1. DEPARTMENT PROFILE 2017-2018

- a) Chemistry Department
- b) Zoology Department
- c) Botany Department
- d) Physics Department
- e) Mathematics Department
- f) Home Science Department
- g) Computer Science Department
- h) Electronics Department
- i) Biochemistry Department
- j) Geology Department
- k) English Department
- 2. DEPARTMENTAL REPORT EVEN SEMESTER
- 3. DEPARTMENTAL REPORT ODD SEMESTER
- 4. STUDENTS MENTORING SYSTEM EVEN SEMESTER
- **5. STUDENTS MENTORING SYSTEM ODD SEMESTER**
- 6. UNIVERSITIES RANK HOLDER FOR THE CURRENT YEAR 2017
- 7. RESEARCH AND PUBLICATION
- 8. SEMINAR AND WORKSHOP
- 9. ACTIVITIES AND ACHIEVEMENTS OF VARIOUS SUB COMMITTEES
- 10. NEW INFRASTRUCTURE AND FACILITIES ACQUIRED
- 11. YEAR WISE EXPENDITURE UNDER UPGRADATION TO MODEL

DEGREE COLLEGE GRANT

- 12. ABSTRACT OF EXPENDITURE OF FUNDS FROM UP-GRADATION/RENOVATION OF EXISTING COLLEGES TO MODEL DEGREE COLLEGES SCHEME
- 13. ANY OTHER RELEVANT INFORMATION.

2. DEPARTMENTAL REPORT EVEN SEMESTER (JAN-JUNE 2017)

		ings			lasse taker		
SI. No.	No. of meetings Resolutions in prief		2 sem	4 sem	esem	Departmental activities	
1	CHEMISTRY	2	 Distribution of Topics Preparation of requirement list Finalization of Topic Distribution for upcoming 1st and 5th Semester 	98	66	129	Visited surrounding industries
2	HOME SCIENCE	1	 Appointment of class teachers Monthly contribution renewed Participation in seminar To Organise exhibition on food adulteration,etc. To meet mentees Re-appointment of teachers in each sem. Submission of department Requirement to RUSA 	215	237	233	Exhibiton of food adulteration
3	BIOCHEMISTRY	1	 Distribution of assignment, Topics Monthly meeting Distribution of topics for 2nd internal. 	09	62	AN	Nil
4	MATHEMATICS	2	 Preparation of routine and work distribution requirement of 1 part time lecturer Distribution of exam duty Recruitment of new teacher marks compilation Mentees attendance & marks Distribution of marks exam duty allotment 	58	55	84	Nil
5	ELECTRONICS	1	 Appointment of Departmental Secy. Question setting for internal exams Topic already taught during Jan Syllabus covered already. Pattern of seminar presentation for 4th semester Dept report for Feb 	64	69	AN	Nil

			7.receipt of books 8.Review of dept. report of Jan 9. syllabus covered already. 10. Preparation for seminar 11. Dept report for Mar 12.Pract marks distribution 13.Pract exam score sheet 14. Review of Univ exam				
6	BOTANY	2	 Distribution of Topics Distribution of assignment topics Schedule of Monthly meeting Distribution of Topics Checking & verification of new equipments Teachers-students meet/counselling 	79	72	72	Nil
7	ZOOLOGY	1	 Maintain Register for equipments Rearrange and check new lab equipments Lab & Book requirement for RUSA 	84	72	100	Computer Practical on Bio informatics
8	PHYSICS	1	 Monthly meeting Field trip for VI sem students Disposal of old furnitures Field trip for VI sem students Appointment of works of lab asst. Compilation of marks 	59	52	114	Nil
9	ENGLISH	2	 Distribution of papers & lesson plan. Rearrangement of lesson plan Enquiry for less attandance of students Improvement of students' skill in English More efforts to make interest in English 	Onl Sc. H.S	•		Nil
10	GEOLOGY	1	 Routine distribution Departmental requirement for RUSA Departmental fund contribution Preparation of common Practical record book for all classes 	80	73	110	Nil
11	COMPUTER SCIENCE	1	 Subject distribution for even semester 2017. Preparation of requirements for RUSA Final preparation of time table To let know parents students performance in 1st internal exam Conduct one day workshop for final yr students 	205	228	124	Mentor-mentees meet

	6. To conduct test or assignments for			
	improvements of students			

3. DEPARTMENTAL REPORT ODD SEMESTER (JULY-DEC 2017)

		ngs		Clas	ses ta	ken	
SI. No.	Department	No. of meetings	Resolutions of meetings in brief	2 sem	4 sem	6sem	Departmental activities
1	CHEMISTRY	6	1.Results analysis of last semester 2. Suggestion of remedial classes 3. lab requirement submission 4. To organize regional workshop in collaboration with MZU Chemistry dept. 5. Review of Regional Workshop at MZU, chemistry dept. 6. Unit distribution for next semester. 7. 2nd Internal Questions 8. Participation in Science exhibition 9. Practical exam routine for 5th sem. 10. Central Evaluation duty 11. Online mark entry to MZU 12. Remedial classes	181	168	688	Students attended Regional workshop Participated in Science exhibition Remedial Classes were organised from 30.10.2017- 3.11.2017 for repeaters.
2	HOME SCIENCE	8	1. Adopted Community at Ramthar. 2. Workshop on Mental Health-life skills 3. Visit School 4. Mentor-Mentees distribution 5. Meeting with ex-students 6. Review of Students performance in 1st int. exam 7. Dept. report 8. Lab. Bearer 9. Adopted Village (RUSA) 10. 5th Semester Field Trip 11. Programme with MHIP Ramthar Branch 12. Submission of Dept reports and Mentoring 13. Selection of Eligible students etc. 14. Review of Com Dev programme 15. Submission of Nov Dept report 16. Central evaluation of MZU	234	256	227	Visited SWD Assignment given to students Exhibition of food adulteration Procurement of work counter for Nutrition Lab Organized community development programme with Ramthar MHIP Invigilation duties for end sem. Placing order for journal of Home Science

			exams				
			17. Distribution of work load, etc				
3	BIOCHEMISTRY	7	1. Maintenance of Students mark profiles 2. Classroom rearrangement for power point presentation 3. Preparation of Proforma 4. Distribution of seminar topics 5. Mentees personal data collection of seminar topics 6. Mentees personal data collection 7. Discussion on Improvement of teaching methods 8. Circulation of study materials 9. Model display for Exhibition org, by Innovation club. 10. Review of Sc. exhibition 11.Final attendance of students 12. Internal marks 13. Conducting Practical exam 14.Online submission of internal marks 15.Submission of books requirements.	81	85	NA	Teachers performed well in end semester UG exams.
4	MATHEMATICS	7	1. Topic distribution 2. Formation of duty chart 3. Formation of excel chart mark compilation 4. Setting Qs for 1st internal 5. Distribution of mentee to mentors 6. Distribution of Invigilation duty internal 7. Model display for Innovation Club Exhibition 8. Compilation of 2nd internal questions 9. Duty list for 2nd int. exam 10. Internal marks compilations 11. Assigning teacher for online marks upload to MZU website 12. Preparation of Departmental report	92	86	303	Preparation for end semester exams and centre evaluation

5	ELECTRONICS	6	1. Syllabus covered by each teacher 2. Appointment of Deptt Secretary for this semester 3. Dept report for Odd semester 4. Qs setter, pattern and marks distribution for internal exam 5. Method to be followed for 3rd Internal assessment 6. Syllabus covered by each teacher. 7. Review of 1st Internal exam results 8. Seminar topic distribution for 3rd Semester 9. Enquire to introduce core subject 10. Syllabus covered by each teacher. 11. Display in display board 12. Site visit of Durtlang Campus 13. Practical examination. 14. Seminar topics for 3sem 15. Departmental display at Exhibition organised by Innovation Club 16. Core subject for Electronics 17. Conducting Practical exams. 18. Final selection of Display in display board 19. Introduction of core subject 20. Syllabus topic distribution for 2018 even semester 21. Reassignment of topics for nest semester 22. Preparation for Central Evaluation 23. Departmental report 24. Online portal for internal marks, etc.	88	94	NA	2nd Internal exam conducted. Practical exams conducted Seminar for 3rd sem students conducted. participated in Science exhibition 1 teacher namely Mr Jonathan Lalrinmawia interviewed for the Academic Officer Job under MBSE and was successful.
6	BOTANY	7	 Distribution of Topics Arrangement of Class Routine Teachers-Students meet of 5th Semester Field Trip Distribution of Topics and marks for 2nd internal Review of Counselling of V 	83	78	213	All Teachers participated in PT meet Counselling of 5 Semester students for improvement in academic Study trip Participated in Science Exhibition 1 teacher attended RUSA

			Semester students 7. Compilation of internal exam 8. Preparation for Practical exam 9. Science exhibition 10. Field trip 11. Report on Compilation of internal exam 12. Review of Practical exam 13. Distribution of topics for next semester				Regional meeting at New Delhi
7	ZOOLOGY	4	 Set Up of New Routine Distribution of Topic Distribution of Mentees Division of Setting Qs and paper evaluation Assignment of Invigilation duty for Test To organise Field trip Bulletin Board Model for display Participation in Science exhibition End Semester exam and Centre evaluation 	74	96	248	Conducted Virtual Lab for V sem and smart Class by using digital aids Computer Practical on Bio inforamatics Project to collect and identify animal species for 1sem Participated in Science exhibition Conducted Practical exams teacher appointed as Winter school coordinator. Training on EAT module attended by a teacher
8	PHYSICS	5	 Distribution of Topics Routine preparation Review of last University exam Preparation of guidelines for practical marks Assignment of students for exhibition End semester Practical routine preparation Preparation for Exhibition Programme organised by Innovation Club Topic & Routine preparation Online entry of internal marks Duty assignment for teachers Topic distribution for next year 	76	75	198	I teacher became a Life member of Nuclear track Society of India Univ. exams conducted as invigilators by teachers
9	ENGLISH	6	1. Improvement of students in English Grammer 2. Arrangement of Classes for teachers on leave 3. Guest teacher about her class 4.Teacher on medical leave 5.Improvement of teaching 6. Re-arrangement of periods 7.Date setting for Oral	203	NA	Ν	Field work near college campus on 12.10.2017

			communication practice 8. List of Book requirements				
10	GEOLOGY	4	 Class Test every month at least once in a month Conducting of Seminar every Wednesday for 5th Semester Winter Special coaching class for 5th Semester 	87	87	324	Field work around Aizawl on 2.8.17 Field work around Aizawl on 18.9.17 Field work near college campus on 12.10.2017 End semester invigilations Central evaluation for MZU UG exams.
11	COMPUTER SCIENCE	4	 Subject distribution On Internal exams Mentors & Mentee list Seminar and Computer Clinic by department First Internal Test Review Mentor-Mentees Meeting Plan to organise National/State/College level Seminar Course coverage by teachers Mentor-Mentees Meeting Review of retest Course coverage by teachers Computer lab Requirement Review of Odd sem. Practical exam duty Univ. internal marks, etc. Lab preparation for exams Practical exam duty list Internal marks submission. Books requirements Invigilation duty. 	268	273	261	Mentor-mentees meet Dept. participated in Science exhibition Performed invigilation duties

4. STUDENTS MENTORING SYSTEM EVEN SEMESTER

CI	ent	Fa	culty (Mentor)	No. of	se	_	~ a	Any other
SI.	Department	SI.	Name	Mentees reported	own house	rented house	Hostel/ Relative	information
No	par	No.		as on	vn	ren	Hos ?ela	
110	De			Jan	0			
		1	LALSANGLIANI					No information on 1
			KHAWLHRING	5	NIL	2	2	mentee
		2	LALSANGKIMI	6	NIL	NIL	4	2 mentees left
			HMAR		•	4	4	
		3	LALHMINGLIANI	8	6	1	1	
1		4	HLONDO VANLALLAWMI	6	1	3	2	
_		5	LALTHANPUII RALTE	6	5	NIL	1	
	E	6	C. LALRAMDINA	6	3	3	NIL	
	Ē	7	MARIA	6	4	1	1	
	SC		LALHMINGMAWII					
	HOME SCIENCE	8	LALRAMMAWII	7	?	2	2	No information of 3
	오							mentees residence
		9	LALRINNGHETI	9	8	1	NIL	
			RALTE	_		_	_	
		10	MIMI	7	NIL	4	2	No information on 1
		11	LALMUANAWMI REBECCA	6	5	1	NIL	mentee
		11	LALNUNTLUANGI	0	5	1	INIL	
		12	ZARZOKIMI	8	1	3	1	No information on 1
			Z/ (NZOKIIVII	J	-		-	mentee
		1	DR. ARUP KUMAR	17	6	9	2	
		2	DR. ROSANGLIANA	7	NIL	1	3	3 Mentees left, 1- no
2								information
	S	3	M.I. SINGH	5	4	1	NIL	
	PHYSICS	4	REMLALSIAMA	10	?	?	?	Status of residence not
	PH					_		given, 1- drop out
		5	LAWRENCE	10	NIL	6	NIL	4-MENTEES LEFT (2-
			ZONUNMAWIA					ENGINEER, 1- NURSING, 1-
								UNKNOWN)
		1	C. ZORAMTHARA	11	7	4	NIL	GIVINIVO VVIV)
3						4		
	λĐ(2	DR. C. LALMUANKIMI	6	1	4	1	
	GEOLOGY	3	LALTIANKIMA	7	3	3	1	
	GEC	<u> </u>	LALILANNINA	,	J	3	1	
		4	C.	5	1	4	NIL	
			LALREMRUATFELA					

		1	LALTLUANGKIMI	16	6	6	2	2 LEFT
4		_	HNAMTE	10		O	_	Z LLI I
	_	2	LALRINSANGI	16	5	5	1	5 MENTEES LEFT (1-
	ENGLISH	_	NGHINGLOVA			_		NAVY, 2-COLLEGE, 1
	19							DID NOT COME, 1-
	ы							POOR ATTENDANCE)
		3	LALMALSAWMI	16	7	5	1	3 LEFT (1-ENGINEER, 2-
								DID NOT COME)
5		1	DR. R.					
			LALENGMAWIA	9	4	3	2	
	-	2	DR SKARIAH P.C.	17	6	10	1	
		3	ZODINPUII	11	3	6	1	I MENTEES
								INFORMATION NOT
								OBTAINED
	Ź	4	LALTLANCHHUNGI	18	7	8	3	
	BOTANY	5	LALRINTLUANGI	7	4	1	1	1 LEFT (JOINED ARMY)
	ã	6	MARY	11	5	2	3	1 LEFT (MARRIED)
	-	7	LALTHANSANGI	12	1		2	21555
		/	LALREMRUATI HMAR	13	3	6		2 LEFT
		8	LALNUNTHARA	9	4	2	1	2 MENTEES
		J	LALIVOIVIIIANA	J	-	۷.	_	INFORMATION NOT
								KNOWN
6		1	PROF. B. ZOLIANA	6	NIL	5	1	
	,,	2	DR. RICKY	8	4	2	2	
	2		LALHMANGAIHZUAL					
	ő		Α					
	ELECTRONICS	3	DR. P.C.	7	1	2	4	
	EE		ROHMINGLIANA					
		4	JONATHAN	6	4	2	NIL	
			LALRINMAWIA				_	
7	ွှ	1	L.B. SINGH	5	1	3	1	4.1
	MATHEMATICS	2	PARIJAT KUMAR	21	2	15	3	1 LEFT
	ΔM	3	DR. LALAWMPUII	6	1	NIL	NIL	5 LEFT (1-MARRIED,4-
	모	4	DR.	8	3	4	1	NOT KNOWN)
	JAT	4	LALHMANGAIHZUAL	٥	3	4	1	
	2		A					
8		1	LALHMINGLIANA	9	2	4	1	2 LEFT
		_	HNAMTE	J		•	_	2 221 1
	_	2	ZONUNTHARI	20	3	14	3	
	TR	3	DR. K.B. SINGH	10	4	5	NIL	1 MENTEE
	MIS							INFORMATION NOT
	CHEMISTRY							OBTAINED
	ō	4	DR. LALSAIMAWIA	11	4	6	1	
			SAILO					
		5	ROHLUPUII	10	4	5	1	

