNA MISSION VIVEKANANDA CENTENARY COLLEGE

RAHARA, KOLKATA-700 118

The Annual Quality Assurance Report (AQAR) of the IQAC

(2016-17)

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The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

AQAR for the year (for example 2013-14)

July 1, 2016 to June 30, 2017

I. Details of the Institution

1. Details of the institution					
1.1 Name of the Institution	RAMAKRISHNA MISSION VIVEKANANDA CENTENARY COLLEGE				
1.2 Address Line 1	P.O. RAHARA				
Address Line 2					
City/Town	KOLKATA				
State	WEST BENGAL				
Pin Code	700 118				
Institution e-mail address	rkmvccollege@rkmvccrahara.org				
Contact Nos.	033- 2568 2049				
Name of the Head of the Institution	n: SWAMI KAMALASTHANANDA				
Tel. No. with STD Code:	033-2568 2049				
Mobile:	09432516982				

Name of the IQAC Co-ordinator:

DR. PRADYOT KUMAR MEDDA

Mobile:

09831943122

IQAC e-mail address:

rkmvccollege@rkmvccrahara.org

1.3 NAAC Track ID (For ex. MHCOGN 18879)

WBCOGN20188

OR

1.4 NAAC Executive Committee No. & Date:

EC(SC)/04/A&A/81 dated 10-12-2014

(For Example EC/32/A&A/143 dated 3-5-2004. This EC no. is available in the right corner- bottom of your institution's Accreditation Certificate)

1.5 Website address:

www.rkmvccrahara.org

Web-link of the AQAR:

http://rkmvccrahara.org/naaciqac.aspx

For ex. http://www.ladykeanecollege.edu.in/AQAR2012-13.doc

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	A	3.14	2014	2019
2	2 nd Cycle	NA	NA	NA	NA
3	3 rd Cycle	NA	NA	NA	NA
4	4 th Cycle	NA	NA	NA	NA

1.7 Date of Establishment of IQAC:

DD/MM/YYYY

30.05.2014

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11submitted to NAAC on 12-10-2011)

i. AQAR (2014-15) _____ (04/09/2015)

ii. AQAR(2015-16)______(23/08/2016)

iii. AQARiv. AQAR	(DD/MM/YYYY) (DD/MM/YYYY)			
1.9 Institutional Status				
University	State Central Deemed Private			
Affiliated College	Yes No No			
Constituent College	Yes No V			
Autonomous college of UGC	Yes No			
Regulatory Agency approved Insti	tution Yes No V			
(eg. AICTE, BCI, MCI, PCI, NCI)				
Type of Institution Co-education	on Men Women			
Urban	Rural Tribal			
Financial Status Grant-in-a	aid $\sqrt{}$ UGC 2(f) $\sqrt{}$ UGC 12B $\sqrt{}$			
Grant-in-aid	1 + Self Financing Totally Self-financing			
1.10 Type of Faculty/Programme				
Arts Science	Commerce Law PEI (Phys Edu)			
TEI (Edu) Engineering	Health Science Management			
Others (Specify)				
1.11 Name of the Affiliating Universi	ty (for the Colleges) WEST BENGAL STATE UNIVERSITY, BARASAT, WEST BENGAL			
1.12 Special status conferred by Cent	ral/ State Government UGC/CSIR/DST/DBT/ICMR etc			
Autonomy by State/Central Govt	. / University √			
University with Potential for Exc	ellence UGC-CPE			

DBT Star Scheme		UGC-CE	
UGC-Special Assistance Programme		DST-FIST	√
UGC-Innovative PG programmes		Any other (Specify	<i>y</i>):
UGC-COP Programmes	√	Centre to the Inst 'Swami Vivekanand Multidisciplinary	ne status of a Research itution by the name la Research Centre for y Research in Basic Social Sciences'
2. IQAC Composition and Activity	<u>ties</u>		
2.1 No. of Teachers	08		
2.2 No. of Administrative/Technical staff	02		
2.3 No. of students	0		
2.4 No. of Management representatives	02		
2.5 No. of Alumni	01		
2. 6 No. of any other stakeholder and community representatives	01		
2.7 No. of Employers/ Industrialists	01		
2.8 No. of other External Experts	03		
2.9 Total No. of members	18		
2.10 No. of IQAC meetings held : 022.11 No. of meetings with various stakeholders:	No. 12	Faculty	02
Non-Teaching Staff Students 06	Alumni	Others (03
2.12 Has IQAC received any funding from UGC of If yes, mention the amount	during the yea	r? Yes No	
2.13 Seminars and Conferences (only quality relat	ted)		

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. 26 International 4 National 13 State 7 Institution Level

(ii) Themes

INTERNATIONAL SEMINARS/PANEL DISCUSSIONS:

- 1. International Seminar on Road Map for decarbonization of Indian energy system
- 2. International Seminar on Molecular Biology
- 3. International Seminar and Scientist Meet
- 4. International Seminar on Towards the Design of adaptive selection strategies for multi factor authentication

NATIONAL SEMINAR:

- 1. UGC-DAE Seminar on 'Radiation Science and Technology.
- 2. Seminar on Teachers' Day
- 3. UGC Sponsored National Level Seminar on Chemistry of Functional Molecules
- 4. UGC Sponsored National Level Seminar on Basic Mathematics and its Application
- 5. UGC Sponsored National Level Seminar on From Molecules to Ecosystem— A Zoological Perspective
- 6. NAAC Sponsored National Level Seminar on Innovations in Teaching-Learning Process for the Present-Day Scenario in India
- 7. National Seminar on 'Sister Nivedita and Her Contribution to India: A Historical Perspective' sponsored by Indian Council of Historical Research, New Delhi
- 8. National Seminar on Knowing Space Technology for Societal Benefits
- 9. UGC Sponsored Week long National Level Workshop on *Techniques in Plant Biotechnology* organised by the Department of Botany
- 10. National Seminar on *Energy Conversion in India* in collaboration with the Alumni Association
- 11. Science Academies' Lecture Workshop on Fundamentals of Chemistry
- 12. Seminar on Swami Vivekananda and Modern Science
- 13. Seminar on Activities of Indian Academy of Sciences, Bangalore

2

STATE LEVEL SEMINAR:

- 1. Seminar on 'Wise use of water and its conservation for sustainable development'
- 2. Seminar on 'Bio-Nanotechnology Laboratory for Engineering Next Generation Drugs'
- 3. Seminar on Swami Vivekananda and his Philosophy of Service
- 4. Seminar on 'Biology behind diabetes' & 'Genomics- What's the excitement about?'
- 5. Seminar on 'History of Indian Chemical Society, Kolkata'
- 6. Seminar on *CBCS system in B.Sc. Courses according to UGC Regulation*.
- 7. Statistics in different branches of science

INSTITUTIONAL SEMINAR:

- 1. Seminar on 'Azadi-70 Zara yaad karo kurbani'
- 2. Seminar on NSS Orientation and Blood Donation Awareness Programme.

- 1. After application, Inspection Team visit and other selection procedures, the College was awarded **Autonomous status** by UGC for the period 2017-2022.
- 2. The IQAC maintained a regular track record in promoting International and National Seminars in the College.
- 3. Regular Progress Evaluation Tests and Pre-final Examination series have been arranged in many Departments for constant monitoring of student progress.
- 4. Regular Parent-Teacher Meetings have been organised to involve all the stakeholders into the Teaching-Learning process and to keep them aware of the efforts put forth by the institution and seek their valuable suggestions.
- 5. Promoting visit of International scientists and eminent personalities like: Harvey F. Lodish, MIT, USA; Prof. Ananda Mohan Chakraborty, University Professor, Dept. of Microbiology & Immunology, College of Medicine, University of Illinois, Chicago, USA, Prof. Pierres Goloubinoff, Department of Plant Molecular Biology, University of Lausanne, Lausanne, Switzerland, Prof. Sushanta Banerjee, Division of Haematology & Oncology, University of Kansas Medical Center, Kansas, USA Prof.(Dr.) F. Hudecz, Department of Organic Chemistry, Eotvos L University, Budhapest, Hungary, Dr. Arunava Roy, Sr. Scientist in Corporate lab, Singapore University Of Technology and Design(SVTD) and others.
- 6. Many eminent scientists and thinkers of the Nation were also invited on different occasions to enlighten the students and research scholars. Among them were: Dr.Dipankar Das, Centre Director, UGC-DAE CSR, KC, Dr. Alok Chakraborty, Director, Variable Energy Cyclotron Centre, Prof. Saibal Chattopadhyay, Director, Indian Institute of Management, Calcutta, Prof. Santanu Bhattacharya, Director, Indian Association for the Cultivation of Science, Kolkata, Prof. Sekhar Basu, Director, Bhaba Atomic Research Center (BARC), Kalpakkam, Prof. Tarasankar Pal, Department of Chemistry, Indian Institute of Technology, Kharagpur, Dr. Chittaranjan Patra, Biomaterials Group CSIR-Indian Institute of Chemical Technology, Hyderabad, Prof Raj Kumar Roychowdhury, ISI, Kolkata; President of Calcutta Mathematical Society, Kolkata, Prof.Malay Banerjee, Dept. of Math. & Stat., IIT Kanpur, Prof. Santimoy Kundu, Department of Applied Mathematics, ISM, Dhanbad and others.
- 7. The Toppers' Academy for awarding meritorious students has awarded the toppers in different streams with cash prizes, which has been a great help for many needy students.
- 8. A Free-Tiffin-Scheme for students, a great attempt for students coming from economically constrained circumstances, is being continued.
- 9. The Institution has offered some scholarships and Tuition Fee Waiver Schemes for meritorious but needy students.
- 10. Syllabus design according to Choice-Based Credit System for the Autonomous mode was framed.
- 11. Academic Council was formed for the autonomous mode and the first meeting of the Academic Council was held.
- 12. Board of Studies for different courses were formed as a part of autonomy.

