

LIST OF TABLES

Table No.	Description of the table	Page No.
1.1	List of some misconceptions on various concepts of science.	29-37
3.1	Blocks of Ranchi district.	96
3.2	Textbook analysis of standard VIII.	99-100
3.3	Item pool for Three-Tiered Multiple Choice Science Misconception Test (TTMCSMT-first draft).	105-106
3.4	Item pool for Three-Tiered Multiple Choice Science Misconception Test (TTMCSMT-final draft).	108
3.5	True & False items of Three-Tiered Multiple Choice Science Misconception Test (TTMCSMT).	109-111
3.6	Tools and data analysis techniques.	113
4.1	Mean & percentage of scores of all students in TTMCSMT (First- Tier).	115
4.2	Mean & percentage of scores of all students in Physics in TTMCSMT (First- Tier).	116
4.3	Mean & percentage of scores of all students in Chemistry in TTMCSMT (First- Tier).	117
4.4	Mean & percentage of scores of all students in Biology in TTMCSMT (First- Tier).	117
4.5	Student's reasons and source of knowledge (Physics).	118
4.6	Student's reasons and source of knowledge (Physics).	120
4.7	Student's reasons and source of knowledge (Physics).	122
4.8	Student's reasons and source of knowledge (Physics).	124
4.9	Student's reasons and source of knowledge (Physics).	126
4.10	Student's reasons and source of knowledge (Physics).	128
4.11	Student's reasons and source of knowledge (Physics).	130
4.12	Student's reasons and source of knowledge (Physics).	132
4.13	Student's reasons and source of knowledge (Physics).	134
4.14	Student's reasons and source of knowledge (Physics).	136
4.15	Student's reasons and source of knowledge (Physics).	138
4.16	Student's reasons and source of knowledge (Physics).	140
4.17	Student's reasons and source of knowledge (Physics).	142
4.18	Student's reasons and source of knowledge (Physics).	144
4.19	Student's reasons and source of knowledge (Physics).	146
4.20	Student's reasons and source of knowledge (Physics).	148
4.21	Student's reasons and source of knowledge (Physics).	150
4.22	Student's reasons and source of knowledge (Physics).	152
4.23	Student's reasons and source of knowledge (Physics).	154
4.24	Student's reasons and source of knowledge (Physics).	156
4.25	Student's reasons and source of knowledge (Physics).	158
4.26	Student's reasons and source of knowledge (Physics).	160
4.27	Student's reasons and source of knowledge (Physics).	162
4.28	Student's reasons and source of knowledge (Physics).	164
4.29	Student's reasons and source of knowledge (Physics).	166
4.30	Student's reasons and source of knowledge (Chemistry).	168
4.31	Student's reasons and source of knowledge (Chemistry).	170

[illegible]

4.80	Student's reasons and source of knowledge (Biology).	268
4.81	Overall performance in TTMCSMT.	270
4.82	Overall source of student's knowledge.	271
4.83	Scores of students with respect to gender.	274
4.84	Scores of students with respect to availability of teaching learning material.	274
4.85	Scores of students with respect to educational qualification of teachers.	275
4.86	Scores of students with respect to professional qualification of teachers.	276
4.87	Post Hoc Test (within group differences).	276
4.88	Scores of students with respect to teachers experience.	277
4.89	Post Hoc Test (within group differences).	278
4.90	Scores of students with respect to educational qualification of parents.	278
4.91	Post Hoc Test (within group differences).	279
5.1	Tools and data analysis techniques.	289