9	ш	1	LALHRUAITLUANG	6	2	4	NIL	NIL
	SCIENCE	2	C. LALRINAWMA	7	4	3	NIL	NIL
	CIE	3	LALDINGLIANA	10	3	7	NIL	NIL
			SAILO					
	COMPUTER	4	R.LALMAWIPUII	9	2	4	3	NIL
	ΛΡι	5	LALHMUNMAWII	10	2	8	NIL	NIL
	O.	6	H.THANGKHANHAU	9	4	4	1	NIL
	0	7	VANLALLURA	8	5	3	NIL	NIL
10		1	CAROLINE	8	4	2	2	NIL
			ZAIHMINGTHANGI					
	λĘ	2	DR. LALZAHAWMI	14	6	8	NIL	NIL
	00		CHENKUAL					
	ZOOLOGY	3	H.LALNUNSANGI	14	7	4	3	NIL
	20	4	S. THANGRIMAWII	11	7	2	2	NIL
		5	SAILOPUII	11	5	5	1	NIL
		6	LALRINMAWIA	14	4	6	4	NIL
11	≿ :	1	K.ZOSANGPUII	12	4	6	1	NIL
	STR	2	LALAWMPUII	13	2	7	3	NIL
	Σ							
	BIOCHEMISTRY							
	0							
	В							

5. STUDENTS MENTORING SYSTEM ODD SEMESTER

		Fa	culty (Mentor)	No. of	Students	Why is		
SI. No.	Department	SI. No.	Name	Mentees reported as on JULY 2017	less of 75% attendance upto 2nd internal	deficient in attendan ce?	Perfromane in the last test, passed or failed?	Follow up of Mentor
1	2	3	4	5	6	7	8	10
		1	LALSANGLIANI KHAWLHRING	5	1	Negligen ce	at least appear once	Follow up given
		2	LALSANGKIMI HMAR	2	Nil		at least appear once	Follow up not given
		3	LALHMINGLIANI HLONDO	2	Nil		Appeared all	Follow up given
		4	VANLALLAWMI	6	Nil		Appeared all	Follow up not given
		5	LALTHANPUII RALTE	2	1	Family problem	at least appear once	Follow up not given
		6	C. LALRAMDINA	6	2	1 left	at least appear once	Follow up not given
1	HOME SCIENCE	7	MARIA LALHMINGMAW II	4	Nil		Appeared all	Follow up not given
1	OME S	8	LALRAMMAWII	3	Nil		at least appear once	Follow up not given
	Τ.	9	LALRINNGHETI RALTE	4	1	student not cooperati ng	at least appear once	Follow up given
		10	MIMI LALMUANAWMI	4	Nil		at least appear once	Performance OK
		11	REBECCA LALNUNTLUANG I	3	1	1 left	at least appear once	Follow up not given
		12	ZARZOKIMI	5	2 left		at least appear once	Follow up mentioned

	PHYSICS	1	DR. ARUP KUMAR	11	4	not mention ed	Appeared all	Follow up mentioned
2		2	DR. ROSANGLIANA	7	3	3 left	3 left, 2 did not appear in all	No follow up mentioned
	PHY	3	M.I. SINGH	7	1		1	Follow Up not given
		4	REMLALSIAMA	12	3	2 left	good attendance	Follow up given
		5	LAWRENCE ZONUNMAWIA	12	2	not mention ed	at least appear once	Follow up given
		1	C. ZORAMTHARA	7	1		at least appear once	Faced probs in maths
	GEOLOGY	2	DR. C. LALMUANKIMI	4	1	Illness	at least appear once	No follow up mentioned
3		3	LALTLANKIMA	7	Nil		at least appear once	Follow up given
		4	C. LALREMRUAT FELA	12	Nil		at least appear once	Students face probs in maths
	ENGLISH	1	LALTLUANGKIMI HNAMTE	5	1	Medical	at least appear once	Follow up given
4		2	LALRINSANGI NGHINGLOVA	4	1	Negligen ce	2 did not appear	Follow up given
		3	LALMALSAWMI	5	Nil		1 did not appear	Follow up given
		1	DR. R. LALENGMAWIA	11	2	Illness	at least appear once	Follow up given
		2	DR SKARIAH P.C.	9	Nil		at least appear once	Follow up given
	Ϋ́	3	ZODINPUII	14	2	1 Left	at least appear once	Follow up given
5	BOTANY	4	LALTLANCHHUN GI	8	Nil		at least appear once	Follow up given
		5	LALRINTLUANGI	14	Nil		at least appear once	Follow up given
		6	MARY LALTHANSANGI	14	3	1 illness	at least appear once	Improved in attendance, follow up

		7	LALREMRUATI HMAR	8	2	Negligen	2 students absent in all	Follow up
		8	LALNUNTHARA	8	Nil	ce	At least appear once	given Follow up given
		1	DR. LALHMINGLIAN A HNAMTE	17	1	Expelled	at least appear once	Follow up not given
	ТRУ	2	ZONUNTHARI	10	1	Negligen ce	at least appear once	Follow up Ok
6	CHEMISTRY	3	DR. K.B. SINGH	14	3		Poor marks in internals	Follow up mentioned
	Н	4	DR. LALSAIMAWIA SAILO	10	2	no mention	at least appear once	follow up given
		5	R. LALRAMENG ZAMI	7	1		1 student absent in all	No follow up mentioned
	ELELCTRONICS	1	PROF. B. ZOLIANA	7	1	Negligen ce	1 student absent in all	Follow up mentioned
7		2	DR. RICKY LALHMANGAIHZ UALA	11	3	Negligen ce	at least appear once	Follow up given
		3	DR. P.C. ROHMINGLIANA	10	2	1 left	1 student absent in all	Follow up given
		4	JONATHAN LALRINMAWIA	7	Nil		at least appear once	Follow up given
		1	L.B. SINGH	10	Nil		at least appear once	Follow up given
	CS	2	PARIJAT KUMAR	9	2	Both Illness	at least appear once	Follow up given
8	EMATICS	3	DR. LALAWMPUII	9	1	No interest	marks poor in internal	Follow up given
	MATH	4	DR. LALHMANGAIHZ UALA	10	Nil		All students appear in both	Follow up given
		5	C. LALNGAIH AWMA	7	Nil		at least appear once	Follow up not given
	ENCE	1	M.S.DAWNGLIA NI	10	Nil		2 did not appear in all	Follow up given
9	ER SCI	2	LALHRUAITLUA NGA	10	Nil		at least appear once	Follow up given
	COMPUTER SCIENCE	3	C. LALRINAWMA	11	1	Negligen ce	1 did not appear in 2 internals	Follow up given

		4	LALDINGLIANA SAILO	11	3	1 left	3 did not appear in all	Follow up given
		5	R.LALMAWIPUII	10	2	negligenc e	1 did not appear in all	Follow up given
		6	LALHMUNMAWI I	9	3	not mention ed	at least appear once	Follow up given
		7	H.THANGKHAN HAU	9	2	1 Left	1 absent in 2 internals	Follow up given
		8	VANLALLURA	10	3	Negligen ce	1 absent in 2 internals	Follow up given
		1	CAROLINE ZAI HMINGTHANGI	10	1	health problem	at least appear once	Follow up given
	ZOOLOGY	2	DR. LALZAHAWMI CHENKUAL	17	1	Illness	1 student abent in both	Follow up given
10		3	H.LALNUNSANG I	16	Nil		at least appear once	Follow up given
		4	S. THANGRIMAWII	9	Nil		at least appear once	No follow up given
		5	SAILOPUII	14	2	1 left	at least appear once	Follow up given
		6	LALRINMAWIA	14	3	1 health problem	at least appear once	Follow up given
	STRY	1	DR. LALSANGLUAII FANAI	12	3	3 left	at least appear once	Follow up given
11	BIOCHEMISTRY	2	LALROSANGPUII	14	3	4 left	at least appear once	Follow up given
	BIO	3	K.ZOSANGPUII	13	2	5 left	at least appear once	Follow up given

6. UNIVERSITIES RANK HOLDER FOR THE CURRENT YEAR 2017

SI.	Roll No	Names	Department	Class	Position
No					
1.	1407BS147	Samuel Lalchhanhima	Physics	1 st	1
2.	1407BS106	Eliazer F. Lalfakmawia	Physics	1 st	8
3.	1407BS105	Zoremsiami	Physics	1 st	8
4.	1407BS099	Wycliff Lalchhandama	Physics	1 st	10
5.	1407BS091	K. Lalruatmawii	Chemistry	1 st	6
6.	1407BS130	C. Zorammawia	Mathematics	1 st	2
7.	1407BS132	Lallungkhama	Mathematics	1 st	4
8.	1407BS138	Lallianmawii	Mathematics	1 st	7
9.	1407BS003	H. Lalchhuanawma	Zoology	1 st	9
10.	1407BS061	Lucy Lalmuanpuii	Zoology	1 st	10
11.	1407BS008	Lalhlimpuii	Botany	1 st	6
12.	1407BS014	Lalsiamchhungi	Botany	1 st	7
13.	1407BS062	PC Vanlalhruaii	Botany	1 st	8
14.	1407BS112	J. Lalramnghahmawii Chhangte	Geology	1 st	10
15.	1407BH020	Zothanpuii Pautu	Home Sc.	1 st	1
16.	1407BH001	Vanlalzawni	Home Sc.	1 st	2
17.	1407BH030	K. Lalbiakzuali	Home Sc.	1 st	3
18.	1407BH028	Lalremruati Sailo	Home Sc.	1 st	4
19.	1407BCA144	Lalremtluang Pautu	Comp. Sc.	Dist.	2
20.	1407BCA156	Robert Lalthianghlima	Comp. Sc.	1 st	4
21.	1407BCA148	Mukesh Kumar Ram	Comp. Sc.	1 st	6
22.	1407BCA155	Malsawmzuala	Comp. Sc.	1 st	7
23.	1407BCA157	Lalhriatpuia	Comp. Sc.	1 st	8

ABSTRACT OF THE FINAL YEAR B.Sc, B.Sc (HOME SCIENCE), BCA 2017

			App	eare	TT	Dis	tinc	1	st	2 ^r	nd	Total	
SI.	Class	Hons	d			tio	on	Cla	ass	Cla	SS	Total Pass	Pass %
No			М	F		М	F	М	F	M	F	Pass	
		Bot.	16	19	35	7	12	-	-	-	-	19	54.28
		Zoo.	7	16	23	3	9	-	-	-	-	12	52.17
1.	VI SEM. B.Sc	Chem.	10	9	19		1	-	1	-	-	2	10.52
		Phy.	12	5	17	4	1	1	1	-	-	7	41.17
		Maths	13	6	19	3	1	4	3	-	-	11	59.89
2.		Geo.	8	3	11	1	3	-	-		-	4	36.36
	VI SEM. B.SC			24	24		7		1			8	33.33
	(HOME SCIENCE)		-	24	24	-	/	-	T	_	-	0	55.55
3.	VI SEM. BCA		18	1	19	8		3	1	-	-	12	63.16
	TOTAL		84	83	167	26	34	8	7			75	

7. RESEARCH AND PUBLICATION DURING 2017

I. INTERNATIONAL JOURNAL

SI. No.	Name of Author	Title of Publication	Journals
1.	Dr. Ricky Lalhmangaihzuala	Structural, Electronic and optical properties of Wurtzite and Zinc Blende InN with GGA and mBJ Potential	International Journal of Advanced Research and Review (IJARR), 2(10), 01 – 11.
2.	C. Zoramthara	Remarkable preservation of terpenoids and record of volatile signaling in plantanimal interactions from Miocene amber	Scientific Reports, 7:10940, 1 – 6.
3.	Dr. Lalsaimawia Sailo	Efficient oxidative removal of 4-tert-octylphenol and 17α- ethynylestradiol from aqueous solutions using ferrate(VI)	Korean J. Chem. Eng., 34(3), 734-740. pISSN: 0256-1115
Э.	Dr. Laisannawia Sano	Degradation of some micro- pollutants from aqueous solutions using ferrate (VI): Physico-chemical studies	

II. NATIONAL JOURNAL

SI. No.	Name of Author	Title of Publication	Journals
		Measurement of Gamma Radiation Dose and its Correlation with Radon Concentration in Southern Part of Mizoram, India.	Science & Technology for shaping the future of Mizoram, 295 – 298. ISBN 978-93-85926-49-5.
1.	Prof. B. Zoliana	Seasonal Variation of Indoor Radon Concentrations in Dwellings in Eastern Part of Mizoram.	Science & Technology for shaping the future of Mizoram, 311 – 313. ISBN 978-93-85926-49-5.
		A Theoretical Formulation of Initial State Wave Functions for Photoemission Calculations	Summary of Doctoral Theses, Eastern Publishers, Vol-2, 165 – 174. ISBN 978- 93-86302-22-9.
2.	Dr. Arup Kumar	Probing Deeper into X-Ray Bursting Neutron Stars from Its Surface Emission with Data from ASTROSAT	Science & Technology for shaping the future of Mizoram, 299 – 304. ISBN 978-93-85926-49-5.
3.	Dr. Lalzahawmi Chenkual	Seasonal Variation in Water Quality Attributes of Tamdil, Mizoram India.	Science & Technology for shaping the future of Mizoram, 169 – 174. ISBN 978-93-85926-49-5.
4.	Dr. Lalhmingliana Hnamte	Computational Study of Greener Pathway for the Synthesis of 2-Ethylaniline and 4-Ethylaniline from N- Ethylaniline in the Presence of HCl under Gas Phase.	Science & Technology for shaping the future of Mizoram, 127 – 142. ISBN 978-93-85926-49-5.
5.	Lawrence Zonunmawia Chhangte	Measurement of Gamma Radiation Dose and its Correlation with Radon Concentration in Southern Part of Mizoram, India.	Science & Technology for shaping the future of Mizoram, 295 – 298. ISBN 978-93-85926-49-5.
6.	Dr. Ricky Lalhmangaihzuala	Structural, Electronic and optical properties of Wurtzite and Zinc Blende InN with GGA and mBJ Potential Effects of Spin Orbit interaction	International Journal of Advanced Research and Review (IJARR), 2(10), 01 – 11. Summary of Doctoral
		on Band Structure in	Theses, Eastern Publishers,

		Semiconductor Spintronic Materials.	Vol-2, 153 – 164. ISBN 978- 93-86302-22-9 .
		Measurement of Gamma Radiation Dose and its Correlation with Radon Concentration in Southern Part of Mizoram, India.	Science & Technology for shaping the future of Mizoram, 295 – 298. ISBN 978-93-85926-49-5.
7.	Dr. PC. Rohmingliana	Seasonal Variation of Indoor Radon Concentrations in Dwellings in Eastern Part of Mizoram.	Science & Technology for shaping the future of Mizoram, 311 – 313. ISBN 978-93-85926-49-5.
		Indoor and Outdoor Radon and Thoron Monitoring in Mizoram With Special Reference to Lunglei, Serchhip and Mamit Districts.	Summary of Doctoral Theses, Eastern Publishers, Vol-2, 175 – 190. ISBN 978- 93-86302-22-9.
		Investigations of Public Dose Due to Stray Radiation in X-Ray Installations in Mizoram.	Science & Technology for shaping the future of Mizoram, 305 – 309. ISBN 978-93-85926-49-5.
8.	Jonathan Lalrinmawia	Investigations of Workers Dose Due to Stray Radiation in X-Ray Installations in Mizoram.	Recent Advances in Physics Research and its relevance, Excel India Publishers, New Delhi, 258–263. ISBN 978- 93-86256-85-0.
9.	Laltlankima	Physico-chemical characterization of potable water in Aizawl.	Solid Waste Management and Safe Drinking Water in Context of Mizoram and other States in India, 33 – 37. ISBN: 978-1-61813- 473-8
Э.	Laitidiikiiiid	Assemic contamination in potable water of Chawngte, Lawngtlai District.	Solid Waste Management and Safe Drinking Water in Context of Mizoram and other States in India, 38 – 45. ISBN: 978-1-61813- 473-8

ABSTRACT OF RESEARCH PAPERS PUBLISHED DURING 2017

I. INTERNATIONAL JOURNAL

IJARR, 2(10), 2017; 01-11



International Journal of Advanced Research and Review

www.ijarr.in

STRUCTURAL, ELECTRONIC AND OPTICAL PROPERTIES OF WURTZITE AND ZINC BLENDE INN WITH GGA AND mBJ POTENTIAL

Lalrintluanga Sailo^{1*}, Ricky L. Ralte², Z. Pachuau³, C. Lalramliana⁴

ABSTRACT

To obtainthe parameters of InN semiconductor compound in wurtzite (WZ) and zincblende (ZB) structures, we have carried out a first-principle total-energy calculation of the structural, electronic and optical properties for WZ and ZB InN semiconductor with density functional theory with Generalized Gradient Approximations (GGA) and modified Becke–Johnson (mBJ) potential. To find the best parameters for each structure, we have optimized the total energy as a function of the unit cell volume and the c/a ratio for the wurtzite structure and for zincblende structure, the total energy as a function of the unit cell volume and the lattice parameter. Our calculations have shown agreement with the other theoretical and experimental results. The electronic band structures were calculated from the optimized lattice parameter with GGA and mBJ potential using Full Potential Linearized Augmented Plane Wave (FP-LAPW) method. The optical properties, including the real and imaginary part of dielectric function, reflectivity, refractive index, absorption coefficient, electron energy loss function and optical conductivity of WZ and ZB InN semiconductor under ambient conditions are discussed.