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
Application for <i>Autonomous College</i> status to UGC	Granted Autonomous status by UGC for the period 2017-2022
Syllabus design according to Choice-Based Credit System for the Autonomous mode.	The entire syllabus for 6 semesters have been framed according to CBCS pattern comprising of Core Courses, Generic Electives, Skill Enhancement courses, Discipline Specific Electives.
Formation of Academic Council for the autonomous mode	Academic Council was formed and the first meeting of the Academic Council was held.
Formation of Board of Studies for different courses as a part of autonomy.	Board of Studies was formed and the first meetings were held for the respective courses.
Application for NIRF Ranking	The College secured Rank 78 on a National basis.
Organization of Seminars & Workshops	26 Seminars & Workshops were organised in one year.
Promoting participation of the students in various Co-curricular events	Students of the Department of Zoology participated in the Quiz competition in 'ZOOQUEST', jointly organized by W.B. Biodiversity Board, Zoology Department, University of Calcutta and Zoological Society, Calcutta and stood First. Students of the Department of Zoology participated in Model and Poster competition in "BIOSCOPE", jointly organized by Zoology Department, University of Calcutta and Zoological Society, Calcutta and stood First. A student of 1st Year, Zoology (Hons.) secured the Second Position in Inter-College Poster Competition on 'Sister Nivedita: Faces & Facets' organized by Bethune College, Kolkata on 7 th February, 2017 to commemorate the 150 th Birth Anniversary of Sister Nivedita.
To promote all round development	Introduction of a Six-month Certificate Course in Yoga for Health and Mind in collaboration with West Bengal Council of Yoga and Naturopathy from the coming session 2017-18

Academic Excellence	 A Research Scholar, Dept. of Botany was selected as the best presenter in the session-1 (In-vitro regeneration and micropropagation of economically important crops and medicinal plants) in the 8th International Plant Tissue Culture & Biotechnology Conference on Biotechnology for Innovative Agriculture and Food Security (3-5 December, 2016) held at Department of Botany, University of Dhaka, Bangladesh. Rohit Mukherjee, IIIrd Year Physics (Hons.) became the State Topper in National Graduate Physics Examination 2017 being placed in Top 1% among 774 students appearing from West Bengal. Manish Nandy, one of our ex-students in Chemistry, secured the 5th Position in West Bengal Civil Service (Executive) Examination 2016. A number of students qualified for the PG and Integrated Ph.D. programmes in the institutions like IISc. Bangalore, TIFR, IITs, IISERs, BHU, CUCET etc. 		
ISBN Publications	The College has published a book 'Swami Vivekananda and his Universal Ideas' with ISBN No. mainly based on the lectures delivered in an International Seminar held in the College in 2016.		
* Attach the Academic Calendar of the year a	us Annexure. (Annexure-i)		
2.15 Whether the AQAR was placed in statutory bod	y Yes V No		
Management ✓ Syndicate Any other body			
Provide the details of the action taken			
After the AQAR was prepared by IQAC it was place Body of the College. Keeping in mind the suggestion finalised for submission.			

Part - B

Criterion - I

I. Curricular Aspects

1.1 Details about Academic Programmes

Level of the	Level of the Number of Number of Number of				
Programme	existing	programmes	self-financing	added / Career	
	Programmes	added during the	programmes	Oriented	
		year		programmes	
Ph.D.	2	NIL	NIL	NIL	
PG	2	NIL	NIL	NIL	
UG	5	NIL	NIL	NIL	
PG Diploma	NIL	NIL	NIL	NIL	
Advanced	NIL	NIL	NIL	NIL	
Diploma					
Diploma	NIL	NIL	NIL	NIL	
Certificate	4	NIL	NIL	2	
Others	NIL	NIL	NIL	NIL	
Total	13	NIL	NIL	2	
Interdisciplinary	NIL	NIL	NIL	NIL	
Innovative	NIL	NIL	NIL	NIL	

- 1	- 1
$\sqrt{}$	
V	V

- 1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options
- (ii) Pattern of programmes:

Pattern	Number of programmes			
Semester	2			
Trimester	NIL			
Annual	5			

1.3 Feedback from stakeholders* (On all aspects)	Alumni	Parents	√	Employers Students $\sqrt{}$	
Mode of feedback :	Online	Manual	V	Co-operating schools (for PEI)	

- 1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.
- 1. The College is affiliated to the West Bengal State University and so it has been following the syllabi framed by the University. So update or revision can be made only by the University and no such recent changes are available. However, the college in its autonomous mode w.e.f 2017-18 academic session will have its own syllabus and evaluation system and hence the option for curriculum framing and revision as per choice-based credit system will be effective from 2017-18.
- 2. In the PG courses (in Chemistry & Botany) offered by the College, there is autonomy to frame the syllabus. There, occasional revision takes place from time to time.

^{*}Please provide an analysis of the feedback in the Annexure (Annexure-ii)

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Applications and sanction procedure for two new Departments namely Computer Science and Microbiology have been inititated.

Criterion - II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
39	23	14	Nil	2

2.2 No. of permanent faculty with Ph.D.

29

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associa Profess		Professors		Other	S	Total	
R	V	R	V	R	V	R	V	R	V
3	3	N/A	N/A	N/A	N/A	1	N/A	4	3

2.4 No. of Guest and Visiting faculty and Temporary faculty

N/A	N/A	40
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	28	74	01
Presented papers	07	06	-
Resource Persons	02	06	01

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- 1) Pre-Examination Preparations: Test series are arranged for a thorough preparation of the students before the University Examinations.
- 2) Attempts are being made to enable the students to pursue NPTEL courses in distance mode in the College parallel to their B.Sc. curriculum. A good number of students have enrolled for the purpose.
- 3) Hands-on-training workshops are organised to acquaint the students to the laboratory techniques and instruments in Botany and Plant Biotechnology.
- 4) A Butterfly garden is being developed by the Department of Zoology for a methodical study on the biodiversity, feeding and metamorphosis of butterflies. This is intriguing interest among the students towards conservation and research of the environment around the college campus.
- 3) Poster presentations and class-based seminars by the students are encouraged for an in-depth understanding of a topic.
- 4. Students are facilitated to participate in various academic competitions organised by reputed Institutes or organization like The Zoological Society, Calcutta; NASI, Allahabad etc. to arouse greater interest and grasp on the subject.
- 5. Certificate courses on Computer Applications & Mushroom Cultivation provide the students an edge in their future to face the competitive job market.
- 6. The College has established an Institutional Membership cum Collaboration with British Council, Kolkata and American Library and Information Center, Kolkata for enrichment of academic resources. As a result, students and staff members have attended a number of academic and cultural programmes arranged by these International bodies which helps one to expand the horizons of knowledge and acquaintances.
- 7. For an all-round development of the students, the students are exposed to the best elements of modern scientific research and the eternal values of life for a man-making education as envisioned by Swami Vivekananda.
- 2.7 Total No. of actual teaching days during this academic year

256

- 2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)
 - 1) UG Exams are conducted entirely by the affiliating University. In PG Botany, scrutiny of the corrected answer scripts and Supplementary Exam system has been introduced.
 - 2) At the UG level, the frequency of tests has been increased to ensure proper preparation for the University Examination. Progress Evaluation tests, Pre-final Exams coupled by guardian meetings have strengthened the academic culture and has involved all the stakeholders in the process.
 - 3) The College will switch over to Choice Based Credit System (CBCS) and Semester pattern from 2017-18 where there are ample opportunities for examination and evaluation reforms.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

37(UG)	19(PG)
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2.10 Average percentage of attendance of students

93%

2.11 Course/Programme wise distribution of pass percentage / Number :

Title of the Programme	Total no. of students		Di	vision/Class	5	
	appeared	Distinction %	I (No.)	II (No.)	III (No.)	Pass (No.)
Physics	48	N/A	32	16		0
Chemistry	49	N/A	40	09		0
Mathematics	39	N/A	11	22		6
Zoology	45	N/A	23	21		1
Botany	39	N/A	11	25		3
Chemistry (M.Sc.)	39	N/A	36	03		
Botany (M.Sc.)	26	N/A	20	06		
Computer Applications (Certificate Course)	40	N/A				40
Mushroom Cultivation (Certificate Course)	35	N/A				35
Communicative English (Certificate Course)	32	N/A				32
Value Education and Indian Culture (Certificate Course)	All UG & PG 1st Yr.					All UG & PG 1 st Yr.

- 1. **Review of the performance**: The IQAC keeps a track of the results after each University Examination and advices necessary remedies for further development.
- 2. **Formation of 'Toppers' Academy':** IQAC is always desirous to encourage and award the meritorious students. Keeping this in mind IQAC proposed the Faculty members to form a Toppers' Academy where financial help from teachers and well-wishers will be helpful to award a student. This is of great significance particularly for the students coming from economically constrained backgrounds.
- 3. **Building newer connections**: IQAC arranges seminars and workshops where the students are able to interact with many eminent academicians, reputed scientists and teachers of renowned Universities and Institutes. This link helps the students to go for their higher studies to those Institutes in future.
- 4. Academic resources: IQAC monitors the constant influx of study materials which range over books and journals to NPTEL resources etc. This helps both the teachers and the students to enrich themselves with the best possible academic nourishment.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	01
UGC – Faculty Improvement Programme	-
HRD programmes	-
Orientation programmes	06
Faculty exchange programme	-
Staff training conducted by the university	-
Staff training conducted by other institutions	
Summer / Winter schools, Workshops, etc.	07
Others	01

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	3	0	0	0
Non teaching Staff	18	18	0	6
Technical Staff	3	6	0	0

Criterion - III

3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
- 1. The newly set up Research Centre, 'Swami Vivekananda Research Centre for Multidisciplinary Research in Basic Sciences & Social Sciences' is functioning smoothly in this academic session for full-fledged Ph.D. programmes & Research. 5 Research scholars enrolled for Ph.D. programmes are about to get their registration.
- 2. **Five Minor Research Proposals** were submitted to UGC and Major Research proposals were submitted to different funding agencies for maintaining the constant flow in Research activities. All the 5 Minor Research proposals submitted by the young faculty members were sanctioned. This has involved the young faculty members in research along with teaching. Along with these many major research projects were also sanctioned.
- 3. Students are exposed to various kinds of field studies, data analysis and presentation to invigorate a research knack.
- 4. **4 International & 13 National Seminars, 7 State Level Seminars and 2 Institutional Seminars** were organised to expose the students, Research Scholars and Faculty to the recent trends in Research.

3.2 Details regarding major projects

			Completed	Ongoing	Sanctioned	Submitted
Number			01	03		
Outlay Lakhs	in	Rs.	24 lakhs	88,98,603		

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	0	05	0	0
Outlay in Rs. Lakhs	0	17.82 lakhs	0	0

3.4 Details on research publications

	International	National	Others
Peer Review Journals	29	03	-
Non-Peer Review Journals	-	01	-
e-Journals	01	-	-
Conference proceedings	-	01	-

3.5 Details on Impact factor of publications:

Range 1.4-6 Average 3.7 h-index 4-12 Nos. in SCOPUS 7	7	
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	From 1.2.16- ongoing	WB-DST	Rs. 25,80,603/-	923056
		WB-DST	Rs. 19,78,000/-	
	3 years	DBT (Govt. of India)	Rs. 24,00,000/-	Rs. 8,00,000/-
	3 years	DBT (Govt. of India)	Rs. 42,00,000/-	Rs. 16,00,000/-
	3 years	DBT (WB)	Rs. 16,64,520/-	Rs. 16,64,520/-
Minor Projects	18.3.17-18.3.19	UGC	4,30,000/-	3,77,500/-
	18.3.17-18.3.19	UGC	2,95,000/-	2,25,000/-
	18.3.17-18.3.19	UGC	3,63,000/-	2,07,500/-
	18.3.17-18.3.19	UGC	4,10,000/-	3,15,000/-
	18.3.17-18.3.19	UGC	2,84,000/-	2,39,000/-
Interdisciplinary Projects	1year	WB-DST	1,40,000/-	1,40,000/-
Industry sponsored	NA	NA	NA	NA
Projects sponsored by the University/ College	NA	NA	NA	NA
Students research projects (other than compulsory by the University)	2016-17	SEBA	14,000/-	14,000/-
Any other(Specify)	NA	NA	NA	NA
Total	NA	NA	NA	NA

3.7 No. of books published	i) With ISBN No.	01	Chapters	in Edited Books	3	
3.8 No. of University Depa	ii) Without ISBN No.		04			
	UGC-SAP DPE	CAS		DST-FIST DBT Scheme/fur	nds]
	Autonomy INSPIRE	CPE CE	√ 	DBT Star Schen Any Other (speci		FIST

3.10 Revenue generated through consultancy

1.5 lakhs

3.11 No. of conferences organized by the Institution

26

Level	International	National	State	University	College
Number	5	4	2	0	2
Sponsoring agencies	1) PCRA 2) RKMVC College	1) NAAC 2) UGC 3) Science Academies 4) UGC-DAE 5) ICHR	1) RKMVC College 2) Design Division, State Water Investigation Directorate (SWID), Govt. of West Bengal		RKMVC College
	y served as experts, o				

3.12 No. of faculty served as experts, chairpersons or resource persons	09
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		_		_			
3.13 No. of collaborations	11	International	05	National	06	Any other	

- 05 3.14 No. of linkages created during this year.
- Rs. 49,18,229 3.15 Total budget for research for current year (2015-2016) in lakhs:

From Funding agency From Management of University/College Rs. 71,01,129 Rs.3,19,693 Total Rs. 74,20,822

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	1
	Granted	1
International	Applied	NA
	Granted	NA
Commercialised	Applied	NA
	Granted	NA

3.17 No. of research awards/ recognitions received by faculty and research fellows Of the institute in the year

Total	International	National	State	University	Dist	College	
2	02	03	NIL	NIL	NIL	NIL	
who are Ph	culty from the Ins a. D. Guides s registered unde		g	06			
3.19 No. of Ph	.D. awarded by f	faculty from	the Ins	titution		0	
3.20 No. of Re	esearch scholars i	receiving the	e Fellow	vships (Newly	enroll	ed + existing o	nes)
JRF	14	SRF	06	Project Fello	ows	Any other	2 (Hony. Research Fe 01 (PDF)
3.21 No. of stu	idents Participate	ed in NSS ev	vents:				01 (FA/Scholar)
				University le	evel	5 State le	evel
				National leve	el [Interna	tional level
3.22 No. of str	udents participat	ed in NCC	events:		L		
				University l	evel	State 1	evel
				National lev	el [Interna	ational level
3.23 No. of A	wards won in NS	SS:			L		
				University le	evel [State le	evel
				National leve	el [Interna	tional level
2.24 No. of A	wards won in N O			T (attorial 10)			
3.24 INU. UI A	warus won in INC	. .		TT ' ' 1	, -		,
				University le		State le	
				National leve	el [Interna	tional level
3.25 No. of Ex	tension activities	s organized					
Unive	ersity forum	Co	ollege fo	orum 26			
NCC		N	ss	4		Any other	
3.26 Major Ac Responsibility	tivities during th	e year in the	e sphere	of extension	activiti	es and Instituti	onal Social
		ıal Eve Oner	ation Ca	amn			

- Annual Eye Operation Camp
- Annual Blood Donation Camp
- Pulse Polio Immunization Programme Centre
- T.B. Seal Sale Camp
- Seminars: Total=26

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	4 acres (approximately) for College & 100 acres land for whole Mission	Construction of five- storied building going on (32000 sq. ft.).	College Fund	-
Class rooms	28	04 + 3500 sq.ft (on-going)	College Fund	32
Laboratories	28	1 Virtual Class room + 600 sq.ft	State Govt.	29
Seminar Halls	01	01 (1100 seated AC Hall) : 9000 sq.ft	College Fund	02
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	29	02 (Iron removal plant :2)	UGC	31
Value of the equipment purchased during the year (Rs. in Lakhs)	-	4.9 lakhs(approx)		
Others	NA	 1) 03 Elevators 2) Remodelled and relocated Library 3) Newly furnished Controller of Examinations Room and Exam section. 4) New LPG gas line for Chemistry dept. 5) 42 Kwatt on-grid PV solar system 6) Multigym with modern equipments 	NA	NA

4.2 Computerization of administration and library

- 1. The entire Official work is maintained through a software developed by the College named *Smart College*. Students data, Accounts, Scholarship, etc. are all maintained and recorded in computerized version.
- 2. Most of the modern equipment required for the smooth running of the office like Photocopy machine, Scanners, Colour Photocopy system, Scanners, *Book Eye* Scanner etc. are used for various official and academic purposes.
- 3. The entire Library Catalogue is computerized. A software named *Bookworm* is used for this purpose along with maintenance of daily book issue-return records etc.
- 4. Wi-fi facility is there in the College Office and the library along with BSNL Broad Band Internet Connectivity.

4.3 Library services:

	Existing		New	ly added	Total	
	No.	Value	No.	Value	No.	Value
Text Books	32258	5478170	87	246302	32345	5724472
Reference Books	1375		84		1459	
e-Books	135000				1,35,000	
Journals	21	22055			21	22055
e-Journals	6250					
Digital Database						
CD & Video	111			1	112	
Others (specify)						

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart -ments	Others
Existing	130	2	31	2	2	16	22	
Added	4	0	1	0	0	1	2	
Total	134	2	32	2	2	17	24	

- .5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
 - 1. The Teachers of each Department have access to desktops and laptops for teaching purposes.
 - 2. Students are offered a UGC-Recognised Certificate Course in Computer Applications in collaboration with WEBEL where the students can be adept in the recent advances of Computer usage.
 - 3. Apart from the Certificate Course, the College also offers a general training in Computers to every student in the very beginning of their studies in the First Year of the B.Sc. curriculum in collaboration with WEBEL.
 - 4. The college is a member of NPTEL courses for the students to access online courses offered by the IITs and IISc.
 - 5. The ICT-enabled classrooms in every Department offers an opportunity to make teaching-learning in-depth and lucid simultaneously.
 - 6. The entire library catalogue, issue-return, & the office data for admissions, examinations,

4.6 Amount spent on maintenance in lakhs:

i) ICT Rs. 3,25,517

ii) Campus Infrastructure and facilities Rs. 29,03,152

iii) Equipments Rs. 5,75,363

iv) Others Rs. 18,68,713

Total: Rs. 56,72,745

Criterion - V

5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
 - 1. Formation of Toppers' Academy to encourage meritorious students through awards and special guidance.
 - 2. Tuition fees waivered for students securing 60% marks in all papers.
 - 3. Grievance Redressal Cell for addressing the problems faced by the students.
 - 4. Placement through campussing by leading companies like TCS, ACC etc.
 - 5. To give access to online courses through NPTEL and get enriched.
- 5.2 Efforts made by the institution for tracking the progression
 - 1. Analysis of class tests, University examinations and day-to-day response/ performance in the theoretical and lab-based classes is done to observe the trend of progression of each student.
 - 2. Progress Evaluation Tests are taken at regular intervals for tracking the development of the students along the academic session. Pre-final tests for both theoretical and practical portions are taken to provide a simulation for Final University Examinations.
 - 3. In case of poor performance, the students are given special guidance and separate examinations are arranged to make them at par.
 - 4. UG & PG students need to give In-house Seminars and Poster Presentations where the academic maturity is assessed for further improvement.
 - 5. Performance of the students at All-India Level Competitive Examinations like JAM, JEST, NET etc. are analysed thoroughly for assessing the standard of the students at the National level.
 - 6. The Alumni tries to keep a record of the ex-students to be aware of the long-term placements secured by the students by dint of their merit.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
793	137	9	Certificate Courses: Computer Applications: 40 Mushroom Cultivation: 40 Communicative English:40

(b) No. of students outside the state

1

(c) No. of international students

0

	No	%	
Men	991	100	

Women

No	%
0	0

Last Year					This Year						
General	SC	S T	OB C	Physicall y Challenge d	Total	General	S C	ST		Physically Challenged	Total
811	12 3	0 7	185	0	1126	729	12 1	05	13 6	0	991

Demand ratio = 6:1

Drop out % = 0.1%

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- 1. Special care is taken to train the UG students for various Competitive Examinations like JAM, JEST etc., for admission in reputed Institutions like IITs, IISC, TIFR etc. for Post graduate courses.
- 2. PG students are motivated for NET exam and guided in individual capacity.
- 3. Students are exposed to NPTEL Online courses for greater depth in knowledge.
- 4. The Certificate Courses in Computer Applications and Communicative English enables the students to keep themselves updated with the recent trends in Computer Sciences and Language expressions which helps the students in the larger scenario.
- 4. The students are made aware about the timings of the different Competitive examinations.