Keywords: DFT; FP-LAPW; structure optimization; optical properties; mBJ-GGA.

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Received: 13 March 2017 Accepted: 26 July 2017 Published online: 08 September 2017

OPEN Remarkable preservation of terpenoids and record of volatile signalling in plant-animal interactions from Miocene amber

Suryendu Dutta¹, Rakesh C. Mehrotra², Swagata Paul¹, R. P. Tiwari^{3,4}, Sharmila Bhattacharya¹, Gaurav Srivastava², V. Z. Ralte³ & C. Zoramthara³

Plants produce and release a large array of volatile organic compounds that play many ecological functions. These volatile plant metabolites serve as pollinator attractants, herbivore and pathogen repellents and protect plants from abiotic stresses. To date, the geological evolution of these organic compounds remains unknown. The preservation potential of these metabolites in the fossil record is very poor due to their low boiling points. Here we report a series of volatile sesquiterpenoids, including δ -elemene, α -copaene, β -elemene, β -caryophyllene, α -humulene, germacrene D, δ -cadiene and spathunenol, from early Miocene (~17 million year) amber from eastern India. The survival of these unaltered bioterpenoids can be attributed to the existence of extraordinary taphonomic conditions conducive to the preservation of volatile biomolecules through deep time. Furthermore, the occurrence of these volatiles in the early Miocene amber suggests that the plants from this period had evolved metabolic pathways to synthesize these organic molecules to play an active role in forest ecology, especially in plant-animal interactions.

Korean J. Chem. Eng., 34(3), 734-740 (2017)

DOI: 10.1007/s11814-016-0324-y

pISSN: 0256-1115

eISSN: 1975-7220

Efficient oxidative removal of 4-tert-octylphenol and 17α -ethynylestradiol

from aqueous solutions using ferrate(VI)

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Abstract: Ferrate(VI) was utilized to treat micro-pollutants--4-tert-octylphenol (TOP) and 17α-ethynylestradiol (EE2)--from aqueous solutions. Batch studies were conducted at various pHs (7.0 to 12.0) and concentrations of TOP/or EE2 (0.03 to 0.3mmol/L) using 0.1mmol/L ferrate(VI). Time-dependent degradation of TOP and EE2 was assessed as a function of pH and micro-pollutant concentrations and we found that significant mineralization of micro-pollutants was achieved by ferrate(VI) treatment. Second-order kinetics showed 1 : 1 stoichiometry was obtained between the ferrate(VI) and TOP/or EE2. Further, the effect of several background electrolytes on degradation of TOP and EE2 by ferrate(VI) was evaluated, showing insignificant effect of degradation.

SEPARATION SCIENCE AND TECHNOLOGY

https://doi.org/10.1080/01496395.2017.1374976

ISSN: 0149-6395 (Print) 1520-5754 (Online) Journal homepage:

http://www.tandfonline.com/loi/lsst20

Degradation of some micro-pollutants from aqueous solutions using ferrate (VI): Physicochemical studies

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Abstract: The aim of this communication is to investigate various physico-chemical parametric studies in the oxidative degradation of bisphenol A (BPA) and diclofenac (DCF) in aqueous solutions using the ferrate (VI). A wide range of pH (7.0–12.0) and concentrations of BPA/or DCF (0.03–0.5 mmol/L) is studied at a constant concentration of ferrate (VI) 0.1 mmol/L. Apparent rate constant was found to be 8.35 × 10² and 7.62 × 10² L/mol/min, respectively, for BPA and DCF degradation bythe ferrate (VI). Further, decreasing the pH from 12.0 to 7.0, the corresponding increase is percentage degradation of BPA and DCF is found to be from 23 to 87% for BPA and from 14 to 41% for DCF, respectively, at the ferrate (VI) to micro-pollutant molar ratio 1:1. Total organic carbon data showed that partial mineralization of BPA/or DCF is achieved at a single operation of ferrate (VI) treatment. Moreover, decreasing the micro-pollutant concentration from 0.5 to 0.03 mmol/L has caused to increase the percentage TOC removal from 15 to 45% (for BPA) and from 10 to 38% (for DCF), respectively, at pH 7.0. The presence of NaCl, NaNO₃, and Na₂HPO₄electrolytes could not affect significantly the oxidation of BPA and DCF by ferrate (VI). However, the presence of NaNO₂and Na₂SO₃co-existing ions hampered significantly the degradation of BPA and DCF using ferrate (VI).

II. NATIONAL JOURNAL

Science and Technology for Shaping the Future of Mizoram



Chapter 24

Computational Study of Greener Pathway for the Synthesis of 2-Ethylaniline and 4-Ethylaniline from N-Ethylaniline in the Presence of HCl under Gas Phase

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ABSTRACT: The objective of the computational calculation is to find greener pathway and to investigate for the synthesis of 2-ethylaniline and 4-ethylaniline from N-ethylaniline in the presence of HCl under gas phase. Mechanistic pathways are proposed for the synthesis to investigate the most suitable synthesis pathway. Which are investigated computationally using Gaussian software which search for the feasibility of the proposed mechanistic pathways from which the best method for the synthesis is selected. It also probe in to the usage of the by-products for the synthesis to eliminate the wastage. Computational calculation is done using Density Functional Method with B3LYP unrestricted 6-311++G (d, p) basis set. Computationally is it proved that the initial stage of the reaction is most feasible as proposed in the literature and that the second stage of the reaction proceeds best when aniline reacts with ethene, which the experimentalists' ignore, than with chloroethane by the electrophilic substitution reaction.

Keywords: Gaussian, Density Functional Theory, Intrinsic Reaction Coordinate (IRC), Computational and Synthesis.

Science and Technology for Shaping the Future of Mizoram



Chapter 29

Seasonal Variation in Water Quality Attributes of Tamdil, Mizoram, India

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ABSTRACT: This paper is intended to be a study concerning the water quality attributes of Tamdil, Mizoram, India, at monthly intervals for a period of two years, i.e. March, 2014 to February, 2016. The results are computed on seasonal basis i.e. pre-monsoon, monsoon, post-monsoon and winter seasons. It was found that temperature ranged from 12°-29°C; turbidity from 5.6-24.3 NTU; total alkalinity ranged from 26 to 76 mgL⁻¹ CaCO₃, total hardness ranged from 24 to 70 mgL⁻¹ CaCO₃; dissolved oxygen ranged from 3.99 to 7.9 mgL⁻¹ and biological oxygen demand value ranged from 0.06 to 1.85 mgL⁻¹. The results reveal that there is a significant seasonal variation in all the parameters and all the parameters are within the prescribed limits of water quality laid down by various scientific agencies, except turbidity. The data were subjected to correlation coefficient among different variables using two tailed test at 5% level of significance using SPSS version 16.0.

Keywords: Water Quality Attributes, Turbidity, Total Alkalinity, Total Hardness, Dissolved Oxygen, Biological Oxygen Demand, and Water Quality Standards.



Chapter 50

Measurement of Gamma Radiation Dose and its Correlation with Radon Concentration in Southern Part of Mizoram, India

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ABSTRACT: This study presents the results of indoor and outdoor ambient gamma dose rates in and around dwellings in Lawngtlai, Saiha and apart of Lunglei districts in southern Mizoram, and these measurements were carried out by using Micro-R Survey Meter, which is a portable detector having a gate time of 8 seconds. The background gamma radiation measurements were carried out on the ground and at one meter above the ground in order to determine the source of radiation, whether it is terrestrial or of cosmic origin. Seasonal measurements for rainy, winter and summer seasons were also performed in order to determine the effects of meteorological factors. The measured gamma radiation dose ranges from 4–13 μ R/h while the nationwide gamma survey result is 10.05 μ R/h. The indoor and outdoor gamma readings had no significant difference but in each case measurement on the ground has a slightly higher value than that of measurement at 1m above the ground. This shows that the background gamma radiation is mainly of the terrestrial origin. It has also been found that there is a slight seasonal variation in gamma readings to indicate the influence of meteorological parameters as expected. Moreover, there has been a good correlations observed between gamma value and radon concentration measured inside the dwellings.

Keywords: Survey Meter, Cosmic and Terrestrial Gamma Radiation, Radon Concentration, Correlation, Meteorological Parameters.

Science and Technology for Shaping the Future of Mizoram



Chapter 51

Probing Deeper into X-Ray Bursting Neutron Stars from Its Surface Emission with Data from ASTROSAT

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ABSTRACT: Neutron Stars (NS) are the densest astrophysical objects with a physical boundary. These objects are born when a massive star undergoes a core collapse supernova explosion. The fundamental properties of any Neutron star is based on a close study of the emission spectrum emerging from their photospheres. Neutron stars in low-mass X-ray binaries show a plethora of spectral and timing properties, such as thermonuclear bursts, burst oscillations, KHz Quasi-periodic Oscillations (QPO) etc. which can be used to study fundamental problems, such as probing the strong gravity and dense core matter and understanding the accretion-ejection mechanisms. The most prominent candidates for such measurements are (thermonuclear) bursting neutron stars (X-ray Bursters or XRB) in low mass X-ray binary systems (LMXB) that present Photospheric Radius Expansion (PRE). We propose to observe the Neutron star 4U 1702-429 in LMXB to study a number of such properties. The observation is during its emission from the surface while it cools after thermonuclear bursts and it relies on the broadband X-ray spectral and fast timing capabilities of X-ray detectors SXT & LAXPC on board ASTROSAT, which is recently launched from India. We also present the prospect of measuring mass and radius of Neutron stars from the data obtained from ASTROSAT and their implications to constrain the equation of state of the cold dense matter in the core of Neutron stars. The core matter is accurately described by one-parameter equation of state that governs the dense matter above nuclear density. The Tolman-Oppenheimer-Volkov (TOV) relativistic stellar structure equation describes the extremely dense cold matter in their cores by relating pressure and energy density. There is a unique map between the microscopic pressure-density $(P \sim \rho)$ relation and the macroscopic mass-radius $(M \sim R)$ relation and the equations of states (EoS) are constrained if the neutron stars masses and radii are determined by astrophysical observational methods.

Keywords: Neutron Stars, LMXB, X-ray bursts, Equation of State, ASTROSAT.

Allied Publishers
New Delhi
2017
ISBN 978-93-85926-49-5

Chapter 52

Investigations of Public Dose Due to Stray Radiation in X-Ray Installations in Mizoram

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ABSTRACT: X-rays are not only magnificent and useful in medicine, but dangerous too. In the present study, 67 diagnostic X-ray facilities installed in 48 institutions from 8 districts in Mizoram, have been considered. A water phantom is used as a source of scattered; field sizes are adjusted to maximum; exposure rates outside Patient Entrance Door (PED) were measured by setting maximum accelerating potential and minimum current with fixed time. The radiations scattered from the phantom, walls, floor and the ceiling as well as leakage radiation have been measured. Workload is calculated for each installation in mA min/week; public dose is calculated in mR/week from workload and stray radiation rates. Exposure rates outside PED in chest mission ranges from 0.001 to 200 mR/h and 0.02 to 185 mR/h in couch mission. Even though fixed X-ray units are able to be used at higher tube loadings than mobile X-ray units, it is found that the required radiation shielding has no essential difference. High exposure rates at public place can be significantly reduced by employing lead lined door and proper shielding as per safety regulation.

Keywords: Diagnostic X-ray, Scattered Radiation, Leakage Radiation, Patient Entrance Door.

Science and Technology for Shaping the Future of Mizoram



Chapter 53

Seasonal Variation of Indoor Radon Concentrations in Dwellings in Eastern Part of Mizoram

Lalmuanpuia Vanchhawng¹, P.C. Rohmingliana², B. Zoliana², R. Mishra³ and B.K. Sahoo³

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ABSTRACT: Radon and its progeny concentrations contribute most of the natural radiation dose to general populations. This fact draws a considerable attention and hence, large scale and long-term measurement of radon concentrations has been going on. Radon present in indoor as well as outdoor air as they had been exhaled from soil and building materials. Radon levels in the indoor have been realized as a concern of public health in many countries and even in India. Consequently, studies related to monitoring of radon and the inhalation dose to the public living in that environment has been a keen interest. Measurement of radon concentrations was done over the past 50 years in many countries, but with the improvement of experimental apparatus and technical formulation, the same is going on till today. Subsequent decay products are formed in the air. It is well-known that in radon problem, the progeny species and not the radon are primarily responsible for lung doses. Among the progenies, short lived nuclei viz. ²¹⁴Po is focused due to its high contribution in deposition and emission of alpha particles inside the lung. Measurement of indoor Radon concentrations have been carried out in Eastern part of Mizoram covering Champhai District for a complete one year in 40 dwellings, which were specifically selected according to the site location of the dwellings. Seasonal variations of indoor radon concentrations were monitored for three seasons, viz., rainy, winter and summer seasons. Solid-State Nuclear Track Detectors (SSNTD) have been used to obtain the time integrated concentration levels of indoor radon. It has been found that the annual indoor concentrations of the radon in the study area is 50.6 Bq/m³. Indoor radon concentration reach its maximum during winter and the minimum concentration was found during summer season.

Keywords: Radon, SSNTD, Ventilation Rate.

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Investigations of Workers Dose Due to Stray Radiation in X-ray Installations in Mizoram

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Abstract—Stray radiation is the sum of all scattered radiation and leakage radiation. 85 diagnostic X-ray facilities installed in 48 institutions from 8 districts have been considered. Each installation is classified into barrier covering Control Panel (CP) properly, not covering CP properly and barrier not available. No worker used Personal Monitoring Device (PMD) for safety and that is why we follow the present method. Using water phantom as scatterer, exposure rates at CP are measured by setting maximum potential (kV) and minimum current (mA) with fixed time (s). Workload is calculated for each installation in mA.min/week; public dose is calculated in mR/week. Installations without barrier but showing low exposure rates are having kV reproducibility problem and the main reason for low workers dose is low workload in different installations. The highest worker dose is 18.9mR/week as compared to AERB Safety Code which is 40mR/week all installations are within safety limit.

Keywords: Diagnostic X-ray, Scattered Radiation, Leakage Radiation, Control Panel

INTRODUCTION

In November 1895 W.C. Roentgen discovered x rays. Within a few weeks, articles describing effects of these strange rays on radiation workers began to appear in journals. There were many reports on somatic radiation effects in radiological technologists and radiologists in the early days of X-rays (Archer, 1995). X-ray late effects were also established in the study of mortality among British radiologists due to cancer and other causes (Smith and Doll, 1981). Until the 1950's there was no scientific report that include the late radiation effects and these late effects on patients and workers lead to radiation-protection regulation of today (Bushong, 1991). The main objective of radiation protection is to ensure that the radiation doses to which the radiation workers are exposed to are kept below permissible level (Binks, 1955). We have International Commission for Radiation Protection (ICRP) as the international regulatory body and in India we have AERB to counterpart ICRP (Grover et al., 2002). These bodies recommend norms for permissible doses limits for the general public and radiation workers (Grover et al., 2002).

In the study of occupational exposure in Brazil, diagnostic X-ray is the main source of exposure for workers in the medical field (Cunha et al., 1992). Radiation workers are exposed to radiation mainly from primary and scattered radiation. However diagnostic workers received very small amount of radiation due to primary and most of the doses is due to scattered radiation (Osborn, 1955). When a photon interacts with matter, it is either absorbed or it experiences a change in its energy or direction of motion. These photon are called scattered photons (Carlsson and Carlsson, 1996). X-rays photons interaction involved three important mechanisms: photoelectric, coherent-incoherent scattering and pair production (Johns and Cunningham, 1983). In diagnostic radiology only photoelectric effect and coherent-incoherent scattering is important as energy ranges up to 150 kV is employed (IAEA, 2014). In photoelectric interaction, most of the photon energy is converted into Kinetic Energy (KE) and only some energy appeared as scattered radiation. However, in coherent scattering all energy is scattered; no energy is converted into KE and in incoherent scattering, some energy is transferred to KE and some are scattered (Johns and Cunningham, 1983).

From the study of occupational exposure in X-ray diagnosis in Brazil by Cunha et al. in 1992 and national survey of occupational exposure among diagnostic technologists in South Korea by Lee et al. in 2014; we see that radiation workers are monitored. But, in the present study none of the workers have been monitored by PMD that is why we follow the present method. By using ionization chamber, we measured stray radiation from X-ray tube as leakage radiation and scattered from cylindrical phantom, ceiling, wall etc. at CP. By using workload (mAmin/week) and radiation rates we calculated dose in mR/week and compare to safety standard.