No. of students beneficiaries

26

5.5 No. of studen	ıts qualif	ied in these exar	ninatio	ns -2015			
NET	2	SET/SLET [0	GATE	4	CAT	
IAS/IPS etc		State PSC		UPSC		Others	JAM =20 , TIFR=1, IISc.=1, BHU=3, IITs=15, IISER=5

- 5.6 Details of student counselling and career guidance
 - 1. Scientists and Educationists from various eminent organisations like INSA, ZSI, UGC-DAE, NAAC, Science Academies etc. visit the college and enlighten the students regarding future avenues in studies, research and jobs.
 - 2. Panel Discussions are organised where many eminent industrialists offer their invaluable suggestions regarding job opportunities.
 - 3. The students always receive valued advices from the Professors regarding their future plans.
 - 4. In-house Campussing are arranged for the students for availing different job opportunities.
 - 5. Student-Teacher-Parent Meet for overall discussion regarding academic performances and goals.

No. of students benefitted

220

5.7 Details of campus placement

	On campus		Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
1	60	2	12 (approx)

5.8 Details of gender sensitization programmes

No separate gender sensitization programmes have been organised. But the Certificate Course in Value Education and Indian Culture which is mandatory for every UG student emphasizes the need for honour and reverence towards all, irrespective of gender. Seminars on the ideas preached by Swami Vivekananda are held regularly which uphold the greatness of women and the worshipful attitude that they deserve for the good of the nation.

5.9 Studer	nts Activities						
5.9.1	No. of students participa	ated in Sp	orts, Games and other	events			
	State/ University level	2	National level	International 1	evel		
	No. of students participa	ated in cu	ltural events				
	State/ University level	22	National level 6	International 1	evel 3		
5.9.2	No. of medals /awards v	won by stu	udents in Sports, Gam	es and other events			
Sports	: State/ University level		National level	International	level		
Cultura	l: State/ University level	3	National level	International	level		
5.10 Schol	5.10 Scholarships and Financial Support						
			Number of students	Amount			
Financial :	support from institution	1		Amount Rs. 62,820			
	support from institution support from governme		students				
Financial :	support from governme	ent	students 33 94	Rs. 62,820 Rs. 15,97,822			
Financial :		ent	students 33	Rs. 62,820			
Financial s	support from governme	ent rces	students 33 94	Rs. 62,820 Rs. 15,97,822			
Financial s	support from governme support from other sou of students who	ent rces	students 33 94 07	Rs. 62,820 Rs. 15,97,822 Rs.38,800			
Financial s	support from governme support from other sou of students who	ent rces	students 33 94 07	Rs. 62,820 Rs. 15,97,822 Rs.38,800			
Financial s Financial s Number Internatio	support from governme support from other sou of students who	rces received	students 33 94 07	Rs. 62,820 Rs. 15,97,822 Rs.38,800			
Financial s Financial s Number Internatio	support from governme support from other sou of students who n nal/ National recognitio	rces received	students 33 94 07	Rs. 62,820 Rs. 15,97,822 Rs.38,800	evel		

5.13 Major grievances of students (if any) redressed: No notable grievances have been recorded.

04

5.12 No. of social initiatives undertaken by the students

Criterion - VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision

The college is a unit of Ramakrishna Mission Boys' Home, Rahara which is a branch centre of the worldwide organization, Ramakrishna Math & Ramakrishna Mission established by Swami Vivekananda.

Swami Vivekananda said 'My ideal indeed can be put into a few words and that is: to preach unto mankind their divinity, and how to make it manifest in every movement of life' & and emphasized the need of 'Modern Science coupled with Vedanta'. Poised in these two visions the institution tries to follow the ideal of *Atmano mokshartham jagaddhitaya cha*, freedom from the bondage of all ignorance & misery by realizing one's divine Self and mending the path for material, intellectual and spiritual good of the entire world. Imbibing this spirit, the college envisions to manifest itself into a powerful centre of higher education aiming the full-fledged growth and fulfillment of all those coming in contact with it.

Mission

The method followed to achieve the supreme good for oneself and for all others is 'Shivajnane jivaseva' – service done in a spirit of worship. Here in this college, the goal is to serve the students mostly coming from economically constrained circumstances by providing them quality education in the field of Science and in the art of all-square Personality Development by:

- (i) Exposing young minds to advanced scientific topics and imparting hands-on training over sophisticated analytical instruments
- (ii) To establish the college as a potential center of research activities thus creating a strong tradition of deep-rooted academic pursuits and an ambience that favours the scholarly activities
- (iii) Imparting a man-making, character-building education by a balanced development of the 3H's- Head, Heart and Hand so that the students may turn out to be wise citizens able to shoulder the responsibility of the Nation.
- (iv) A culture of labour and service, focus and perseverance, simple living and high thinking is transmitted to the students who are the future of the nation.

6.2 Does the Institution has a management Information System

- 1. The entire data related to the students details, fees, admission, examination etc. is maintained through a software name Smart College which is accessible by different concerned staff of the Office. This makes the process unified and smooth.
- 2. The data related to Accounts, Day Book Entry, Salary etc. is also maintained through the same software Smart College. As a result staff members working in different sections of the College Office are able to have a complete picture whenever they are working on any aspect.
- 3. The Library catalogue is also entirely computerized, this makes the searching fast and easy.
- 6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

- 1. For UG, the Institution does not have a direct role as per University statue. However, faculty members who are members of the Board of Studies, actively work for syllabus development to keep at par with modern trends. With implementation of autonomous mode from 2017-18 a huge scope has come as far as curriculum development is concerned.
- 2. For PG, Institution with its own Board of Studies composed of college faculty members as well as many distinguished Professors from other Institutions play a role in quality improvement via curriculum development.

6.3.2 Teaching and Learning

- 1. Each Department is equipped with Computer facility and Internet Connection for the teachers to enrich themselves and to help them in their day-to-day class teaching
- 2. Every Department has ICT based classrooms for an interactive teaching-learning process and for easy comprehension of complicated topics. Very often multimedia presentations and video-graphic representation makes the topics under discussion much more lucid
- 3. Models, e-museum concept of zoological specimens are used for teaching more effectively. Efforts are being made to set up a Plant Fossil museum with some recently collected rare Plant Fossils from different coal mines in Asansol, West Bengal.
- 4. Every student is given a training in Computer Applications and Spoken English just at the onset of their B.Sc. studies to keep them updated and perfect in expression skills. Since most of the students come from rural and semi-urban areas, hence expertise in Communicative English needs to be provided to them for expressing their blooming ideas and genius in science.
- 5. A six-months certificate course in Communicative English has been started for UG students.
- 6.Students are encouraged to undertake online certificate courses under NPTEL as the college is a Nodal Centre for NPTEL.
- 7. A *Smart Classroom* interactive board is used for various participatory classes.
- 8. A Virtual Class room has become functional from this session.

6.3.3 Examination and Evaluation

Since the College is affiliated to the West Bengal State University, the entire examination and evaluation process for the UG level is executed under the guidelines of the affiliating University. However many of the Faculty members are involved in the Examination and Evaluation process who try to upgrade the process by their suggestions.

However at the PG level the College enjoys autonomy to organise and improvise the examination process. Many Professors from other reputed Institutions are also invited as moderators, external examiners etc. to make the system transparent and widely accepted. For unsuccessful candidates, the Department of Botany has introduced the provision for supplementary examination at the PG level.

Apart from these, some additional measures have been taken at the College level for the UG students during this academic session to ensure academic grasp and perfection:

- 1. Progress Evaluation Tests
- 2. Departmental Pre-final test.
- 3. The students are made aware of the evaluation and the necessary betterment they should go through for further precision.

6.3.4 Research and Development

The Institution has a strong culture of Research for more than two decades. It always caters to the various needs of the Faculty members and Research Scholars involved in Research:

- 1. The College had plans to start a Research Centre of its own with self-sustained infrastructure for Doctoral thesis. A Research Centre by the name 'Swami Vivekananda Research Centre for Multidisciplinary Research in Basic Sciences & Social Sciences' is functioning smoothly.
- 2. The research infrastructure includes an array of sophisticated scientific instruments like HPTLC, UV & IR Spectrophotometers, Fluorophotometer, Geldoc, *Leica* digital 3-D and 2-D Microscopes, Beckmann Ultracentrifuge, High precision balance etc. The College keeps on enriching its instrumental facility. For example, in this Academic Session the College has procured a HPLC, Fluorescence Inverted Microscope, CO₂ Incubator, Western Blotting system for research in the Department of Chemistry and Botany.
- 3. With the day-to-day expansion in research work in the College, there is increasing demand for lab space. From the previous academic session two new research labs have been constructed for research work in Cancer Cell line.
- 4. Five of the newly joined Faculty members have received Minor Research Projects from UGC.
- 5. A week-long UGC Sponsored Hands-on-training Workshop was arranged by the Dept. of Botany where 30 students and teachers from all over the nation participated. This is an initiative to spread the institutional expertise, infrastructural enrichment and research aptitude to other institutions. The participants were trained in the latest lab techniques in molecular biology and biotechnology.
- 6. Many UG students from the Dept. of Zoology are also encouraged to carry on various field studies with qualitative and quantitative precision. Some of these

6.3.5 Library, ICT and physical infrastructure / instrumentation

- 1. The Library is time-to-time enriched with new books.
- 2. The entire Library Catalogue is computerised which gives ease for searching books.
- 3. A collaboration with American Library has increased access to many ebooks and journals.
- 4. Every Department has ICT enabled classrooms.
- 5. ICT enabled centrally air-conditioned Seminar Hall *Swami Vivekananda Hall* is used for seminars, special lectures , panel discussions and workshops.