Physico-Chemical Characterization of Potable Water In Western Aizawl

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¹Department of Geology, Mizoram University, Aizawl ²Department of Chemistry, Govt. Zirtiri Residential Science College, Aizawl

Abstract

Aizawl city water supply is provided by PHED, Govt. of Mizoram through water pipe connections. The people of Aizawl also depend on tuikhur and hand pumps for the alternate source of potable water for their domestic purposes. The water samples were collected from different selected sites of Aizawl for their physico-chemical analyses such as pH, electrical conductivity (EC),total dissolved solids(TDS), turbidity, , total chloride, total hardness, iron and fluoride. Total coliform (MPN) and faecal coliform (MPN) were also determined for bacteriological characteristics in order to obtain the current status of potable water quality in the study area. Heavy minerals analyses were also done with MP-AES. The results show that the water quality of tuikhur and hand pumps which are used for domestic purposes are by and large within the acceptable limits.

Key word: MP-AES, bacteriological test

7

Arsenic Contamination in Potable Water of Chawngte, Lawngtlai District, Mizoram John Blick^{1*}, Laltlankima¹, Shiva Kumar¹ & K. B. Singh² ¹ Department of Geology, Mizoram University, Aizawl, Mizoram ²Department of Chemistry, GZRSC, Aizawl, Mizoram

Abstract

Arsenic contamination in potable water is a common feature in neighboring border of Mizoram. They include Bangladesh, Tripura, Assam and Manipur. The contamination of groundwater by arsenic in Chawngte is likely to be happened due to its sharing of a common land border with Bangladesh. The main sources of water in the area are surface water, ground water and rain water of which the latter two sources generally meet the most important supplementary sources of drinking water in their natural condition for the locality. The area is dominated by mainly three types of tribes broadly in cluster manner. They are Mizo, Lai and Chakma, while Chakmas are closest to the Bangladesh border. People of Chakma are forced to fetch water for their daily needs from tuikhurs (spring) or other sources. These waters are usually consumed directly without having proper treatment because of the shortage of the supply water by PHED. At this moment the contamination of the underground water has become a great challenge for providing safe drinking water to the majority of the population. It has been observed that several number of tube wells, tuikhurs and hand pumps, exist in any cluster or community. Generally, not all tube wells and hand pumps in an area are affected by arsenic. Therefore, the immediate challenge is to find out the unaffected ones in the affected areas and commence routine monitoring in order to stop using the currently affected tube wells as soon as arsenic is detected.

Keywords: Chawngte; arsenic; potable water (physico-chemical parameters).

8. SEMINAR AND WORKSHOP.

SI.	Name of Faculty	Title of	Organized by	Date
No		Seminar/Workshop		

9. ACTIVITIES AND ACHIEVEMENTS OF VARIOUS SUB COMMITTEES

I.IQAC:

Members:

Coordinator: Prof B Zoliana

Lalrinsangi Nghinglova Lalsangkimi Hmar Dr R Lalengmawia M.S.Dawngliani

Objectives:

i. To work towards realising the goals of quality enhancement.

ii.To develop a system for conscious and consistent improvement in the performance of the college by

- Preparing Academic Calender at the beginning of every session in accordance with the MZU calendar.
- Monitoring the functioning of all sub-committes and departments.
- Collecting feed back from students.
- Implementing the mentoring system.
- Organising Parent-Teacher Meets

iii. The IQAC is empowered to take necessary actions under the supervision of the Principal.

II.EXAMINATION:

Members:

Chair : Principal

Secretary : Dr Rosangliana

Dr. R.Lalengmawia

H.Lalnunsangi Lalrammawii M.S.Dawngliani

Objectives:

i. To supervise, ensure smooth and secure conduct of internal and university Examinations.

ii.To Implement rules of examinations strictly, in accordance with the university and college rules and take actions against defaulters.

iii.To collect and maintain internal marks of students from concerned department and send them to the University as and when required.

iv. To conduct briefings on examination rules, etc. to students as well as faculty members before University examinations.

v. To coordinate with the examination department of Mizoram University in all matters relating to examinations and make notifications to students whenever necessary.

- i. Internal test examinations are conducted by preparing examination time table for each department. Copies of internal marks of all departments is recorded.
- ii. Workshop on Sensitization of Exam matter was conducted by Exam Department, MZU during this reporting period, secretary of this committee and one office staff was participated.
- iii. End Semester exams commencing from 10th November to 8th December 2017 was conducted. Question papers received from University are arranged and checked well in advance, exam duty invigilation for teachers and office staff are also prepared in advance in order to conduct smooth exams.
- iv. A new pattern of CS and Practical mark submission to MZU was followed; all marks are submitted to MZU through online in the portal provided by MZU.

III. ADMISSION:

Members:

Chair : Principal

Secretary : Laltluangkimi Hnamte

All HODs

Objectives:

i.To implement the already existing rules contained in the prospectus and set new criteria and rules for admission into the college if and when necessary.

ii. Setting of time frame for admission procedure.

iii.Performing the needful during the time of admission such as appointing members for help desks and interview of students seeking admission.

IV.AISHE:

Member:

Lawrence Zonunmawia Chhangte

Objective:

i. To perform documentation work as proposed by concerned authority.

Activities:

i. Collect Institution statistics and upload to aishe web site (http://aishe.gov.in)

V.ANTI-RAGGING & GRIEVANCE:

Members:

Chairman :Remlalsiama Secretary :S.Thangrimawii

Lawrence Zonunmawia

L.B.Singh

Lalsangkimi Hmar

Sailopuii

Objectives:

i.To ensure that there is no ragging in any form among our students within and outside our college campus

ii.To ensure that no student is a victim of harassment, exploitation and discrimination on any ground..

iii.To look into the grievances of students and take necessary action for redressal.

- i) Grievance and Ragging Complaint/Report Box is placed at the main corridor of the college.
- ii) This complaint box is monitored every working days throughout the session. Not a single complaint was received.
- iii) Committee Members are advised to sense any kind of ragging apart from Grievance box.
- iv) Prohibition of Ragging in and outside the college campus. Notice is placed in all notice board of the campus twice throughout the year.
- v) Announcement regarding prohibition of any kind of ragging is made in each and every classrooms.
- vi) Grieveance cell complaint box is renovated and repainted once throughout the session.

VI.STUDENT'S UNION:

Members:

Chairman : Lalnunthara

Secretary : Dr. Lalzahawmi Chenkual

Lalhmingliana C.Lalramdina S.Thangrimawii Lalremruati

Objectives:

i.To organise Annual Student's Union Election.

ii.To render overall supervision of all activities of the student's union.

iii. To help promote general welfare of the students.

iv. To provide necessary advice and assistance to the student body.

- i. Conduct Fresher Social on 14/07/2017.
- ii. Conduct election of Classes Representatives from all classes for 2017-2018 on 10/07/2017.
- iii. Conduct election of Student's Unionfor 2017-2018 session on 26/07/2017. Appointment of Returning Officer and Polling Officers and assignment of faculties for counting of votes.
- iv. To help and guide newly elected SU leaders during college week and to see the smooth functioning of various activities during college week by maintaining strict discipline throughout the week.
- v. Compel the students to wear College T-shirt every Tuesday and Thursday.
- vi. Take necessary action to students who were found drunk in the college campus.
- vii. Organised college week closing function at Chanmari YMA Hall on 10/03/2017.
- viii. Participated MZU sport held during 20th-24th March 2017.

VII.GAMES AND SPORTS:

Members:

Chairman : C.Zoramthara

Secretary : Dr. Lalhmangaihzuala

Dr KB Singh M.I. Singh

Lalzahawmi Chenkual

Zarzokimi Vanlallura

Laldingliana Sailo

LB Singh

Dr PC Rohmingliana

Lalrosangpuii C Lalrinawma Lalremtluanga Laltlankimi

Objectives:

i.To supervise all activities relating to games and sports of the student body.

ii.To appoint teachers on duty during college and university sports.

iii.To monitor purchase of sport goods and ensure the management of sports venues.

- i. All the sport equipment were kept in a roon opposite to Maths Laboratory.
- ii. Duty List for college week was prepared.
- iii. College week was held from 4th Sept 9th Sept 2017.
- iv. Bought sport equipment for different discipline.
- v. Duty List of teaching faculties for MZU sport was prepared.
- vi. Participation in MZU sports held on 20th-24th March 2017.

VIII.COLLEGE MAGAZINE:

Members:

Chairman : Laltluangkimi Hnamte

Secretary : Lalmalsawmi

Lalthanpuii Ralte H Thangkhanhau Lalhmingliana Hnamte Dr R Lalawmpuii

Objectives:

i.To ensure publication and proper distribution of the Annual College magazine.

ii.To render advice to magazine editors as and when necessary.

iii.To empower magazine editors in collection and selection of articles for magazine.

iv .To help in editing of college magazine.

- i. Appealing to students of different classes to contribute to college Magazine.
- ii. Taking pictures of different activities to be published in the magazine.
- iii. Preparing and giving appeal letter to all teaching staff to contribute to Magazine.

IX.DEBATING, SOCIO-CULTURAL

Members:

Chair : Lalthanpuii Ralte Secretary : R.Lalengzami

> Dr Arup Kumar Dr PC Skariah

Laltluangkimi Hnamte Lalrinsangi Nghinglova

Lalmalsawmi Mary Lalthansangi Lalrinngheti Ralte Dr R Lalawmpuii Dr C Lalmuankimi

Objectives:

i.To ensure smooth functioning of SENHRI, our college cultural club.

ii.To assist in selection of student representatives /participants in intercollege debates,quiz ,cultural functions etc

iii.To help promote the art of Public speaking among students.

iv. To help students in organizing competitions under the debating department during college week .

- **i.** The committee helped the SU incharge to organize and judge the indoor activities and cultural programme held during collee week (6th and 7th sept 2017)
- ii. Senhri cultural club performed special items during Freshers Social (19th July 2017) and college week closing function(15th Sept 2017).
- iii. After the 1st internal exam in odd semester, members of senhri cultural club practiced regularly at the college Auditorium in preparation for the college Week Closing Function.
- iv. The committee helped to select contestants for the miss/mister contest and the committee members- Laltluangkimi Hnamte, Lalmalsawmi and Lalrinsangi Nghinglova were judges for this contest.

X. SPIRITUAL COUNSELLING

Members:

Chair : Lalhmingliani Hlawndo

Secretary : Lalhruaitluanga

Lalrinngheti Ralte Dr P.C.Skariah Laltlanchhungi Lalrintluangi

Dr Lalhmangaihzuala

Objectives:

i.To assist the activities of the Evangelical Union.

ii. To provide spiritual counselling to those in need.

iii. To promote and ensure mental and spiritual health of students.

- i. Meeting for E.U Rising Day was conducted. Activities for fund rising, programmes and different sub committee were formed.
- ii. Fund Rising were done by selling smoked porked, distributing enveloped for donation among adviser/ teachers and students.
- iii. Project meeting for equipping E.U Office were done by fund rising and purchasing of mic stand, filter, fan and mirror.
- iv. We have fellowship three times a week during lunch break.
- v. Members of the committee are given a chance for short sermon.
- vi. Release of Evangelical Union T shirt.
- vii. Hollow Guitar and Plastic chairs were donated by RUSA.
- viii. Media Zonet covers Evangelical Union fellowship and interview committee members and student.

XI.REFRESHMENT

Members:

Chair : Mary Lalthansangi Secretary : Maria Lalhmingmawii

> Lalrintluangi R Lalmawipuii Dr Lalmuankimi Dr Lalhmangaihzuala

Dr. Ricky Lalhmangaihzuala

Dr P.C. Rohmingliana Dr Lalsaimawia Sailo

Objectives:

i.To take charge of selecting and ordering food items to be distributed in college functions.

ii. To take charge of distributing the selected food items during the functions.

- i. Refreshment was prepared for 80 people when the commissioner, HTE visit the college on 25th January 2017.
- ii. Refreshment was prepared for 90 people on Consumer Awareness program by bureau of Indian Standards (BIS) and IQAC, GZRSC on 22nd February 2017.
- iii. Refreshment was prepared for 310 people on the celebration of National Science Day on 28th February 2017.
- iv. Refreshment was prepared for 8 persons when Impromptu eas visited by the minister, THE on 9th March 2017.
- v. Refreshment was prepared for 90 people during workshop on IPR organized by IPR committee, GZRSC and MISTIC, Science and Technology on 24th March 2017.
- vi. Refreshment was prepared for 200 people on GZRSC Alumni Day organized by Alumni Committee and sponsored by RUSA held on 1st Aug 2017.
- vii. Refreshment was prepared for 60 people for 5 days on Trainer's Training Programme for Enhancing Equity and Inclusion by Website committee, GZRSC and centre for Social Research, New Delhi, sponsored by RUSA held from 16th-22nd August 2017.
- viii. Refreshment was prepared for 350 people on Parents- Teacher meet organized by IQAC, GZRSC sponsored by RUSA on 24th August 2017.
- ix. Refreshment was prepared for 300 people on Career Advancement Campaign organized by Research and Seminar Committee, GZRSC in collaboration with Central YMA, sponsored by RUSA held on 28th August 2017.

XII.DECORATION & HALL ARRANGEMENT

Members:

Chair : Lalsangliani Khawlhring Secretary : Rebecca Lalnuntluangi

Lalsangliana Khawlhring

Lalrinngheti Ralte Lalhmingliani Hlondo

Vanlallawmi Parijat Kumar Mimi Lalmuanawmi K Zosangpuii

Rebecca Lalnuntluangi

Objectives:

i.To take charge of decoration & hall arrangement for college functions.

ii.To look after the beautification of the college in general.

- i. Flowers and banner are put up before every functions. The room where function will take place will be decorated with flowers and so on. Banner if needed were also arranged.
- ii. No steps is taken regarding the requirements submitted.
- iii. As the principal suggested, beautification of college campus and purchase of more artificial flowers and plants will also be done after the submission of admission fees.
- iv. Time table of each members is kept by the chairman so that decoration of the particular function is taken care by the chairman. Information is given through watsapp and every member of the committee are requested to be alerted.
- v. Responsibility for decorating the Hall prior the occasion is done by four committee members appointed by the chairman.
- vi. Picture of the founder and the principals to be mounted on the wall of the main building has been working in progress.
- vii. Dt 14th Sept 2017, purchase of artificial flowers was taken by 2 members of the decoration committee i.e Ms Lalsangliani Khawlhring and Ms Vanlallawmi financed by the coordinator IOAC.
- viii. Put up banner and arranges flowers on seminar on National Science Day on 28th February 2017.
- ix. Clean, decorate the room and arrange seat on consumer awareness programme on 22^{nd} February 2017.
- x. Clean and decorate hall before Workshop on intellectual property rights on 24th March 2017.
- xi. Meeting of cell members and submission of requirements to the principal on 30th March 2017.

XIII.SECURITY

Members:

Chair : C.Lalramdina Secretary : Sailopuii

Lalhruaitluanga

Zodinpuii C Lalrinawma L B Singh

Dr Ricky Lalhmangaihzuala

Remlalsiama Lalnunthara R Lalengzami

Objectives:

i. To monitor disciplinary climate prevailing in the student community.

ii.To provide security and maintain discipline among students during college functions. iii.To issue rules relating to disciplinary proceedings as and when necessary and to strictly implement already existing rules pertaining to discipline of students in consultation with the Principal.

- i. Participated and performed security duty during the College Week Closing functions held on 10th March 2017. A night duty was also detailed from the members of the committee.
- ii. Performed security duty as far as possible to maintain discipline among the students during MZU Sports held during 20th-24th March 2017.
- iii. Maintained discipline among the students as far as possible inside the college Campus trying to prevent a false play by the students during the reporting period.

XIV.CANTEEN

Members:

Chair : Vanlallawmi Secretary : Zonunthari

Caroline Zaihmingthangi

Lalthanpuii Ralte Parijat Kumar K Zosangpuii C Lalremruatfela Dr Fanai Lalsangluaii

Objectives:

i. Authorized to select the canteen proprietor.

ii.To monitor the working of the college canteen and give necessary advice to them.

iii.To supervise and ensure efficient management of canteen towards providing hygienic, healthy and tasteful food items.

- i. Tender was called and six candidates appeared. Pi Lalbiaknungi was appointed to run the canteen.
- ii. Renovation of canteen was done.
- iii. Instruction on cleanliness and guidelines was given to the canteen runner.
- iv. The committee inspect the canteen at regular intervals.
- v. Charcoal burner was newly constructed at the corner of the canteen.

XV. LIBRARY

Members:

Objectives:

i.To guide the librarian in formulating general library policies and regulations ii.To work towards modernization and improvement of the library iii.To adopt measures to enhance and promote reading culture among students. iv. To organise orientation programmes on library use.

XVI.RECEPTION

Members:

Chair : Zodinpuii Secretary : Remlalsiama

> Laltlanchhungi H Lalnunsangi

Caroline Zaihmingthangi

Dr K B Singh

Objectives:

i.To look into matters pertaining to reception of invited guest, dignitaries , resource persons etc to college functions and programmes

ii.To cordially receive officials during college functions, inspections etc. and provide gifts and flowers if necessary. To make arrangement for transportation and accommodation of guests when required.

iii.To maintain the *visitor's book* and ensure that all visitors give their feedback of their visit in the book.

- i. Receptions are rendered when the commissioner visit the college on 25th Jan 2017.
- ii. Receptions are rendered on Consumer Awareness Programme on 22nd February 2017.
- iii. Receptions are rendered on National Science Day observation on 26th February 2017.
- iv. Duties assigned to the committee are well performed as a team. Visitors book is kept on which signature of our gueast are taken including our very own minister R Romawia (honorable minister of Higher and Technical Education etc)

XVII.CLEANLINESS & SANITATION

Members:

Chair : Lalrammawii Secretary : C.Zoramthara

> S Thangrimawii Mary Lalthansangi

Zonunthari

Lalremruati Hmar C Lalremruatfela

Objectives:

i.To Ensure that cleanliness is maintained in classrooms and college campus.

ii.To organise regular cleanliness drive jointly with the NSS.

iii.To take all necessary steps to ensure cleanliness (e.g selection of cleanest classrooms etc)

iv. To inculcate the importance of cleanliness and promote clean & hygienic living.

- i. Launching of Cleanliness Week on 28th September 2017 at College Auditorium in collaboration with NSS Unit, GZRSC. The Programme was organized successfully in the presence of our respected principal with all professors and students.
- ii. Observance of Cleanliness Week (2nd to 6th October 2017). Cleanliness week was observed throughout the week even by cleaning the college building and campus.
- iii. Students were reminded to maintain their respective rooms clean.
- iv. Took up responsibilities of cleaning up the place in every function held in the college such as:
 - a visit by the commissioner on 25th January 2017
 - consumer awareness programme on 22nd February 2017
 - observation of national science day on 28th February 2017
 - workshop on IPR on 24th March 2017.

XVIII.WEBSITE

Members:

Chair : H.Thangkhanhau Secretary : Laldingliana Sailo

Lalrinmawia

Lawrence Zonunmawia

R Lalmawipuii

Jonathan Lalrinawma

Lalhmunmawii

Objectives:

i.To monitor the college website and keep it updated with relevant informations including the syllabus, etc.

ii. To generate easy access of informations and study materials to benefit students as well as the faculty.

iii. Establish policy concerning the operation of the website.

Activities:

i. Updating website

Website committee update college website whenever required. All the items or notifications or news received from Principal Office to be upload into website without fail. Not only that, any news items or information received from Faculties, Staffs, etc. are uploaded into college website. Photos of our College New Buildings constructed under RUSA Funding. Different equipment purchased under RUSA are also updated into College website as a photographic evidence.

ii. Looking after inflibnet digital library

INFLIBNET is a UGC-Infonet Digital Library Consortium which was formally launched in December 2003 by Honourable President of India Dr. APJ Abdul Kalam. In this digital library, there are currently more than 6,000+ e-journals and 31,35,000 e-books. Website committee play major role since this program was joint by our college Library. Username and passwords for all the faculties whether regular or not is created by Website Committee. **Recently, username and password for newly joint faculties are created.**

iii. Joining IITs Program (NPTEL)

NATIONAL PROGRAMME FOR TECHNOLOGICAL ENHANCED LEARNING

NPTEL is an acronym for National Programme on Technology Enhanced Learning which is an initiative by seven Indian Institutes of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and Indian Institute of Science (IISc) for creating course contents in engineering and science. There are many courses appropriate for students of Computer Science, Home Science, Geology and BSc in different subjects. Different online courses were conducted through this NPTEL program and certificate from IITs were given to successful students who passed the exam.

Website Committee under the Guidance of our respected Principal takes initiative to join this program i.e. to open Local Chapter of NPTEL program is our college so that students can learn

whatever courses appropriate from them. We also apply to become the first Exam Centre for NPTEL program. If all our initiative steps of application for opening NPTEL local chapter and Exam Centre were successful, many students will benefit from this program and they will get certificate from IITs which will boost their career while applying for jobs.

iv. Website domain renewal

Our college website domain i.e. www.gzrsc.edu.in which was purchased from Education and Research Network (ERNET) as per directive from Ministry of Communications and Information Technology (Govt. of India). This domain is about to expire on July, 2018. Website Committee as agreed to take initiative to renew our college domain before the expiry date. Application for approval to sanction money for domain renewal had been submitted to our Principal and the same has been approved. *Therefore, our domain will be renewed for another 9 years*.

v. Upgradation of website framework

Currently, our college website was created using free open source software. Even though website committee tried our best to develop and create a very beautiful website, there are some limitations using this free website framework software. There are many limitations in terms of display, adaptations, capabilities of our college website using free framework software. Mobile phones and different smaller screens were not supported in the current website.

Therefore, Website Committee decided to purchase paid version of Website Framework Software to make our college website more beautiful, more capable and more adapt to different devices for accessing the website including mobile phones and handheld devices. Request or application for purchasing website software framework has been submitted to our Principal. We are happy to learn that our application has been approved by our Principal and our website will be upgraded using RUSA Fund.

vi. Joining microsoft imagine program

Microsoft Imagine, formerly known as DreamSpark, is a Microsoft program to provide students with software design and development tools at no charge. The program was available for more than 80 countries. It is estimated that up to 35 million students will be able to access these software titles free of charge through this program.

But in order to provide free software to students, institution have to join the program where there is a subscription fee. If our college subscribe to this program as a premium subscriber, we will be able to use most of Microsoft software including **Microsoft Windows** for free by our college as well as by the students. This will greatly reduce our licensing fee for software and we will be *free from Software Piracy*.

Considering the benefit of this programme, Website Committee take all the necessary steps so that our college can benefits from this program. Request to take necessary actions to join this program has been submitted to our Principal stating the different subscription fee and renewal fee. We are happy to learn that Principal approved our application for subscription of 3 years and renewal of 3 years i.e. 6 years under RUSA Funding.

Website Committee hope that by using this program, we will be free from Software Piracy and avoid hard questions from UGC NAAC Inspection Team. We also hope that this program will give us some points in positive ways in the next NAAC Accreditation.

vii. Looking after college official email

Website Committee in collaboration with Google Inc. offer official email for our college i.e. @gzrsc.edu.in which has the same features as Gmail. It means it is as good as Gmail. There are many situations where public emails are not accepted and only official email are accepted. Official email is also one of the first proof that employees are working in that organization or institute especially in the field of Research and Development.

Website committee look after this official email and created email IDs for all faculties. Recently, official email IDs were allocated to new faculties.

vii. Organizing state level workshop

Website Committee & Innovation Committee are planning to organized State Level Workshop on Financial Management and Digital Teaching Methods from 5th – 12th April 2017. This workshop will be sponsored by RUSA. Joint meeting between Website Committee and Innovation Committee had been held and all necessary steps were also taken including approval from the Principal. The target audience for this workshop is College Faculties. Experts from Information & Communication Technology Department, Govt. of Mizoram and SBI, Regional Business Office were invited to be the Resource Persons. Some of the experts from our College Faculties were also invited to present papers.

We hope that participants will benefits from the workshop as recent digital payment systems including Electric Bill Payment recently launched are included in the workshop. We also hope that faculties will be able to use their digital teaching skills in day to day teaching activities.

XIX.ALUMNI

Members:

Chair : Lalrinsangi Nghinglova Secretary : Dr.P.C.Rohmingliana

> Lalrammawii M.S.Dawngliani Lalremruati Hmar Maria Lalhmingmawii

Objectives:

i.To maintain close ties with our ex-students and take note of their placements.

ii.To organise Alumni day

iii.To assist the student alumni commitee

- i. Celebration of Alumni Day on 1st August 2017.
- ii. Organised election of office bearers and newly elected office bearers are given charge and names published on newspaper.
- iii. Felicitation of successful Alumni Members.
- iv. Organised Research Motivation Seminar.
- v. Release of Alumni Constitution.

XX. RESEARCH & SEMINAR

Members:

Chair : Dr Lalzahawmi Chenkual Secretary : Dr.Ricky Lalhmangaihzuala

> Prof B Zoliana Dr Rosangliana

Lalrinsangi Nghinglova

Sailopuii

Dr Fanai Lalsangluaii

Objectives:

i.To Facilitate research culture among students and the faculty.

ii.To initiate, facilitate,integrate, recommend and support research projects conducted by faculty members and students

iii. To organise Seminars, lectures on selected topics at regular intervals.

- i. Organised the celebration of National Science Day on 27th February 2017 at college Auditorium, GZRSC.
- ii. Preparation of certificate in intellectual Property Rights and Grass Root Innovation on 24th March 2017 at Professor's Common Room, Gzrsc.
- iii. Organised a seminar on "Career Advancement Programme" on 28th August 2017 at College Auditorium, GZRSC in collaboration with Central YMA, Mizoram.
- iv. Organised winter class on Environmental Research technique for 3 months course started on 1st December 2017. This programme is sponsored by RUSA, GZRSC in collaboration with State Legal Services Authirity HRDC, MZU and Pollution Control Board.

XXI.DISASTER MANAGEMENT

Members:

Chair : Lalnunthara Secretary : C.Lalremruatfela

> Lalsangliani Khawlhring Dr. Lalzahawmi Chenkual

C. Zoramthara Laltlankima

Dr. C Lalmuankimi

Objectives:

i.To react to any kind of disaster, natural or man-made that involves the college.

ii.To spread awareness on mitigation of any kind of disaster

iii. To work in close proximity with the Disaster management Department, Govt. of Mizoram.

XXII.VILLAGE & SCHOOL ADOPTION

Members:

Chair : Prof. B.Zoliana

Secretary : Dr.Ricky Lalhmangaihzuala

Dr R Lalengmawia

Lalthanpuii

Laltluangkimi Ralte Lalrinngheti Ralte Vanlallawmi

Lalhruaitluanga

Objectives:

i.To encourage extension programmes for greater social good.

ii.To work towards upliftment of adopted villages & schools.

iii. To arrange invited lectures in collaborations with the school authority.

Activities:

i. The meeting resolved to meet the authority of the adopted School i.e Rosebud School, Ramhlun Venglai. Three members from the committee visited Principal and Staff of Rosebud School. It was discussed about our collaboration for promoting Science Education which can rendered to them. The technical that can be rendered are listed as undet-

- a. Observation and study of functioning of lower classes.
- b. Popular lecture.
- c. Career Guidance.
- d. Invited lectures on selected topics.
- e. Laboratory demonstration and support.
- f. Guidance on science activities (Science Congress, Science Seminar, Science Exhibition etc)
- ii. The two schools Govt. Zemabawk Hogh School and Govt. Republic High School were also visited in pursuance of the Director School Edication request. Two School also communicated on promotion of Science Education and Services we can rendered.
- iii. We also included the adoption of Govt. Venglai Middle School in addition to the existing adopted school. We already visited the Principal and staff of this school and discussed our action plan for our collaboration and promotion of Science Education.

XXIII.WOMEN STUDIES

Members:

Chair :Lalsangkimi Hmar Secretary :Lalrinsangi Nghinglova

Lalthanpuii Ralte Lalhmingliani Hlondo

Objectives:

i. To work towards promotion of gender equity.

ii.To uplift the girl student and provide special provisions wherever possible.

iii. To coordinate with the Women Study Centre, Mizoram University in organising seminars, etc.

- i. Visit to the women centre MZU.
- ii. Supported Home Science Department in extension programme to the local women in the college vicinity. Provide awareness on child's rights, budgeting etc and organized cooking class.

XXIV.INTELLECTUAL PROPERTY RIGHT

Members:

Chair :Dr. Lalhmingliana Hnamte

Secretary :C.Zoramthara

Dr Arup Kumar Prof B Zoliana

Lalhmingliani Hlondo

Objectives:

i.To disseminate awareness on patent rights and educate members on issues relating to intellectual property

ii.To study and monitor intellectual property and copyright issues.

iii. To coordinate with the IPR Cell, Department of Science & Technology, Govt. of Mizoram.

Activities:

i. Organised one day state level workshop on Intellectual Property Right and Grass Root Innovation jointly with Patent Information Centre, MISTIC, Govt of Mizoram on 24th March 2017 at Professor's Common Room.

XXV.STUDENT'S SUPPORT

Members:

Chair : Zodinpuii

Secretary : Lalrinsangi Nghinglova

Dr. Lalzahawmi Chenkual

Lalsangkimi Hmar

Caroline Zaihmingthangi

Lalthanpuii Ralte M.S.Dawngliani H Thangkhanhau Lalhruaitluanga

Objectives:

i.To provide assistance to students who are economically deprived.

ii.To organise add on courses such as CCC and other such courses.

iii.To organise Personality Development course for final year students and equip them with life skills.

iv. To provide career counselling to students and look out for placement of students.

- i. CCC classes conducted from August 2017.
- ii. Career counseling class organized for all students on three occasions i.e 25th and 26th July 2017 and 1st August 2017.
- iii. Register maintained to help students to "Earn while they lean".
- iv. Students Representatives name Sylvia LAllawmkimi and Nick Lalrinmawia were sent to attend a three days programme on Mizoram Sustainable Development foundation during the monthe of August.
- v. Student Representative namely Lunngaihliani and Lalduhawma BCA sent to attend the Entrepreneur Awareness Camp.
- vi. Financial assistance given to 3 students from the Poor Fund collected by the faculty of the college.

XXVI.INNOVATION CLUB

Members:

Chair :Lalhruaitluanga Secretary :Lalmalsawmi

Lalrinmawia

Mary Lalthansangi C Lalngaihawma

Objectives:

i.Explore innovative ideas in local groups

- ii. Organise seminars, conferences, workshops, exhibitions relating to innovations
- iii. Develop innovative mindset and train for entrepreneurship
- iv. provide opportunities and platforms for students, teachers and other members of the society
- v. Support and facilitate grass root innovations.
- vi. Document innovations for different walks of life
- vii. Collaborate with micro, small and medium enterprises.
- viii.To promote innovation, creativity and engagement in science.
- ix. To cultivate in students the ability to think "out of the box"

- i. Bulletin board furnished by different departments as follows: Botany (5th sem), Home Science(5th sem), Zoology (5th sem) and BCA(5th sem). The bulletin board near Professor's common Room was manned and furnished with creative ideas by the said departments starting from 28th Aug till date.
- ii. Science exhibition 2017 was organized on 12th and 13th October at the college Auditorium. In this exhibition 10 departments of GZRSC displayed about 45 models altogether. Chemistry department was awarded the most innovative department with the model "Indigenous Incineration". More than 420 students from 9 different institutions attended this exhibition.
- iii. The club visited Aizawl Venglai Primary School on 10th February 2017. Mr Lalrinmawia and Mr Lalhruaitluanga presented lecture on Basic Science and Application of Computer. They were very interested and happy in the program.
- iv. Innovation club and website committee are planning to organized State Level Workshop on Financial Management and Digital Teaching Methods on 5th -12th April 2017.
- v. Club members from Computer Science department and chairman attended seminar on Thinking Social Connecting Youth to Social Enterprise organized by IIM Calcutte & TATA Social Enterprise on 31st March 2017 at PAchhunga University College.

XXVII.NSS

Members:

Chair : Lalnunthara

Secretary : Dr. P.C.Rohmingliana

Lalnunthara C Zoramthara

Mimi Lalmuanawmi Rebecca Lalnuntluangi Dr P.C Rohmingthanga C. Lalremruatfela

Objectives:

i.To fulfill the aims and objectives of the NSS ii.To serve the society without bias.

- i. Special Camping was organized at Durtlang on 15th to 21st July 2017.
- ii. Orientation programme for first semester students was organized on 27th July 2017.
- iii. Three Programme officers attended P.O meeting at Aijal Club on 11th August 2017.
- iv. Hosted visit programme of Central Evaluation Team on 24th August 2017.
- v. Attended "Clean Aizawl City" programme/Observance of 49th NSS day held on 22nd September at A.R. Ground.
- vi. One Programme Officer attended P.O meeting at SNO office on 22nd September 2017.
- vii. Launching of cleanliness week and observation of cleanliness week on 28th September at college campus.
- viii. Mass Cleanliness Drive at Chite River on 29th September 2017.
- ix. Special Camping was organized at Sairang Dinthar Veng during 23rd to 29th September 2017.
- x. Attended P.O meeting for training on Life skills, leadership and personality development for Mamit and Champhai District at SNO Office Chamber.
- xi. Plantation site visit/cleaning was conducted on 27th November 2017.