6.3.6 Human Resource Management

The Institution is a unit of the Ramakrishna Mission founded and inspired by Swami Vivekananda. Following his footsteps the college tries to spread a culture of man-making education. The Institution knows that it is giving shape to the future of the Nation and world at large by working on the powerhouse called youth. For chanellising this power along beneficial channels the Institution emphasises a balanced development of both the head and the heart, academic excellence and humanitarian expansion, Western science and Indian values. For this the Institution has taken few steps during this academic session:

- 1) A six-month certificate course on *Value Education & Indian Culture* has been started for the First Year UG students so that they can imbibe the spirit of Swami Vivekananda's Man-making Education at the very onset of their tenure in the College. This is perhaps a correct time in life when a young student can really admire the depth of Values and practise them to their fruition.
- 2) Along with various seminars on the ideas of Swami Vivekananda for students which have become common events in the College, this academic year a Workshop on *Value Education for Professionals including Teachers* was organised by the Institution. This was unique since it drew many professionals, guardians, teachers for revivifying the ideals of a meaningful life.
- 3) As a corollary to the certificate course on *Value Education & Indian Culture* for the students, weekly cleaning programmes have been started during this academic session which has increased their involvement with the College and its premises.
- 4) A text-book has been published from the College named *Jivan Sopan* for the aforesaid certificate course. This book comprises of various cardinal points of day-to-day life like following a daily routine for synchronising the life style, the art of living happily by walking along the path of sincerity, dedication, selflessness and so on.

6.3.7 Faculty and Staff recruitment

1) This year the college was able to fill 3 vacant posts for the Teaching Faculty through the College Service Commission, West Bengal. This has been a great boost for the Teaching-Learning process of the college.

6.3.8 Industry Interaction / Collaboration

In an International Seminar on 'Road Map for decarbonization of Indian energy system', Prof. Mohsen Assadi, Professor, University of Stavanger, Norway, Dr. Homam Nikpey, Post-Doc, University of Stavanger, Norway, Dr. Amir Safari, Post-Doc, University of Stavanger, Norway & Prof. Sudipta De, Mechanical Engineering Department, Jadavpur University discussed the different industrial processes going on in Norway and India.

In a state level seminar on 'Wise use of water and its conservation for sustainable development' in collaboration with Design Division, State Water Investigation Directorate (SWID), Govt. of West Bengal, eminent scientists of the SWID discussed various industrial techniques for water harvesting and conservation.

Prof. Samir Bhattacharya, FNA, FASc, FNASc (Former Director Indian Institute of Chemical Biology, Kolkata), INSA Golden Jubilee Research Professor has discussed about drug development against diabetics which can reach the commercial level.

6.3.9 Admission of Students

The application process for PG Admissions has been switched over to online mode from the previous year. This has made the process more accessible for students residing far away. As a result the number of applicants has also risen to a considerable extent. The analysis of the applications submitted online has also become easy and less prone to error.

The UG Application process has been made entirely through the online mode from the previous session. This year the college has introduced the admission test for the selection of UG students.

6.4 Welfare schemes for

Teaching	Cooperative Society for monetary benefit after retirement, loans etc.
Non teaching	Cooperative Society for monetary benefit after retirement, loans etc.
Students	 Scholarships from Ramakrishna Mission for needy students. Tuition fee waiver for students securing 60% or above in all papers of the University Exam 'Toppers' Academy' awards for needy and meritorious students through cash prizes. Students are enlightened to avail different scholarships like Merit-cum-Means, Inspire, Jindal, WBMDFC scholarships as per their performance and economic background. 'Personal Integrity Award' has been started for students with overall performance and human development. Free Tiffin Scheme for students.

6.5 Total corpus fund generated: Rs. 2,482,744.37	as per A	udit F	Report	2016-	2017
6.6 Whether annual financial audit has been done	Yes	√	No		

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type		External	Int	Internal		
	Yes/No	Agency	Yes/No	Authority		
Academic	Yes	UGC through its series of academic as well as administrative audit cum evaluation has conferred the status of Autonomy in 2017	Yes	IQAC		
Administrati ve	Yes	UGC through its series of academic as well as administrative audit cum evaluation has conferred the status of Autonomy in 2017	Yes	Governing Body		

6.8 Does the University	/ Autonomous College dec	lares res	ults wi	thin 30 days?
	For UG Programmes		٧	No
	For PG Programmes	Yes	1/	No 🗍

- 6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?
 - 1. Earlier there used to be two University Examination during the Three-year degree course: PartI (comprising of the Ist and IInd Years) & Part II (comprising of the IIIrd Year). However at present, a student needs to sit for three University examinations at the end of each academic session namely Part-I, Part-II & Part-III Examinations respectively.
 - 2. For the PG courses in the college in Chemistry & Botany, semester examination system is followed instead of the previously prevalent annual examinations.
 - 3. Scopes have increased for examination received since the college is switching over to autonomous mode from 2017-18.
- 6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

UGC has conferred the Autonomous status in the year 2017 to the college with the full support and assistance of the affiliating university i.e. West Bengal State University.

6.11 Activities and support from the Alumni Association

Many of the Alumni association members constantly support the activities in the college. During the Annual Free Eye Operation Camp conducted by the college some of the members take active role in raising funds and collecting medicines and eye drops for the needy patients. The members of the Alumni has collected a fund of about Rs. 12 lakhs for construction of newly built annexe building.

6.12 Activities and support from the Parent – Teacher Association

Though there is no formal Parent-Teacher Association, but the parents are constantly abridged about their wards' performance. Whenever required, there are Parent-Teacher meetings for discussing issues regarding the betterment of the students' performance. The guardians are invited for different cultural programmes in the College.

In this academic session all the five Departments conducted around 12 Parent-Teacher meetings to discuss academic issues.

6.13 Development programmes for support staff

There is a cordial relationship between the support staff, the faculty members and college authorities which encourages free exchange of ideas for an united effort towards the holistic development of the Institution . They are free to participate in any academic, athletic and cultural programmes for their personal enrichment and recreation. There is a Cooperative Society for financial aid of the support staff. They can avail the medical facilities provided by the Ramakrishna Mission.

6.14 Initiatives taken by the institution to make the campus eco-friendly

The College campus is characterised by lush green surroundings, garden, water bodies etc. This is indeed like an oasis in the heart of the hustle bustle of the city.

One of the main thrusts of the college is hygiene. For this purpose there are provisions to provide purified water to the stakeholders in the college.

The college promotes alternate sources of energy to minimize the pollution level. There is a new 42 KW Solar Power Unit, installed this year which supplies the excess production to the main grid.

A Seminar was organised on 'Wise use of water and its conservation for sustainable development' in collaboration with Design Division, State Water Investigation Directorate (SWID), Govt. of West Bengal.

An energy audit was carried out by the scientists and students of IISWBM.

Criterion - VII

7. Innovations and Best Practices

- 7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.
 - After application, presentation and other selection procedures the UGC has conferred the 'Autonomous Status' to the college.
 - 2. The 'Swami Vivekananda Research Centre for Multidisciplinary Research in Basic Sciences & Social Sciences' of the College has started functioning from this year with independent RET examinations, Interviews. 5 Research Scholars have enrolled themselves this year in the Dept. of Botany for pursuing their Ph.D.
 - 3. The IQAC maintained a regular track record in promoting International and National Seminars in the College.
 - 4. Regular Progress Evaluation Tests and Pre-final Examination series have been arranged in many Departments for constant monitoring of the student progress.
 - 5. Remedial Classes have been organised in the Department of Zoology for providing extra academic care to the weak students.
 - 6. Regular Parent-Teacher Meetings have been organised to involve all the stakeholders into the Teaching-Learning process and to keep them aware of the efforts put forth by the institution and seek their valuable suggestions.
 - 7. Promoting visit of International scientists and eminent personalities like:
 - Harvey F. Lodish, MIT, USA;
 - Prof. Ananda Mohan Chakraborty, University Professor, Dept. of Microbiology & Immunology, College of Medicine, University of Illinois, Chicago, USA,
 - Prof. Pierres Goloubinoff, Department of Plant Molecular Biology, University of Lausanne, Lausanne, Switzerland,
 - Prof. Sushanta Banerjee, Division of Haematology & Oncology, University of Kansas Medical Center, Kansas, USA
 - Prof.(Dr.) F. Hudecz, Department of Organic Chemistry, Eotvos L University, Budhapest, Hungary,
 - Dr. Arunava Roy, Sr. Scientist in Corporate lab, Singapore University Of Technology and Design(SVTD) and others.
 - 8. Many eminent scientists and thinkers of the Nation were also invited on different occasions to enlighten the students and research scholars. Among them were:
 - Dr.Dipankar Das, Centre Director, UGC-DAE CSR, KC,
 - Dr. Alok Chakraborty, Director, Variable Energy Cyclotron Centre,
 - Prof. Saibal Chattopadhyay, Director, Indian Institute of Management, Calcutta,
 - Prof. Santanu Bhattacharya, Director, Indian Association for the Cultivation of Science, Kolkata,
 - Prof. Sekhar Basu, Director, Bhaba Atomic Research Center (BARC), Kalpakkam,
 - Prof. Tarasankar Pal, Department of Chemistry, Indian Institute of Technology, Kharagpur, Dr. Chittaranjan Patra, Biomaterials Group CSIR-Indian Institute of Chemical Technology, Hyderabad,
 - Prof Raj Kumar Roychowdhury, ISI, Kolkata; President of Calcutta Mathematical Society, Kolkata,
 - Prof.Malay Banerjee, Dept. of Math. & Stat., IIT Kanpur,
 - Prof. Santimoy Kundu, Department of Applied Mathematics, ISM, Dhanbad
 - 9. The Toppers' Academy for awarding meritorious students has awarded the toppers in different streams with cash prizes which has been a great help for many needy students.
 - 10. A Free-Tiffin-Scheme has been started for students, which is again a considerable attempt for many

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Plan of Action	Achievements
Application for <i>Autonomous College</i> status to UGC	Granted Autonomous status by UGC for the period 2017-2022
Syllabus design according to Choice-Based Credit System for the Autonomous mode.	The entire syllabus for 6 semesters have been framed according to CBCS pattern comprising of Core Courses, Generic Electives, Skill Enhancement courses, Discipline Specific Electives.
Formation of Academic Council for the autonomous mode	Academic Council was formed and the first meeting of the Academic Council was held.
Formation of Board of Studies for different courses as a part of autonomy.	Board of Studies was formed and the first meetings were held for the respective courses.
Application for NIRF Ranking	The College secured Rank 78 on a National basis.
Organization of Seminars & Workshops	26 Seminars & Workshops were organised in one year.
Promoting participation of the students in various Co-curricular events	Students of the Department of Zoology participated in the Quiz competition in 'ZOOQUEST', jointly organized by W.B. Biodiversity Board, Zoology Department, University of Calcutta and Zoological Society, Calcutta and stood First. Students of the Department of Zoology participated in Model and Poster competition in "BIOSCOPE", jointly organized by Zoology Department, University of Calcutta and Zoological Society, Calcutta and stood First. A student of 1st Year, Zoology (Hons.) secured the Second Position in Inter-College Poster Competition on 'Sister Nivedita: Faces & Facets' organized by Bethune College, Kolkata on 7 th February, 2017 to commemorate the 150 th Birth Anniversary of Sister Nivedita.
To promote all round development	Introduction of a Six-month Certificate Course in Yoga for Health and Mind in collaboration with West Bengal Council of Yoga and Naturopathy from the coming session 2017-18

Academic Excellence	 A Research Scholar, Dept. of Botany was selected as the best presenter in the session-1 (In-vitro regeneration and micropropagation of economically important crops and medicinal plants) in the 8th International Plant Tissue Culture & Biotechnology Conference on Biotechnology for Innovative Agriculture and Food Security (3-5 December, 2016) held at Department of Botany, University of Dhaka, Bangladesh. Rohit Mukherjee, Illrd Year Physics (Hons.) became the State Topper in National Graduate Physics Examination 2017 being placed in Top 1% among 774 students appearing from West Bengal. Manish Nandy, one of our ex-students in Chemistry, secured the 5th Position in West Bengal Civil Service (Executive) Examination 2016. A number of students qualified for the PG and Integrated Ph.D. programmes in the institutions like IISc. Bangalore, TIFR, IITs, IISERs, BHU, CUCET etc.
ISBN Publications	The College has published a book 'Swami Vivekananda and his Universal Ideas' with ISBN No. mainly based on the lectures delivered in an International Seminar held in the College in 2016.

7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)

- 1. One of the best practices of the college includes Character-building Education to provide a holistic growth of the youth.
- 2. Another best practice followed in the college is a blend between Research and Curricular academics to strengthen the arena of pure sciences to complement the growth of Technology.

For details please see Annexure-iii

*Provide the details in annexure (annexure need to be numbered as i, ii,iii)

7.4 Contribution to environmental awareness / protection

- 1. The College campus is characterised by lush green surroundings, garden, water bodies etc. This is indeed like an oasis in the heart of the hustle bustle of the city.
- 2. One of the main thrusts of the college is hygiene. For this purpose there are provisions to provide purified water to the stakeholders in the college.
- 3. The college promotes alternate sources of energy to minimize the pollution level. There is a new 42 KW Solar Power Unit, installed this year which supplies the excess production to the main grid.
- 4. The students and the Staff members actively participated in the *Swachcha Bharat Abhiyan* by engaging themselves in Campus Cleaning Programme. Along with that there was a seminar on 'Environmental Awareness' for the students.
- 5. The students clean the classrooms, library and lab spaces weekly to imbibe a spirit of cleanliness and service to the Institution.
- 6. A Seminar was organised on 'Wise use of water and its conservation for sustainable development' in collaboration with Design Division, State Water Investigation Directorate (SWID). Govt. of West Bengal.
- 7.5 Whether environmental audit was conducted? Yes √ No

Design Division, State Water Investigation Directorate (SWID), Govt. of West Bengal visited our College and did the official investigation cum audit. In this process of investigation cum audit a proposal has been submitted from our end regarding *Roof-top Rain water Harvesting and water Recharge system inside the Campus* to develop the campus in a more eco-friendly manner.

SWOT Analysis:

Strength:

- 1. Strong academic environment with experienced teachers, proper teaching-learning infrastructure, rich collection of books and journals.
- 1. Excellent academic performance by the students at the University level.
- 2. Student success at the National Level in different competitive examinations like JAM; JEST; PG entrance examinations for IISC Bangalore; TIFR; HRI, Allahabad; JNU, Delhi; BHU, University of Hyderabad etc.
- 3. Well equipped Research Infrastructure with many Research scholars working for their Doctoral thesis.
- 4. Emphasis on Value based education system to promote Character building and Scientific education simultaneously.
- 5. The alumnus of the College comprises many distinguished scientists, professionals and officials for example Prof. Shankar Narayan Pal, Padmashree, Ex.-Director Indian Statistical Institute, Kolkata; Prof. Dipak Kar, Chairman, College Service Commission; Shri Subhashish Dutta, Chairman, DTDC, Dr. Somnath Bandyopadhyay, Associate Prof., Nalanda University etc. This galaxy radiates the potential of the Institution which draws many students and teachers to it.

Weakness:

- 1. The College has PG wings for only two of its Departments. In future it envisions to have similar facility for the other Departments as well.
- 2. Since the College is a Grant-in Aid College so the financial limitations hinder the fulfilment of many plans.

Opportunities

- 1. Students get care, guidance and environment for developing themselves for Higher Education and future prospects.
- 2. Newly joined Faculty members can venture into research just after joining owing to a pre-existing research culture in the college.
- 3. The INFLIBNET facilities & collaboration with the British Council Library provides an access to a huge number of ebooks and e-journals.
- 4. UGC Recognised Certificate Courses in Computer Applications and Mushroom Cultivation provide a rare opportunity to the students to avail a course parallel to their major subject.
- 5. Owing to the wide admiration for the ideals and activities of the Ramakrishna Mission many well-wishers and officials come forward to help the Institution in various capacities.

Threats:

- 1. Since most of the students come from rural and economically constrained backgrounds, the College does not charge a huge fee from them. However with the shooting prices of chemicals and other infrastructural maintenance expenses, it has become a challenge to meet the demands of the present day educational set up with such a meagre input.
- 2. With the changing times, the question of a value-based education system has become a challenge since the very necessity and practice of an integral character is becoming rarer and unemphasised in wider circumstances. In this situation the emphasis on character as the pivotal treasure of man is looked upon as an idea obsolete and unnecessary. Thus the Institution has to fight its battle single-handedly to keep up the high ideals of Sacrifice and Service as a source of real joy in life.

8. Plans of institution for next year

- 1. To set up a well furnished Canteen for students and staff members of the college.
- 2. To set up a digital conference room with 100 seating capacity.
- 3. To construct the 2nd floor of the Canteen building.
- 4. To cover the roof-top of the old building with colour coated tin for future use.
- 5. To fabricate two(2) new computer laboratories for Maths Dept and Computer Science Department.

Name: DR. PRADYOT KUMAR MEDDA Name: SWAMI KAMALASTHANANDA

Pradyot Kumar Medda Sw. Kom der

Signature of the Coordinator, IQAC

Coordinator, IQAC Ramakrishna Mission Vivekananda Centenary College Rahara, Kolkata-700118 Signature of the Chairperson, IQAC

Principal(Actg)
Ramakrishna Mission
Vivekananda Centenary College
P.O. Rahara, Kolkata-700118

Ramakrishna Mission Vivekananda Centenary College, Rahara Tentative Academic Calendar for the Session 2016-2017 Sl. Tentative Dates (2016-17) **Events** No. 1 Issue of B.Sc. Admission Forms 4th June-11th June, 2016 2 Final exam M.Sc. 2nd Semester 6th-16th June, 2016 Publication of List for B.Sc. Admission Counselling 3 14th June, 2016 4 Counselling & Admission Dates for B.Sc. 20th-22nd June, 2016 5 Declaration of result of 2nd Semester (M.Sc.) 30th June, 2016 6 Declaration of result of 4th Semester (M.Sc.) 30th June, 2016 7 Commencement of classes (M.Sc. IIIrd Sem) 4th July, 2016 Commencement of Classes for B.Sc. Ist Year 8 4th July, 2016 9 Issue of M.Sc. Admission Forms 8th-21st July, 2016 10 Commencement of Classes for B.Sc. IIIrd Year 15th July, 2016 11 Admission Test for M.Sc. Admission 24th July, 2016 12 Publication of List for M.Sc. Admission Counselling 27th July,2016 13 Issue of Application Forms for Certificate Courses 27th-30th July, 2016 14 Counselling & Admission Dates for M.Sc. Admission 29th July & 30th July, 2016 15 Commencement of Classes for B.Sc. IInd Year 1st August, 2016 16 Commencement of classes (M.Sc. 1st Sem) 8th August, 2016 17 Commencement of Classes for Certificate Courses 8th August, 2016 18 University Registration for UG students 22nd-25th August, 2016 19 Teachers' Council Meeting (Annual) 12th September, 2016 20 University Registration for PG students 19th &20th September, 2016 21 Freshers' Welcome 22nd September, 2016 22 **Blood Donation Camp** 23rd September, 2016 23 Puja Vacation 07th Oct-02nd Nov, 2016 24 Free Eye Operation Camp 17th-19th December, 2016 25 Winter Recess 25th Dec, 2016-1st Jan, 2017 Final exam M.Sc. Ist Semester 26 5th-14th January, 2017