XXVIII.RED RIBBON

Members:

Objectives: i.To work towards fulfillment of the ideals of MSACS ii.To work in co-ordination with NSS

XXIX. SPOKEN HINDI

Members:

Chair : Dr. Rosangliana

Secretary : Dr. Lalzahawmi Chenkual

Members : RUSA Nodal Officers and Principal

Objectives:

i. To promote Hindi Language to the faculties and the students

- i. RUSA Nodal Officers Meeting on 08/09/2017 resolved to conduct Spoken Hindi Course. Officers In Charges were appointed.
- ii. Advertisement for the course was made. Application form was given out. Around 200 students applied for the course. Final Selection of the student was done on 13/09/2017. 50 final year students were selected to attend the course.
- iii. Opening function of RUSA sponsored Hindi Course was held at college auditorium at 2:30 pm.
- iv. Classes were taken regularly on every Thursday and Friday. Either the secretary or chairman was always present in all the classes.

10. NEW INFRASTRUCTURE AND FACILITIES ACQUIRED

A. Constructions

SI. No.	Name of facilities	Amount	Utilised	Balance	Present Position	Remark
1	Construction of Laboratory Building	14000000.00 (allocated)	13055043.00	944957.00	Construction completed	Balance shown is for 5% security deposit

B. Up gradation and renovation of existing facilities

SI. No	Particulars of Up gradation/Renovation	Amount	Utilised	Balance	Present Positio n	Remark
1	Construction of Boys Hostel and Girls Hostel, construction of approach road to hostels, construction of Environmental Laboratory etc.	14000000.0 0 (allocated)	4,094,325.0 0	9,905,675. 00	Initial stage of construc tion	Amounts shown here is as per allocation in the DPR

C. **Equipment**:

1. CHEMICALS

SI. No.	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark
1	Acetic Acid – 1 bott	16-25440	440	Nil		Entered in Botany Dept. stock register
2	Acetic Acid 500ml LR BIOSOL – 4 bott	1220	1220	Nil		
3	Acetone – 5 bott	1875	1875	Nil	2	
4	Acid Proof Hand Gloves 14" OPG - 10pair	2550	2550	Nil		
5	Ammonia Solution 500ml LR SQ - 2bott	400	400	Nil		

6	Ammonium Buffer Solution 500ml LR SQ - 2bott	460	460	Nil		
7	Ammonium Ferrous Sul- phate 500gm LR RB – 4pkt	1176	1176	Nil		
8	Anthrone 25gm ER SQ – 4pkt	3230	3230	Nil		Entered in
9	Barfoed's Reagent 500ml - 1bott	385	385	Nil	2	Zoology
10	Barium Chloride 500gm – 2pkt	737	737	Nil	2	Dept. stock register
11	Barium Sulphate 500gm LR SQ - 1bott	280	280	Nil		
12	Benzene 500ml – 5bott	1750	1750	Nil		
13	Biurate Reagent 100ml LR ETPL - 1bott	110	110	Nil		
14	Borax Carmine Stain. 100mlLR NB – 4pkt	1800	1800	Nil		
15	Bouin's Fluid 100ml LR ETPL -2bott	600	600	Nil		Entered in
16	Buffer Tablets Ph 4.0 20tab LR SQ - 1pcs	403	403	Nil	2	Chemistry Dept. stock
17	Buffer Tablets Ph.7.0 20tab LR SQ – 1box	403	403	Nil		register
18	Carbontetrachloride 500ml – 5bott	10600	10600	Nil		
19	Carmine 5GM RB - 1bott	714	714	Nil		
20	Chloroform 500 LR SQ – 9bott	3380	3380	Nil		
21	D.P.X. Mountant 250ml LR SQ - 2bott	978	978	Nil		
22	Deionised Water - 4	920	920	Nil		
23	Dextrose Anhydrous 500gm LR RB - 2bott	790	790	Nil		Entered in Botany
24	D-FRUCTOSE 500gm RB - 2bott	1700	1700	Nil	3	Dept. stock
25	Diphenylamine - 1bott	925	925	Nil		register
26	Diphenylamine 100gm ER SQ - 1nos	470	470	Nil		
27	Distilled Water – 1case	230	230	Nil		

28	Distilled water 5ltr (carton of 4jar) LR RB - 1carton	1408	1408	Nil		
29	EDTA Acid 100gm LR RB - 2bott	594	594	Nil		
30	EDTA disodium salt GRM 1370-1kg - 1nos	2373	2373	Nil		
31	Eosin Stain Solution (aqueous) 100ml LR STB - 2bott	400	400	Nil		
32	Formaldehyde 500ml LR SQ - 10bott	2600	2600	Nil		
33	Glycerol 500ml LR BIOSOL - 4bott	1680	1680	Nil		
34	Haematoxylin Powder 5GM LR RB - 2nos.	5940	5940	Nil		
35	Hydrochloric Acid – 7bott	1890	1890	Nil		
36	Hydrochloric ACID 500ml LR RB - 5bott	1350	1350	Nil	-	
37	Hydrochloroc acid 205 ltr LR SQ - 1bott	675	675	Nil		
38	Hydroxyylammonium Chloride 100gm LR SQ - 2bott	900	900	Nil		Entered in Chemistry
39	Iodine 100g – 2pkt	5560	5560	Nil	3	Dept. stock register
40	Lab Testing Soln. 450ml HLX – 17bott	4760	4760	Nil		
41	Lactophenol Mounting 100ml LR NB - 2bott	340	340	Nil		
42	ManganousSulphate LR 500ggm SQ - 2nos	978	978	Nil		
43	Methyl Alcohol 500ml SQ - 2bott	520	520	Nil		
44	Methylene Blue – 2bott	840	840	Nil		
45	N-Butyl Alchohol 500 ml LR RB – 5bott	1922	1922	Nil		
46	Ninhydrin 10gm AR RB - 3bott	2607	2607	Nil		Entered in Zoology
47	Nitric Acid 500ml LR RB - 4bott	1600	1600	Nil	4	Dept. stock
48	Oxalic Acid - 2bott	820	820	Nil		register

49	Orthophisphoric acid 500ml – 5bott	890	890	Nil		
50	Paraffin wax 60-62*C 500 gm LR SQ - 1nos	750	750	Nil		
51	Phenolphthalein Indicator Soln. 100ml LR ETPL - 5bott	700	700	Nil		
52	Potassium Dichromate 500gm LR SQ - 1nos	1075	1075	Nil		
53	Potassium ferricyanide LR 500gm SQ - 1nos	1869	1869	Nil		Entered in Biochemistry
54	Potassium Iodide 500g – 1pkt	5375	5375	Nil	4	Dept. stock register
55	Potassium Nitrate 500g – 2pkt	900	900	Nil		
56	Rectified Spirit – 3bott	450	450	Nil		
57	Schiffs Reagent 500ml – 2bltt	1208	1208	Nil		
58	Sodium Azide100gm LR SQ - 1nos	550	550	Nil		
59	Sodium Carbonate 500gm LR EM -2bott	700	700	Nil		
60	Sodium chloride 500gm LR BIOSOL - 2bott	380	380	Nil		
61	Sodium Flouride 500gm LR SD'S - 2nos	1376	1376	Nil		
62	Sodium Hrdroxide flakes 500gm LR SQ - 1nos	164	164	Nil		Entered in
63	Sodium Hydrogen Carbonate 1KH LR SQ - 1nos	373	373	Nil	4	Home Science
64	Sodium Hydroxide Pellets 500gm AR RB – 11pkt	4100	4100	Nil		Dept. stock register
65	Sodium Sylphate 500mg LR SQ - 2nos	460	460	Nil		
66	Sodium thioxalphate 500g – 2pkt	438	438	Nil		
67	Solochrome Black T 25gm- SQ - 1nos	457	457	Nil		
68	Special Solvent 99.90% 500ml – 15bott	6750	6750	Nil		
69	Starch Soluble 500gm LR	5384	5384	Nil		

	SQ – 4pkt					
70	Sulfuric Acid 2.5 ltr LR SQ - 1bott	1089	1089	Nil		
71	Sulfuric Acid 500ml – 17bott	5690	5690	Nil	- 5 -	Entered in Chemistry Dept. stock register
72	Sulphuric Acid – 3bott	1490	1490	Nil		
73	TOULENE Rectified 500ml LE SQ - 1bott	420	420	Nil		
74	Xylene Rectified 500ml LR RB - 2bott	780	780	Nil		
	TOTAL	122101	122101	Nil		

2. LAB. EQUIPMENTS

SI. No.	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark
1	1.5 copper wire, 4 coils	8320	8320	Nil	11	Entered in Physics Dept. stock register
2	101 PH Meter E1 – 5nos.	74590	74590	Nil		Entered in Botany,
3	111 PH Meter El - 3pcs	32400	32400	Nil	11	Zoology, Biochemistry
4	112 Digital PH Meter ESICO - 3pcs	29100	29100	Nil		Dept. stock register
5	2.5 copper wire - 1coil	3320	3320	Nil		
6	2m plate & box - 10set	1430	1430	Nil	11	Entered in
7	312 BO Digital Photo Colorimeter 8F El - 2pcs	25960	25960	Nil	11	Physics Dept. stock register
8	1 no. each of 3D model of internal structure of the Earth i) Internal Structure of the Earth ii) Plate Tectonics iii) Geological Time Scale	7950	7950	Nil	11	Entered in Geology Dept. stock register
9	3m plate & box - 10set	1830	1830	Nil		

	1			1	-	1
10	5 in 1 comb. With box - 1set	192	192	Nil		
11	5m plate & box complete set - 8set	4904	4904	Nil		
12	601 Digital Conductivity Meter E1 – 2nos.	28160	28160	Nil		
13	611 Digital Conductivity Meter E1 – 4nos.	43200	43200	Nil		
14	9 Volt Battery – 2nos.	550	550	Nil	12	Entered in Physics Dept. stock register
15	AAA Battery - 1strip	130	130	Nil		Stock register
16	Adaptor – 2nos.	2960	2960	Nil		
17	Aerial Photograph/steropair (Black & White) 25x25 - 5nos	3750	3750	Nil	12	Entered in Geology Dept.
18	Aerial Photograph/steropair (Colour) 25x25 - 10nos	8500	8500	Nil		stock register
19	Aluminum wire for earthling - 3coil	270	270	Nil	- 12	Entered in Electronics
20	Analog Multimeter - 1nos	700	700	Nil	12	Dept. stock register
21	Analytical Digital Balance 200mg/.001mg SPT-200 PRIME - 1pcs	41694	41694	Nil	12	Entered in Chemistry Dept. stock register
22	Audio Frequency Generator 20 Hz to 200 KHz O/P 0-20V RMS – 2nos.	15000	15000	Nil		
23	Auto digital TDS meter – 1nos.	6600	6600	Nil	12	Entered in Physics Dept.
24	Bacteriological incubator 12X12X12 DIAGNOS - 1pcs	7560	7560	Nil		stock register
25	Bar Magnet 3" Alnico (5pcs) LAFCO - 2set	2300	2300	Nil		

26	Bar Pendulum Set 4 Kowa - 2pcs	2900	2900	Nil		
27	Battery Eliminator (S.S) (0-5 volt, 3Amp) – 2nos.	7400	7400	Nil		
28	Battery Eliminator (S.S) (0-5 volt, 500mA) – 2nos.	4400	4400	Nil		
29	Binocular Microscope B1-220AC Motic – 5nos.	230650	230650	Nil		
30	Binocular Microscope RED 200 MOTIC – 4nos.	197140	197140	Nil		
31	Binocular Polarising (Petrological) Microscope - 4nos	177800	177800	Nil	13	Entered in Geology Dept.
32	Bottle Brush (set of 12pcs) TST - 1set	275	275	Nil	- 13	stock register
33	Brunton Compass : Metal body in a case (Foreign make) - 6nos	25200	25200	Nil		
34	Bunsen Burner W/out Stopclock (set of 2) TST - 5set	2725	2725	Nil		Entered in
35	Bunsen Burner with Stop Clock BRIJ - 1pcs	440	440	Nil	13	Chemistry Dept. stock
36	Burete Stand 8x5x24 MICO (Set of 2) – 6set	3936	3936	Nil		register
37	Chisel set (3 in a set) 16x150mm - 5nos	3250	3250	Nil	13	Entered in Geology Dept. stock register
38	Chromatography Paper 46x67 (Set of 10) LABSMAN NTC - 1set	880	880	Nil	13	Entered in Botany Dept. stock register
39	Collpitt Oscillator Trainer Kit – Model # Me 662 - 1nos	2241	2241	Nil	13	Entered in Electronics Dept. stock register
40	Contact Goniometer (Steel make) - 4nos	1040	1040	Nil	13	Entered in
41	De- Sauty Bridge – 2nos.	12200	12200	Nil	13	Physics Dept. stock register

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42	Decade Resistance Box (EIGHT DIALS) 1 ohm to 100 M ohms – 2nos	7800	7800	Nil		
43	Different Ore Minerals - 17nos	3150	3150	Nil		Entered in
44	Different Rock hand specimens - 17nos	5525	5525	Nil	13	Geology Dept. stock register
45	Digital Balance (Electronics) 0.001gm- 200gm Bandhan - 1pcs	42780	42780	Nil	12	Entered in Zoology Dept.
46	Digital Colorimeter 8F 312 E1 – 8nos.	86360	86360	Nil	13	stock register
47	Digital Conductivity Meter Alpha 06 E1 - 2pcs	19600	19600	Nil	13	Entered in Electronics Dept. stock register
48	Digital Microscope - 1pcs	4600	4600	Nil	13	Entered in Botany Dept. stock register
49	Digital Multimeter – 2nos.	2400	2400	Nil	14	Entered in Physics Dept. stock register
50	Digital PH Meter Alpha- 01 E1 - 2pcs	19600	19600	Nil	14	Entered in Zoology Dept. stock register
51	Dip Circle - 1pcs	3960	3960	Nil	14	Entered in Electronics Dept. stock register
52	Dissecting Microscope- Almicro -	4340	4340	Nil	14	Entered in Botany Dept.
53	Eco Tester Ph2 Pen Type EutechVidhi - 1pcs	10955	10955	Nil	14	stock register
54	Eryscreen - 1kit	900	900	Nil	14	Entered in Geology Dept. stock register
55	Eye piece pointer – 3nos.	900	900	Nil	14	Entered in Botany Dept. stock register
56	Face Mask – 5nos.	25	25	Nil	14	Entered in Geology Dept. stock register

57	Fet Voltmeter Trainer – Me 535 - 1nos	3150	3150	Nil	14	Entered in Electronics Dept. stock register
58	Filter paper 11cm (set of 10 PKT) INDICA - 1set	750	750	Nil	14	Entered in Chemistry Dept. stock register
59	Fossil Plants – 1no.	500	500	Nil	14	Entered in Geology Dept.
60	Fossils specimens - 1set	10650	10650	Nil	14	stock register
61	Fuse te 5amp - 1box	400	400	Nil	14	Entered in Physics Dept. stock register
62	Garmin GPS Etrex 30 - 1pcs	22000	22000	Nil	- 14	Entered in Geology Dept. stock register
63	Garmin GPS Oregon 650 - 1pcs	38990	38990	Nil		
64	Gas part – 1no.	250	250	Nil	14	Entered in Chemistry Dept. stock register
65	Geological Instruments &Equipments - 1no.	30420	30420	Nil		J
66	Geologist Hammer - 5nos	6500	6500	Nil		
67	GL-0011 - 1no	35320	35320	Nil		Entered in
68	GL-0012 - 1no	143196	143196	Nil	15	Geology Dept. stock register
69	GL-0013 - 1no	98947	98947	Nil]	Stock register
70	GL-0014 - 1no	3401	3401	Nil		
71	GL-0015 - 1no	177670	177670	Nil		
72	GL-0016 - 1no	205952	205952	Nil		
73	H Parameter of PNP Transistor in Common Emitter Mode. Me 532D - 1nos	4410	4410	Nil	15	Entered in Physics Dept. stock register
74	Haemcytometer - 12nos	26400	26400	Nil	15	Entered in Zoology Dept.