Ramakrishna Mission Vivekananda Centenary College, Rahara

Tentative Academic Calendar for the Session 2016-2017

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Sl.	Events	Tentatíve Dates (2016-17)
No.		
27	Final exam M.Sc. 3rd Semester	5th-14th January, 2017
28	Annual Sports	6th January, 2017
29	Annual Prize Distribution	27th January, 2017
30	Saraswati Puja	01st & 02nd February, 2017
31	Alumni Meet	26th January, 2017
32	Declaration of result of M.Sc. 1st Semester	30th January, 2017
33	Declaration of result of M.Sc. 3rd Semester	30th January, 2017
34	Commencement of classes (M.Sc. IInd Sem)	06th February, 2017
35	Commencement of classes (M.Sc. IVth Sem)	06th February, 2017
36	College Test (B.Sc. Part-III)	6 th -10 th February,2017
37	Submission of Marks (B.Sc. Part-III Test)	16th February, 2017
38	TC. Meeting and Sent-up list (B.Sc.Part-III)	17th February, 2017
39	Sri Ramakrishna Jayanti Annual Procession	27th February, 2017
40	College Test (B.Sc. Part-II)	1st -7th March, 2017
41	Submission of Marks (B.Sc. Part-II Test)	13th March, 2017
42	TC. Meeting and Sent-up list (B.Sc. Part-II)	14th March, 2017
43	College Test (B.Sc. Part-I)	20th-25th March, 2017
44	Submission of Marks (B.Sc.Part-I Test)	31st March, 2017
45	TC. Meeting and Sent-up list (B.Sc.Part-I)	3rd April, 2017
46	Final exam M.Sc. 4th Semester	22nd-30th May, 2017
	<u> </u>	·

Students' Feed Back Form Analysis

1. Please give a rating of your course on the following

9	8	7	6	5	4	3	2	1
Extremely	Very	Good	Moderately	Moderate	Somehow	Poor	Very	Extremely
Good	Good		Good		Tolerable		Poor	Poor

Sl.No	Particulars	Rating
1	Learning value (in terms of skills, concepts, knowledge, analytical abilities, or broadening perspectives)	9 = 80% 8 = 15%
2	Depth of the course content	7 = 5% 9 = 75% 8 = 18% 7 = 7%
3	Extent of coverage of course	9 = 87% 8 = 8 % 7 = 5 %
4	Extent of effort required by students	9 = 81% 8 = 12% 7 = 7%
5	Overall rating	9 = 90% 8 = 8% 7 = 2%

2. The syllabus was

1	1) challenging	2) adequate	3) inadequate	4) dull	5) irrelevant
8	85%	12%	3%		

3. How much of the syllabus was taught in class?

1). 90 to 100%	2).75 to 90%	3) 50 to 75%	4) 40 to 50%	5) less than 40%
99%	1%			

4. What is your opinion about the library holdings for the course?

1) excellent	2) adequate	3) inadequate	4) poor	5) very poor
92%	8%			

5. Were you able to get the prescribed readings?

1) very good	2) good	3) average	4) poor	5) very poor
94%	6%			

6. The internal evaluation system as it exists is

1) very good	2) good	3) average	4) poor	5) very poor
85%	10%	5%		

7. When you meet students who have taken a similar programme at other Colleges do you feel that your programme is?

1) superior	2) equal	3) inferior
96%	4%	

8. How do you rate the student-teacher relationship in the College as a whole?

1) very good	2) good	3) satisfactory	4) unsatisfactory	5) very poor
82%	12%	6%		

9. How do you rate the student-teacher relationship in your department?

1) very good	2) good	3) satisfactory	4) unsatisfactory	5) very poor
85%	11%	4%		

10. How do you find the College's administrative offices?

1) very helpful	2) helpful	3) indifferent	4) unhelpful	5) cumbersome
81%	12%	7%		

11. Did you participate in any of the extra curricular activities of the Department / College?

1) very often	2) often	3) sometimes	4) rarely	5) never
80%	10%	6%	4%	

12. What was the attitude of teachers to extra curricular activities?

1) co-operative	2) indifferent	3) discouraging
97%	3%	

13. Has your time at the College been intellectually enriching?

1) yes	2) marginally	3) no
96%	4%	

14. After leaving the College how will you talk about it?

1) proudly	2) indifferently	3) disparagingly
100%		

15. Overall Rating of the Programme (tick in the relevant cell)

Sl.No	Item	Very Good	Good	Average	Poor	Very Poor
1	Academic content	82%	18%			
2	Fairness of evaluation	93%	7%			
3	Interaction with	90%	8%	2%		
	faculty					
4	Interaction with	91%	9%			
	administration					
5	Library facilities	98%	2%			
6	Computer facilities	85%	9%	6%		
7	Extra-curricular	88%	11%	1%		
	activities					
8	Sports facilities	80%	12%	8%		

Annexure-iii

1. Title of the Practice

'Character-building Education'

2. Goal

Being a part of the Ramakrishna Mission, the Institution is instrumental in giving shape to Swami Vivekananda's ideas regarding education. Swami Vivekananda says 'What is education? Is it book-learning? No. Is it diverse knowledge? Not even that. The training by which the current and expression of will are brought under control and become fruitful is called education.' So according to Vivekananda, a man whose will does not drag him hither and tither but rather he himself possessing full control over his will employs it along positive and beneficial channels is a truly educated man. Such an education which rests on self-control and correct self-exertion is what Vivekananda called 'Man-making, Character-building Education'. Inspired by such a lofty ideal of education the Institution attempts to inculcate a combination of practical skills to fulfill the basic needs, moral values for a superior inter-personal relationship, spiritual wisdom for a fearless existence.

3. The Context

After the Independence of India, a gradual decline in the moral integrity of the society as a whole, a slow poisoning of the youth psyche by the glitter egocentric pleasures, a clouded wisdom of the elders unable to show the path of strength and peace is undoubtedly evident to any careful observer. Time is ripe enough to save the youth, the future citizens from a disastrous tragedy. So the Institution along with its leader, Swami Vivekananda, possesses genuine feeling for the youth and wants to empower them with a strength that is imperishable, with a hope that is unfailing and with a freedom that is unselfish. Swami Vivekananda says, 'money does not pay, nor name; fame does not pay, nor learning. It is love that pays; it is character that cleaves its way through adamantine walls of difficulties.'

Hence, the Institution is trying to guide the youth along the lines of character-building so that tomorrow's sunrise becomes more golden.

4. The Practice

Practices:

- First of all the very ambience of the Institution instills orderliness and calmness in one and all. As one enters the college the gigantic portraits of Swami Vivekananda as if calls upon the 'sleeping soul' towards a glorious way of life based on self-confidence and self-sacrifice. The main campus welcomes the visitors into the holy precincts of a Universal Temple dedicated to Shri Ramakrishna, the Prophet of Religious harmony. Thus just an unplanned entry into the campus is gifted with an elevating experience. The students having got an opportunity to study in such an environment imbibes the spirit of holiness and serenity within them.
- A number of programmes are arranged to expose the students to the ideals of Indian Culture and Spirituality with a background of Universalism as propounded by the great lives and teachings of Shri Ramakrishna, Holy Mother Shri Sarada Devi and Swami Vivekananda. Some of the important measures taken in this direction to fortify the character of the youth are given below:
- a) Seminars on Swami Vivekananda's ideas are arranged in the college. Eminent speakers from all walks of life starting from Professors coming from Science, Arts and Engineering fields, Vice-Chancellors, Monks of the Ramakrishna Mission and many other dignitaries enlighten the students towards right understanding and implementation of Swamiji's bold and strong ideas. They shed light on different aspects of the great one's life and message like Vivekananda's concepts on Education, Science and Technology, Service, Nation-building, Youth, Human

Development and so on. Thus, inspirations run along varying channels and mould the student community according to one's unique tendencies but always in a positive direction.

- **b**) Books on value education and personality development are often distributed among the students free of cost.
- c) Swami Vivekananda has emphasized on service to country men as the chief means for character building. The Ramakrishna-Vivekananda Ideal of Service is Service to man as service to God. Swami Vivekananda calls upon the youth 'What is life but growth, i.e. expansion, i.e. love? Therefore all love is life, it is the only law of life; all selfishness is death, and this is true here or hereafter. It is life to do good, it is death not to do good to others. Ninety per cent of human brutes you see are dead, are ghosts—for none lives, my boys, but he who loves. Feel, my children, feel; feel for the poor, the ignorant, the downtrodden;...'. The young students are given a taste of the bliss involved in selfless service and its efficacy in elevating oneself. During the Annual Voluntary Blood Donation Camp, the Annual Eye Operation Camp etc. the students are given a chance to serve the 'Living-God' as manifested in the form of the suffering patient hailing from dire circumstances.
- **d**) The students are often assigned responsibilities for conducting different cultural programmes, preparing wall magazines or poster presentations or exhibitions etc. This arouses the self-confidence of the students and moulds them as leaders for future.
- e) Discourses on various spiritual topics are arranged in the Universal Temple of the main campus. The birthdays of luminaries of different religions are celebrated with equal sanctity and devotion. These include the birthday celebrations of Lord Buddha, Jesus Christ, Shri Krishna, Adi Shankaracharya, Shri Ramakrishna, Shri Sarada Devi, Swami Vivekananda and many others. The students have full access to these discussions and to learn about the ennobling features in the lives and teaching of these great ones. On the other side since the Organisation emphasizes the harmony of all religions, Universal brotherhood and reverence towards Teachers of every Religion, hence the spirit of a spiritual Oneness amidst diverse courses of each religion is inculcated among the youth for a much more all-inclusive feeling to develop. This feature is very much pertinent when separatist ideas still create strife among men.
- **f**) Every evening there is congregational prayer and vesper service in the Temple. Interested students participate in it.
- g) One of the rare opportunities which the students enjoy is the close contact with the monastic members who try to help them build a strong foundation for their character-building. Often the students come up with several psycho-social complications and seek solutions from the monastic members of the College. The monks too keep a caring vigilance over the students and guide them in path of righteousness. Some of the students have received spiritual instructions from the President or Vice-Presidents of the Ramakrishna Mission and engage themselves in regular meditation.
- h) The college library has books on Value Education, Personality Development and Swami Vivekananda; monthly journals on spiritual culture brought out by the Ramakrishna Mission like *Prabuddha Bharata*, *Vedanta-Kesari* etc.; e-books, CDs and DVDs on Personality Development, Education, Spiritual development etc. for giving the students easy access to the rich heritage and the legacy which they bear.
- i) All the cultural programmes held in the college have a goal to invigorate the urge for becoming better, enlightened human beings.
- j) Festivals like Saraswati Puja, Durga Puja, etc. held in the college and the main campus introduce the students to the rich and deep spiritual heritage of India. The students participate in a colourful procession organized to commemorate the Birth Anniversary of Shri Ramakrishna in which folk artists of rural Bengal take part. This is a novel experience to know the legacy which we bear.

Challenges before us

- The College is affiliated to the West Bengal State University and must mandatorily follow the curriculum as prescribed by the University. Hence there are no opportunities for incorporating value- education as a compulsory subject in the syllabus for a much more detailed discussion on this vital issue.
- In a fast moving age when most of the people are running to grab an opportunity for self-centred pleasure, the issue of character-building and value education seems to be out of context. Keeping apart some exceptions, most of the people abhor ideas like 'spiritual growth', 'character-building', 'selfless service', 'self-control' and the like. So many students coming from such a society fail to realize the urgent need to have a strong footing in this arena. As a result only the students who have a genuine thirst for a higher way of life, for a more meaningful path for satisfaction are more benefitted by the arrangements put forth by the college. Rest are either slow learners or remain bound by stagnation with regard to the complete manifestation of the inner wisdom.

5. Evidence of Success

The success in 'character-building' programme is undoubtedly a difficult parameter to gauge. Its subtle consequences take time to sprout. However, for the last 50 years, the Institution is trying to sow the seeds of holistic personality development in the fertile grounds of the young minds. Some signs of success may be mentioned in the following terms:

- The healthy interaction between the junior and the senior students without any tinge of ragging or any sort of harassment is a silent evidence for the natural sense of decorum prevalent in the college. This cordial, fearless, helping attitude among the students develops without any specific sermons or anti-ragging campaigns. This may be counted as an achievement where inter-personal relationship need not pass through the test of harassment for gaining acceptance.
- All the students of the college are Day Scholars. They come from far and near to the college every day. As a result they get a chance to mix with the society. So they are able to assess the importance of the values they receive at the college in comparison with the greater societal cross section. They can freely adopt the ideas which they feel is vital for their workaday life. The students understand the difference in the standards which life as such attain by imbibing greatness and how pathetic it becomes when bereft of such a dimension. This they realize more when they step into the wider expanse of the world in future. Occasionally they come to the college years after passing out and express their gratitude for this kind of training for their moral depth.
- The spirit of selfless service which the students imbibe in their college days often grow in dimensions in future. Many of them while pursuing their higher studies or jobs start their own NGOs for serving the society especially the poor and the afflicted. One of our student, Ritwik Bhattacharya, University topper in Mathematics is now pursuing his PhD from the reputed Indian Statistical Institute (ISI), Kolkata. He, along with some other young men have started a NGO, which provide academic assistance to many students coming from extremely constrained financial background even in some remote villages.
- Many of our students who are employed in Pharmaceutical Companies spontaneously come forward to supply medicines and eye drops for our Eye camp. Some of our students donate generously for the betterment of the college.
- Many renowned ex-students of our college when invited for a talk come and emphasise the issue of moral growth to the students which they had once learnt from the college and from the inspiring ideas of Swami Vivekananda. For example, Dr. Shankar Narayan Paul, an exstudent of our college is the recipient of the Padmashri Award for Physics. He, while addressing the students, asserted the importance of Swami Vivekananda's ideas to the youth. This shows that academic brilliance and supreme recognition has not made the issue of character-building education meaningless to him but has become much more relevant.

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- During the seminars on Swami Vivekananda's ideas, the enthusiasm, participation and interest that has seen in the students once again proved the positive and strengthening impact of these life-giving ideas among the college youth.
- Spirituality and Character building may not be just an alien practice which has nothing to do with one's worldly prosperity. Rather it rouses the maximum power and will force in man and concentrates them towards achievement of any goal which so ever he chooses. So emphasis is laid on self-reliance, self-confidence, fearlessness and practical wisdom for winning over any goal essential for one's life. Examples are plenty, where many of our students hailing from rural and economically backward homes gush forth into the brilliance of excellence in academics, job sectors and other walks of life.
- Last but not the least, the students of the college is a class apart by their politeness, their reverential attitude towards the teachers and elders, by their sincerity and honesty in academic career and by their adherence towards service.

6. Problems Encountered and Resources Required

Problems encountered:

- The society is still not yet unanimous towards the initiation of character-building education system as a vital and urgent requirement. Hence it is the institution alone that stresses the need for such a necessity along with few guardian, teachers and students in favour of such a move.
- The long- lost faith in the efficacy of having an all-square personality with a pure and unselfish character has resulted in many misconceptions regarding issues like happiness, freedom, motivations etc. These have gone to the vitals of the society and have metamorphosed it into a completely different cast. Hence, it is a herculean task to trace back the path along the steep rise to the peak. Thus the Institution must be patient enough to see men of wonderful glory and greatness to bloom out from its lap. Therefore, having lost the background for developing the character on positive lines due to blind imitation, greed for quick pleasures and the lack of true self-respect, few more generations will be needed to revert back to the eternal path of a superior manifestation.

Resources required:

The institution possesses a band of dedicated monks and teachers for invigorating the positive values in the students. Thus, man power is rich in supply.

However, if the institution wishes to hold large programmes for instilling the spirit of manmaking and character-building say for example seminars, youth conventions, Retreats etc. then financial grants are required.

7. Notes

Few points which are kept in mind while working on this practice:

- a. The growth of Science and Technology and modern developments are never condemned. But rather it is complemented with the science of inner wellbeing and outer welfare of one and all.
- b. The spirit of Universalism and non-sectarianism burns bright in every attempt. The target is to create a harmonious social fabric without any discordant note of separatism.
- c. The revival of the Indian spiritual culture to go beyond the fear of misery, disease and death is the goal.
- d. As opposed to focusing solely on one's own spiritual growth, the institution practices and preaches the path of physical, intellectual and spiritual nourishment of the entire world as vivified by Swami Vivekananda in his dictum -by helping others we help ourselves.

1. Title of the Practice

'A parallel Research wing along with curricular academics'

2. Goal

The institution feels that it is necessary to pursue research along with the regular curriculum to create a deep-rooted academic ambience. The main reason behind it is the common observation that a fixed curriculum with minor changes often leads to stereotyped teaching-learning process. Whereas, research brings about creativity and exploration along newer avenues. For the faculty, research helps them to get greater grasp over the subject and opens the windows to explore the recent findings in the field of science. For the students this offers a glimpse beyond the walls of curriculum. The taste of a few drops trickling down from the research world will motivate them to pursue higher studies and research in Pure Science in future. This is vital for the nation since the students engaged in serious research work in pure science should increase and complement the growth in Technology.

3. The Context

At one point of time, the Institution felt that it possesses many faculty members with hidden research potential. Upon being encouraged several faculty members started pursuing research. Later on with the availability of grants from the Government and Non-Government agencies the laboratory infrastructure and instrumental facility enhanced. Therefore, more and more scopes for research enabled growth along this line.

Challenges:

Research demands a sophisticated infrastructure with expensive instruments and chemicals. For this the institute has to be financially equipped. But receiving research grants at the college level is not at all easy. Hence, in spite of talents, efforts and interests funds pose a threat towards the future of research in the college.

4. The Practice

Research started in the Institution about 20 years back. Some features of research activities and its consequences are given below:

- Every Department has worked on minor research projects.
- The Department of Chemistry and the Department of Botany have major research projects.
- All total 11 Research scholars are working for their Doctoral thesis in the college. Out of them 7 Research scholars are in the Department of Botany and 4 Research scholars are in the Department of Chemistry.
- Till now 4 scholars have completed their Ph. D. research work from the college.
- The thrust areas in major Research Projects are Organic Chemistry, Inorganic Chemistry, Plant Tissue Culture, Mycopathology etc.
- Most of the research projects are funded by UGC, DST etc.
- The college has a well-equipped lab infrastructure for research. A rich collection of sophisticated instruments including HPTLC, UV & IR Spectrophotometers, Fluorometer, Freeze Dryer, Geldoc, Growth Chamber, *Leica* microscopes etc. are supporting the rapid growth of research.
- The research wing has not been kept divorced from the rest of the college curriculum. a) The PG students must work on some project in these research labs.
- b) Often the Research scholars guide the UG and PG students in Laboratory classes.
- c) The interaction between the UG and PG students with the Research Labs is highly beneficial for developing a creative knack in the subject.

- d) The UGC-Certified Mushroom Cultivation Course is run in the college with the help of the Mycopathology Research lab.
- The findings in the research labs have been able to find a place in peer-reviewed journals.

Limitations:

Due to the shortage in teachers which the college is facing, the faculty members involved in Research need to bear a heavy class load along with research. This hinders much of their focus on research.

The college is bound to follow the syllabus and curriculum framed by the affiliating University at the UG level. At present the curriculum prescribes no lab-based project works as mandatory part of the syllabus. Therefore, it has not been possible to provide any research experience at the UG level.

5. Evidence of Success

The college has been successful in fulfilling its vision of carrying on Research along with curricular academics. Some outcomes of such a pursuit may be difficult to enumerate at this early stage. Yet some important consequences are:

- The college has turned out to be an important centre for research. The publications prove the quality of research.
- Some of our faculty members have patent over their research outcomes. For e.g. In Plant Tissue Culture Lab some of the rice varieties have received recognition from NCBI and has received unique NCBI accession numbers.
- Research scholars from other reputed Institutes come to our research labs for summer projects or for using our instrumental facility.
- Several collaborative research schemes are active with other Research Institutes.
- Four Research scholars have already been awarded the Doctoral Degree.
- Retention of many faculty members with research aptitude has been possible by this well-established research facility in the college.
- The college is self-sufficient to carry on PG project works at the college itself with the support of the Research Labs.
- Unlike typical Research Institutes, the Research scholars get a chance to guide the UG and PG practical classes which gives them a teaching experience.

In this way the institution is achieving the target of an interactive research wing for creative academics and enriched UG-PG courses.

6. Problems Encountered and Resources Required

• The main crisis felt in the field of research is the financial crunch. With exorbitantly expensive instruments, chemicals and reagents the smooth and unhindered research work at college level at times comes into question.

7. Notes

The long tradition of research in the college has given the institution confidence and glory. In spite of regular UG and PG courses the faculty members engage in research work to increase the perimeter of their knowledge and to bring the students into the light of the ever-expanding arena of science.