75	HaemocytometerMarien feld (O) - 3sets	7350	7350	Nil		stock register
76	Hair Dryer - 4nos	2000	2000	Nil	15	Entered in Zoology Dept. stock register
77	Hand pump - 1no	550	550	Nil	15	Entered in Chemistry Dept. stock register
78	Hartley Oscillator Trainer Kit # Me 661 - 1no	2241	2241	Nil	15	Entered in Physics Dept. stock register
79	Haversack adjacent felt with pocket good quality - 5nos	1750	1750	Nil		
80	Hot Air Over 12x12x12 DIAGNOS - 1pcs	7628	7628	Nil	45	Entered in Botany Dept. stock register
81	Hot Plate 16"X10" (AM- 129) ALMICRO - 1pcs	4235	4235	Nil	15	
82	Igneous & Metamorphic Petrology - 3nos	1485	1485	Nil	15	Entered in Geology Dept. stock register
83	Inclined Monocular Microscope 6MO ALMICRO - 3pcs	29976	29976	Nil	15	Entered in Biochemistry Dept. stock register
84	Industrial Helmet - 20pcs	3540	3540	Nil	16	Entered in Geology Dept. stock register
85	Junction Diode Rectifier & Filter Characteristics with Power Supply - 2no	16600	16600	Nil	16	Entered in Physics Dept. stock register
86	Lab. Balance 200mg/0.001mg SPT 200 - 1pcs	41694	41694	Nil		Entered in
87	Lab. Balance 500gm/0.01gm - 2pcs	5940	5940	Nil	16	Botany and Zoology Dept. stock register
88	Lab. Thermometer - 5pcs	450	450	Nil		
89	Laboratory Balance BW- 320 300gm/0.01 - 1pcs	14500	14500	Nil		
90	Lancets 200cs - 2pkt	540	540	Nil	16	Entered in Physics Dept.

91	Leucoband (1meter) – 3nos	600	600	Nil		stock register
92	Me 611 Transistor Amplifier Circuit (CB, CE & CC Modes) - 1no	4275	4275	Nil	16	Entered in Electronics Dept. stock register
93	Me 619 Two Stage RC Couped Amplifier - 1no	2583	2583	Nil		
94	Microscope Labovision - 10nos	72000	72000	Nil	16	Entered in Zoology Dept. stock register
95	Mirror Stereoscope binocular - 2nos	328000	328000	Nil	16	Entered in Physics Dept. stock register
96	Moh's Scale of Hardness box - 10nos	5800	5800	Nil	16	Entered in Geology Dept. stock register
97	Moh's Scale of Hardness set - 2nos	1050	1050	Nil		
98	Multimeter - 2pcs	9000	9000	Nil		
99	Multimeter Normal - 1pc	799	799	Nil	16	Entered in Physics Dept. stock register
100	Mx Sold. Pump - 1no	250	250	Nil		
101	OP-AMP Characteristics - 2nos	14000	14000	Nil		
102	Phase Shift Oscillator Trainer Kit # Me 664 - 1no	2241	2241	Nil		
103	Plain Table with accessories & Stand 60x75cm Eastman - 2pcs	5280	5280	Nil		
104	Plier - 1no	200	200	Nil	17	Entered in Geology Dept. stock register.
105	Pocket Stereoscope - 6nos	4605	4605	Nil	17	Entered in Electronics Dept. stock register
106	Rebound hammer, Labtest make - 1no	12500	12500	Nil	17	Entered in Geology Dept.

107	Sold. Icad - 1no	100	100	Nil		stock register
108	Sold. Paste - 1no	20	20	Nil		
109	Soldron 25w Ori - 1no	350	350	Nil		
110	Student Microscope KB5 with LED LAFCO - 2pcs	12400	12400	Nil	17	Entered in Biochemistry Dept. stock register
111	Surface Tension Capillary Tube Appt. SYMAX - 2set	5000	5000	Nil		F. J. J. J. J. J.
112	Tangent Galvanometer Brass MKOW - 2pcs	3780	3780	Nil	17	Entered in Physics Dept. stock register
113	TapariaScrwedriver Sets - 9sets	1980	1980	Nil		Stock register
114	Test Tube Stand Poly 6 Holes (12pcs) TST - 1pkt	380	380	Nil		
115	Tester Set - 1no	240	240	Nil		Entered in
116	THERMOHYGROMETER with CLOCK HTC-1 RAVI - 4pcs	5332	5332	Nil	17	Botany and Biochemistry Dept. stock register
117	Thermometer – 20nos.	3900	3900	Nil		
118	Thermometer 250'c (10pcs) LAFCO - 3nos	6296	6296	Nil		
119	Transistor Characteristics Apparatus BRIJ - 1pc	5500	5500	Nil	17	Entered in Physics Dept. stock register
120	Trinocular Petrological Polarizing Microscope with Photographic attachment (with installation charge) – 1no	241520	241520	Nil	17	Entered in Geology Dept.
121	TrinocularPetrological Polarizing Microscope with Photographic attachment - 1no	185000	185000	Nil		stock register

	TOTAL	3149498	3149498	Nil			
128	Young Modulus APPT. SYMAX - 2pcs	3200	3200	Nil			
127	Wire striper - nos	1185	1185	Nil		Entered in Electronics Dept. stock register	
126	Wire Gauge with Frame TST - 9doz	2565	2565	Nil			
125	Water Bath Thermostat S/S PTP - 1pc	8500	8500	Nil	17		
124	Voltage Stabilizer Char. Of Zener Diode with 4 meter – Model # Me 542 - 2nos	4680	4680	Nil			
123	Two Stage R-C Coupled Transistor Amplifier with Power Supply - 2nos	7200	7200	Nil			
122	Twin core wire - 35mt	1060	1060	Nil			

2. COMPUTER & PERIPHERALS, PROJECTOR ETC.

SI. No	Particulars of new equipment Purchase	Amount	Utilised	Balanc e	Page no. of Asset Register	Remark
1	24 ports switch - 1no	3850	3850	Nil		
2	4 ports Hub - 1no	615	615	Nil		
3	All in ine PC - 1no	38900	38900	Nil	30	Installed in different
4	Assembly Computer Set Core i3 4th Gen HA-H81M- S1 - 3sets	81000	81000	Nil		rooms
5	Cabinet - 10nos	24500	24500	Nil		

6	Canon digital camera SLR EOS 750D (18-55) lens+8GB card+Bag - 1no	53000	53000	Nil		
7	Canon Printer - 1no	13300	13300	Nil		
8	Ceiling Mount - 1no	2500	2500	Nil		
9	Computer set - 10sets	336000	336000	Nil		
10	CPU - 1no	22650	22650	Nil		
11	Dongle - 3nos	15807	15807	Nil		
12	HDMI Cable - 9nos	7191	7191	Nil		
13	Keyboard Mouse - 8nos	6100	6100	Nil		
14	Labtap - 3nos	59400	59400	Nil	30	For English Dept.
15	Lan Cable (Cat 6) - 1no	0	0	Nil	20	Installed in
16	Laptop - 1no	75000	75000	Nil	30	different rooms
17	Laser Printer - 1no	8945	8945	Nil		
18	RAM - 10nos	26500	26500	Nil		
19	Mira cast - 4nos	9200	9200	Nil		
20	Monitor - 1no	12500	12500	Nil	24	Installed in
21	Motherboard - 10nos	44500	44500	Nil	31	different rooms
22	Mouse & Keyboard - 11nos	14498	14498	Nil		
23	MS Office - 1no	7600	7600	Nil		
24	Optical Drive - 10nos	11500	11500	Nil		

25	PC CORE i3 4th Gen GA- H81M-S - 3nos	83970	83970	Nil
26	Presenter - 2nos	9590	9590	Nil
27	Printer - 1no	18000	18000	Nil
28	Processor - 10nos	85750	85750	Nil
29	Projector Wiring & Installation	5800	5800	Nil
30	Projector - 15nos	644170	644170	Nil
31	Projector stand - 3nos	7482	7482	Nil
32	Samsung Toner - 1no	200	200	Nil
33	SMPS - 2nos	1300	1300	Nil
34	Spike Booster - 11nos	5000	5000	Nil
35	SSD - 10nos	38850	38850	Nil
36	UPS - 16nos	32248	32248	Nil
37	Wall Mount Kit - 3nos	12000	12000	Nil
	TOTAL	1819416	1819416	Nil

3. OFFICE & CLASSROOM FURNITURES

SI. No	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark
1	Almirah small KD - 4nos	50292	50292	Nil		
2	Almirah small Storwel minor plain - 1no	16462	16462	Nil	50	Fitted in different rooms
3	AlmirahStorwel Big Plain + 1 Shelf - 1no	21666	21666	Nil		1001113

4	AquaguardReviva - 1no	14000	14000	Nil		
5	Barcode scanner - 1no	3250	3250	Nil		
6	Book case 4 Door - 2nos	53658	53658	Nil		
7	Carpet - 1roll	10000	10000	Nil		
8	Class A, B, AB & Push Pull Amplifier – Model # Me 622 - 1no	4275	4275	Nil		
9	Computer Table - 6nos	39116	39116	Nil		
10	Double sided steel Bookrack maindoor - 1no	25082	25082	Nil		
11	Plastic Chair - 12nos	5700	5700	Nil		
12	Revolving Chair 5DOZ - 12nos	66285	66285	Nil		
13	Almirah (sliding door) - 8nos	206632	206632	Nil		
14	Study Table - 1no	5600	5600	Nil		
15	Table - 2nos	15500	15500	Nil		
16	Table 2'x6' h-30" - 10nos	150000	150000	Nil	F4	Fitted in
17	Table T-32 - 1no	11190	11190	Nil	51	different rooms
18	White Board - 6nos	33000	33000	Nil		
	TOTAL	731708	731708	Nil		

5. STATIONARIES

SI. No.	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark
1	Arch file - 4nos	800	800	Nil		For RUSA Office
2	Cash book - 5pcs	270	270	Nil		
3	Double clip file - 2pcs	200	200	Nil	60	
4	Ring file - 10nos	1000	1000	Nil		
5	Ring file (A4 size) - 2pcs	200	200	Nil		
	TOTAL	2470	2470	Nil		

6. SPORTS GOODS

SI. No.	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark
1	Badminton jersey – 4pcs	1200	1200	Nil		
2	Bag - 1no	500	500	Nil		
3	Basketball (indoor) - 2nos	2400	2400	Nil		Entered in Student Union stock register
4	Basketball (outdoor) - 2nos	1400	1400	Nil	-	
5	Basketball jersey - 1set	13500	13500	Nil	66	
6	Check clock - 2nos	300	300	Nil	00	
7	Chess clock - 1no	2000	2000	Nil		
8	Chess jersey - 5pcs	1500	1500	Nil	_	
9	Chess mat - 1no	300	300	Nil		
10	Chess men - 2nos	350	350	Nil		

11	Cock - 4cartoons	7550	7550	Nil		
12	Discuss (girls) - 1no	2200	2200	Nil		
13	Discuss (men) - 2nos	2400	2400	Nil		
14	Football - 4nos	5800	5800	Nil		
15	Football jersey - 1set	18000	18000	Nil		
16	Guitar stand - 1no	1350	1350	Nil		
17	Hertz Acoustic Guitar HW4142 - 1no	11000	11000	Nil		
18	Hertz cable 10m - 1no	1890	1890	Nil		
19	Javelin (girls) - 2nos	2200	2200	Nil		
20	Javelin (men) - 2nos	2400	2400	Nil		
21	Running jersey - 8pcs	2400	2400	Nil		
22	Shot put (girls) - 1no	1100	1100	Nil	67	Entered in Student
23	Shot put (men) - 1no	1200	1200	Nil	07	Union stock register
24	TT jersey - 4pcs	1200	1200	Nil		
25	Tug of war jersey - 9nos	2700	2700	Nil		
26	Volleyball - 4nos	4900	4900	Nil		
27	Volleyball jersey - 1set	14100	14100	Nil		
28	Volleyball net - 1no	2999	2999	Nil		
	TOTAL	108839	108839	Nil		

7. GLASSWARES

SI. No.	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark		
1	Beaker 1000ml – 5nos	5244	5244	Nil				
2	Beaker 100ml Borosilicate Kaybee (Pkt of 10pcs) AMBAY – 11nos	7823	7823	Nil				
3	Beaker 2000ml – 7nos	3400	3400	Nil				
4	Beaker 250ml – 6nos	1171	1171	Nil		Entered in Botany,		
5	Beaker 500ml B/S Kaybee (set 0f 6) AMBAY – 11nos	8630	8630	Nil	72	Biochemistry, Zoology and Chemistry Depts. stock registers		
6	Beaker 50ml Borosilicate Kaybee (Pkt of 10pcs) AMBAY - 1pkt	715	715	Nil				
7	Conical Flask 250ml B/S Kaybee (10pcs) AMBAY - 2pkt	2640	2640	Nil				
8	Conical Flask 50ml Borosilicate Kaybee AMB (10pcs) -	3070	3070	Nil				
9	Cover Slip 18mm - 3box	288	288	Nil				
10	Cover Slip 18x18 10gm Upen - 2pkt	160	160	Nil		Entered in		
11	Cover slip 22x22 10gm (set of 10) Upen - 2box	1760	1760	Nil	72	Botany and Zoology Depts.		
12	Dropper Glass 6" (12pcs) TST - 4set	720	720	Nil		stock registers		
13	Funnel 3" (10pkt) Borosilicate - 1pkt	1181	1181	Nil				
14	Glass Rod 1 meter 5mm - 10pcs	220	220	Nil		Entered in Chemistry and		
15	Glass Slide (Pkt of 50 Pcs) Upen - 2pkt	160	160	Nil	72	Biochemistry Depts. stock registers		

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16	Measuring Cylinder 100ml (2PCS) - 2nos	1137	1137	Nil					
17	Measuring Cylinder 10ml (2pcs) - 8nos	4173	4173	Nil					
18	Measuring Cylinder 250ml (set 0f 5) - 2pkt	3950	3950	Nil		Entered in Botany,			
19	Measuring Cylinder 25ml (2SET)	1194	1194	Nil	73	Biochemistry, Zoology and Chemistry			
20	Measuring Cylinder 500ml (5pcs) - 1set	6540	6540	Nil		Depts. stock registers			
21	Measuring Cylinder 50ml (2SET) - 8nos	5349	5349	Nil					
22	Measuring Cylinder 50ml - 1no	323	323	Nil					
23	Micropipette 10 – 100 uL - 7nos	25020	25020	Nil	_				
24	Micropipette 100 – 1000 uL - 2pcs	7240	7240	Nil		Entered in Zoology and			
25	Micropipette 20 – 200 uL - 6nos	21652	21652	Nil					
26	Micropipette 5-50ul Microlit - 1pc	3360	3360	Nil					
27	Pipette 10ml Borosilicate (10pcs) - 4nos	3279	3279	Nil					
28	Pipette 20ml - 3nos	1750	1750	Nil	73	Biochemistry Depts. stock			
29	Pipette 25ml Borosilicate (10pcs) - 3nos	2900	2900	Nil		registers			
30	Pipette 5ml Borosilicate (10pcs) - 4nos	3089	3089	Nil					
31	Pipette pump 25ml (Set of 10) - 2set	10560	10560	Nil					
32	Pippette pump 10ml(pkt of 6pcs) - 1pkt	3168	3168	Nil					
33	Test tube 15ml - 1box	1200	1200	Nil	73	Entered in Chemistry and			

34	Test tube 18x150 - 4set	64	64	Nil		Biochemistry Depts. stock
35	Test Tube 5" (15x125) (100pcs) - 4set	4400	4400	Nil		registers
36	Volumetric Pipette 25ml - 1set	2300	2300	Nil		
37	Volumetric pipette pump 2ml (10pcs) - 1set	1630	1630	Nil	74	Entered in Zoology and Botany Depts.
38	Volumetric pipette pump 5ml (10pcs) - 1set	1510	1510	Nil		stock registers
	TOTAL	153860	153860	Nil		

8. BOOKS

SI. No.	Particulars of new equipment Purchase	Amount	Utilised	Balance	Page no. of Asset Register	Remark
1	Advanced Microprocessor and Peripherals, - 5nos	2650	2650	Nil		
2	Animal Physiology - 2 nos	560	560	Nil		
3	Animal Physiology & Biochemistry - 10 nos	14750	14750	Nil		
4	Applied Hydrogeology - 2 nos	990	990	Nil		
5	Applied Zoology - 2 nos	400	400	Nil		Entered in
6	Artificial Intelligence - 14 nos	8710	8710	Nil	86	College Library
7	Basic Electronic Solid State - 30 nos	19500	19500	Nil		stock register
8	Basic Electronics - 30 nos	19500	19500	Nil		
9	Beginning Visual Basic - 4 nos	8022.7	8022.7	Nil		
10	Biochemistry - 2 nos	500	500	Nil		
11	Calculus & Analytic Geometry - 10 nos	5950	5950	Nil		

12	Chordate Zoology - 4 nos	2300	2300	Nil		
13	Climatology - 10 nos	3500	3500	Nil		
14	Computer Graphics - 1 nos	456	456	Nil		
15	Current Handbook Of UGC Guidelines - 1 nos	2250	2250	Nil		
16	Data Communication and Networking (SIE), - 2 nos	1350	1350	Nil		
17	Data Mining : Concept and Techniques - 2 nos	2127.52	2127.52	Nil		
18	Data Mining Techniques - 1 nos	656	656	Nil		
19	Data Mining - 1 nos	650	650	Nil		
20	Data Mining: Principles and Applications - 1 nos	615	615	Nil		
21	Data Structure Through C - 2 nos	496	496	Nil		
22	Data Structure Through C Language - 10 nos	3300	3300	Nil		
23	Data Warehousing Fundamentals: - 5 nos	2395	2395	Nil		
24	Data Warehousing in the Real World - 5 nos	865	865	Nil		
25	Design & Analysis of Computer Algorithms - 4 nos	2796	2796	Nil		Entered in
26	Dewy Decimal Classification - 1 nos	32757	32757	Nil	87	College Library
27	E-Commerce : Strategy, Technologies & Application - 2 nos	1250	1250	Nil		stock register
28	Economic Geology - 5 nos	1125	1125	Nil		
29	E-Governance: Concepts and Case Studies - 5 nos	1500	1500	Nil		
30	Elements of Complex Analysis - 10 nos	1850	1850	Nil		
31	Encyclopedia of UGC Twelfth Plan - 1 nos	6750	6750	Nil		

	Endocrinology &	4:2-				
32	Reproductive Biology - 5 nos	1125	1125	Nil		
33	Engineering Mathematics (Vol-I) - 10 nos	4090	4090	Nil		
34	Engineering Mathematics (Vol-II) - 10 nos	5290	5290	Nil		
35	Environmental Biology - 10 nos	1750	1750	Nil		
36	Fish & Fisheries - 2 nos	950	950	Nil		
37	Fishes of Assam - 10 nos	6950	6950	Nil		
38	Fundamentals of Remote Sensing - 2 nos	990	990	Nil		
39	Groundwater Hydrology - 8 nos	9560	9560	Nil		
40	Intro. To Automata Theory, Language & Computation - 4 nos	2796	2796	Nil		
41	Intro. To Biostatistics - 10 nos	2950	2950	Nil		
42	Intro. To Geochemistry - 2 nos	2190	2190	Nil		
43	Intro. To Operation Research - 4 nos	2796	2796	Nil		
44	Intro. to Probability (Vol- I) 2 nos -	1338	1338	Nil		
45	Intro. to Probability (Vol- II) - 3 nos	2037	2037	Nil		
46	Intro. To Real Analysis - 5 nos	2595	2595	Nil		
47	Introduction to Data Mining with Case Studies - 1 nos	495	495	Nil		Entered in College
48	Invertebrate Paleontology & Evolution - 2 nos	1990	1990	Nil	88	Library stock register
49	Manual of Practical Zoology : Chordates - 4 nos	1400	1400	Nil		registei

	Manual of Practical			
50	Zoology : Invertebrates - 10 nos	3500	3500	Nil
51	Mapping and Compilation Methods and Techniques - 2 nos	700	700	Nil
52	Mastering Microsoft Visual Basic - 4 nos	12159.84	12159.84	Nil
53	Microprocessor 8085 : Architecture, Programming and Interfacing - 4 nos	512	512	Nil
54	Microprocessor Architecture, Programming and Applications with the 8085 6/e - 1 nos	296	296	Nil
55	Mineral Processing - 3 nos	1350	1350	Nil
56	Modern Algebra - 10 nos	2950	2950	Nil
57	Modern T.B. of Zoology : Invertebrates - 10 nos	6550	6550	Nil
58	Multimedia, making it work - 2 nos	758	758	Nil
59	NarendraModi : A Rebel or Revolutionary - 1 nos	1350	1350	Nil
60	Network Security Essentials : Applications and Standards - 2 nos	559	559	Nil
61	Numerical Methods : Problems & Solution - 20 nos	5500	5500	Nil
62	Oceanography - 10 nos	2500	2500	Nil
63	Open GL Proramming Guide: The Official Guide to Learning Open GL, Version- 1 nos	1437.9	1437.9	Nil
64	Operational Amplifier as Differential Amplifier – 2 nos	5382	5382	Nil

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65	Operational Amplifier as Inverting, Non Inverting, Summing & Difference Amplifier - 2 nos	6840	6840	Nil		
66	Petrology of the Igneous Rocks - 4 nos	1400	1400	Nil		
67	Petrology of the Igneous Rocks - 4 nos	1000	1000	Nil		
68	Practical Zoology Volume 2 - 2 nos	300	300	Nil		
69	Principles of Electronics - 30 nos	17850	17850	Nil		
70	Principles of Engineering Geology &Geotechnics - 8 nos	4125	4125	Nil		
71	Principles of Information Security - 4 nos	1412	1412	Nil		
72	Principles of Paleontology - 5 nos	1375	1375	Nil		F.J. and
73	Probability & Statistics - 10 nos	3250	3250	Nil		Entered in
74	Remote Sensing & GIS - 3 nos	2097	2097	Nil	89	College Library stock
75	Remote Sensing & Image Interpretation - 2 nos	1898	1898	Nil		register
76	Research Design: Qualitative, Quantitative and Mixed Methods Approaches - 1 nos	450	450	Nil		
77	Sedimentology & Stratigraphy with CD ROM - 5 nos	5475	5475	Nil		
78	Series & Parallel Resonance - 2 nos	7200	7200	Nil		
79	Software Project Management - 2 nos	1220	1220	Nil		
80	Software Project Management : Concise Study - 3 nos	738	738	Nil		

81	Software Project Management: A Unified Framework - 5 nos	1970	1970	Nil		
82	Stefans Law of Radiation by using an In- candascent Lamp with Power - 2 nos	14400	14400	Nil		
83	Study of BistableMultivibrator using Transistors – 1 nos	2538	2538	Nil		
84	Study of Forbidden Energy Gap with P/S and 1 Digital Meter - 2 nos	11200	11200	Nil		
85	Study of OP-AMP Mathematical Operations with Power Supply - 2 nos	10600	10600	Nil		
86	Study of SCR Characteristics Apparatus – 1 nos	3150	3150	Nil		
87	Study of Wein Bridge Oscillator usinf Transistor - 1 nos	2241	2241	Nil		
88	Surveying (Vol-I) - 4 nos	1980	1980	Nil		
89	Surveying (Vol-II) - 4 nos	1980	1980	Nil		
90	System Simulation - 4 nos	900	900	Nil		
91	Text Book of Biotechnology - 5 nos	2500	2500	Nil		Entered
92	Text Book of Immunology &Immunotechnology - 10 nos	3250	3250	Nil	90	in College Library stock register
93	Text Book of Pathology - 2 nos	3700	3700	Nil		108/3001
94	Text Book of Biotechnology - 5 nos	2500	2500	Nil		
95	Tally ERP 9 in Simple steps - 10 nos	2990	2990	Nil		

96	Theory of Computer Science - 10 nos	2750	2750	1	Nil	
97	Theory of Functions of a Complex Variable - 10 nos	3950	3950	ľ	Nil	
98	Trainer for Oscillators Circuit 1 nos	5850	5850	١	Nil	
99	Trainer for Transistors Multivibrator (Monostable) – 1 nos	2583	2583	١	Nil	
100	Trainer on Differentiator & Integrator – 2 nos	5076	5076	١	Nil	
101	Tuned Collector Oscillator – 1 nos	3420	3420	١	Nil	
102	Zoology for Degree Students - 10 nos	7250	7250	1	Nil	
103	Zooplankton - 10 nos	18000	18000	Nil		
	TOTAL	418725.9 6	418726	Nil		

9. OTHER EQUIPMENT

S	o Par equ	ticulars of new uipment Purchase	Amoun t	Utilised	Balance	Page no. of Asset Register	Remark
1	L SP\	/ Power Plant	188000	188000	Nil	110	Installed in the main Building

11. YEAR WISE EXPENDITURE UNDER UPGRADATION TO MODEL DEGREE COLLEGE GRANT

1. YEAR WISE EXPENDITURE UNDER UPGRADATION TO MODEL DEGREE COLLEGE GRANT

(Total Receipt – $1^{st} \& 2^{nd}$ installment = Rs. 3,00,00,000.00)

Head	2015-2016 (Rs.)	2016-2017 (Rs.)	2017-2018 (Rs.)	Total (Rs.)
Purchase	1	1,03,03,800	17,79,337	1,20,83,137
New Construction	25,00,000	44,55,167	2,51,243	72,06,410
Renovation	-	2,20,575	82,09,619	84,30,194
Total	25,00,000.00	1,49,79,542.00	102,40,199.00	2,77,19,741.00

2. Academic Building Block I, Durtlang Campus

a) Source of funding : SPA (Special Plan Assistant) Mizoram PWD

Vide Letter no. :

b) Amount sanctioned : 7.5 crore

c) Design & Drawn : Architech Branch, Mizoram PWD

d) Area : 2560 sq.m

e) No. of Floor : 4 (Basement, Ground, First & Second Floor)

f) Status : Ongoing

12. ABSTRACT OF EXPENDITURE OF FUNDS FROM UP-GRADATION/RENOVATION OF EXISTING COLLEGES TO MODEL DEGREE COLLEGES SCHEME

INCOME:

SI. No.	Amount	Remarks
1	Rs. 50,00,000.00	Vide SPD(RUSA) Letter No. G.21017/1/2015-SPD(RUSA); Dated Aizawl the 6 th January, 2016 - Cheque No. 069488 of 06, 01, 2016
	, ,	Fund to be utilized as – Const. of Lab. building – Rs.
		40,00,000.00 Purchase of immediate needs – Rs.
		10,00,000.00
		Vide SPD(RUSA) Letter No. G.20015/1/2015-SPD(RUSA);
		Dated Aizawl the 9 th November, 2016
		2 nd Installment of Upgradation to Model Degree Colleges
2	Rs. 2,25,00,000.00	Fund to be utilized as –
		35% for new construction
		35% for Upgradation/Renovation of existing college
		30% for purchase of equipments
		Vide SPD(RUSA) Letter No. G.21015/1/2016-SPD(RUSA) –Pt
3	Rs. 25,00,000.00	1; Dated Aizawl the 3 rd February, 2017
TOTAL	Rs. 3,00,00,000.00	

EXPENDITURE

HEAD OF ACCOUNT : PURCHASE

SI. No	Sanction No.& Date B.13011/4/16- GZRSC(RUSA)		Amount	Expenditure Head
1	443-444	of dt. 19.4.2016	105703	Books for Computer Science Department
2	445-446	of dt. 20.4.2016	56346	Almirah, Table, R. Chair, White Board etc.
3	447-448	of dt. 25.4.2016	44341	Chemicals, Lab. Equipments, White Board etc.
4	455-456	of dt.13.5.2016	3955	Banner, Stamps, Cash Book, Sticker etc.
5	451-452	of dt. 25.4.2016	3845	Lab. Equipments
6	599-601	of dt. 10.6.2016	827891	Lab. Equipments and Chemicals
7	648-650	of dt. 31.1.2017	135000	Microscope for Geology dept. (NARSHI Technologies)
8	687-689	of dt. 15.2.2017	664486	Lab. Equipments and Chemicals for various Departments. (Green Labs.)
9	701-704	of dt. 7.2. 2017	2470	Stationeries (D. Buanga & Sons)
10	709-712	of dt. 20.2.2017	400273	Office furniture (SD Enterprise)
11	713-716	of dt. 24.2.2017	53000	Canon Camera (Photo House, Aizawl)
12	739-741	of dt. 6.3.2017	14000	Aquaguard (Blue Star, BEE ZET Ice Cream Industries, Aizawl)
13	642-644	of dt. 31.1.2017	75000	Laptop and Peripherals (Datamation Services, Guwahati)
14	705-708	of dt. 15.2.2017	2434	Chemicals (Genesis Enterprise, Aizawl)
15	814-816	of dt. 23.3.2017	19220	White Boards and Marker (D. Buanga & Sons, Aizawl)
16	817-819	of dt. 23.3.2017	374000	Computers and Projector (Sunflower Electronics, Aizawl)
17	785-787	of dt. 21.3.2017	94349	Sport Goods (Tabitha Store, Aizawl)
18	782-784	of dt. 21.3.2017	14240	Guitar (JIT Management, Aizawl)
19	773-775	of dt. 21.3.2017	92581	Library Books (Eastern Book House, Guwahati)
20	540-543	of dt. 15.2.2016	88031	Library Books (Eastern Book House, Guwahati)
21	645-647	of dt. 31.1.2017	186690	Microscope for Geology Department (Central Scientific Instrument Corporation, Agra)
22	544-546 15.12.201	of dt. 16	100000	Computer and Peripherals (RM Infotech, Aizawl)
23	820-823	of dt. 24.3.2017	21630	Carpet & Curtain (MD &D Enterprises, Aizawl)
24	776-778	of dt. 21.3.2017	5600	Office Table (The Norwood Builders, Aizawl)
25	779-781	of dt. 21.3.2017	5700	Plastic Chairs (Bonton, Aizawl)

26	547-549 of dt. 15.12.2016	200000	Lab. Equipments (Green Labs.)
27	651-653 of dt. 31.1.2017	441000	Projector etc. (RM Infotech, Aizawl)
28	830-832 of dt. 24.3.2017	40902	Electrical goods and Installation (Fancy Electronics, Aizawl)
29	835-837 of dt. 28.3.2017	177680	Lab. Equipments (Omega Electronics, Jaipur)
30	609-611 of dt. 21.1.2017	188000	SPV Power Plant (ZEDA, Aizawl)
31	847-851 of dt. 29.3.2017	16800	Computer Tables (The Norwood Builders, Aizawl)
32	39-42 of dt. 24.4.2017	321643	10 nos. of Computers and Printer (RM Infotech, Aizawl)
33	43-46 of dt. 24.4.2017	145098	Lab. Equipments for Geology Department (Hindusthan Minerals and Natural History Specimens Supply Co., Kolkatta)
34	216-218/17 of dt. 25.5.2017	12000	Home Sc. Lab. Table (Joseph furnitures, Aizawl)
35	219-221/7 of dt. 25.5.2017	493389	Lab. Equipments (Green labs., Aizawl)
36	222 -224/17 of dt. 25.5.2017	26100	Books for Library (Eastern Book House, Guwahati)
37	225-229/17 of dt. 25.5.2017	30420	Geological Instruments and Equipments (Hindusthan Minerals and Natural History Specimens Supply Co., Kolkatta)
38	228-230/17 of 5.6.2017	65305	Laptap, Laser Printer etc. (RM Infotech, Aizawl)
39	250-253/17 of dt. 5.6.2017	28682	Steel Book Rack and Computer Table (SD Enterprise, Aizawl)
40	264-267/17 of 7.6.2017	150000	Home Sc. Lab Tables 10 nos. (Norwood builders, Aizawl)
41	47-50 of 24.4.2017	22850	Rebound Hammer & Digital TDS Meter (Zeal International N. Delhi)
42	278-281/17 of 16.6.2017	106520	Trinocular Petrological Polarising Microscope (Narshi Technologies, Kolkatta)
	TOTAL	58,57,174	

HEAD: NEW CONSTRUCTION

SI. No	SANCTION NO.	AMOUNT	EXPENDITURE HEAD
1	427 of dt.9.2.2016	2500000	To C. Lalsiama, Chairman, Mizoram
2	113 of dt.25.5.2016	1500000	Technocrats Ltd. For construction of Laboratory Building at Durtlang
3	501-503 of dt.28.11.2016	4324000	

	TOTAL	130,55,043
5	14.6.2017	251243
	231-233/17 of	
4	731-733 of dt.1.3.2017	4479800

HEAD: RENOVATION/UPGRADATION

SI. No	SANCTION NO.	AMOUNT	EXPENDITURE HEAD
1	690-693 of dt.15.2.2017	10870	Balu, Cement etc. (T. Dela)
2	788-791 of dt21.3.2017	11050	Plywood (Bee-Ess)
3	792-794 of dt.21.3.2017	5600	Cement, Balu (TluangTluangEnterptise)
4	795-797 of dt.21.3.2017	50695	Hardware (Sunrise Home Appliances)
5	798-800 of dt.21.3.2017	78145	Hardware (Orion)
6	838-842 of dt.29.3.2017	8205	Hardware (Orion)
7	801-803 of dt.21.3.2017	54130	Sawn Timber (CH.M Furniture works)
8	827-829 of dt.24.3.2017	1880	Building Material (Orion)
9	65-68 of dt27.4.2017	300000	Pu C. Lalrinmawia (approach road)
10	62-64 of dt.27.4.2017	16019	Building repair
11	209-211/7 of dt.15.2.2017	3500000	To Mizoram Technocrats for vertical extension of Girls Hostel
	TOTAL	40,36,594	

GRAND TOTAL: Rs. 229,48,811.00

BALANCE : Rs. 70,51,189.00 (Rs. 300,00,000 - Rs. 229,48,811)