LIST OF APPENDICES

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</tr>
</thead>
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<tr>
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<td>The Regional distribution of the sample of teacher educators and the number of questionnaires received.</td>
</tr>
<tr>
<td>APPENDIX III C</td>
<td>Interview Schedule for teacher educators.</td>
</tr>
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</tr>
<tr>
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</tr>
<tr>
<td>APPENDIX IV A</td>
<td>Job Analysis Scale.</td>
</tr>
<tr>
<td>APPENDIX IV B</td>
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</tr>
<tr>
<td>APPENDIX VI A</td>
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</tr>
<tr>
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<td>Questionnaire for experts in education.</td>
</tr>
<tr>
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</tr>
<tr>
<td>APPENDIX VIII A</td>
<td>Enrolment pattern of postgraduates in the training colleges of Gujarat</td>
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### Outline of course content of M.Sc.Ed. Chemistry Course

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</tr>
<tr>
<td>C 1.1</td>
<td>States of Matter and Molecular Structure</td>
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<td>Atomic Structure and Chemical Bonding</td>
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<td>Theoretical Organic Chemistry-I</td>
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<td>Science/Mathematics Education-I*</td>
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<td>C 1.4</td>
<td>Practical Physical Chemistry -I</td>
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<tr>
<td>C 1.5</td>
<td>Practical Inorganic Chemistry -I</td>
<td>2</td>
</tr>
<tr>
<td>C 1.6</td>
<td>Practical Organic Chemistry -I</td>
<td>3</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>C 2.1</td>
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<td>C 2.2</td>
<td>Non-transition Elements</td>
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<td>C 2.5</td>
<td>Practical Inorganic Chemistry -II</td>
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</tr>
<tr>
<td>C 2.6</td>
<td>Practical Organic Chemistry -II</td>
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<tr>
<td></td>
<td><strong>III SEMESTER</strong></td>
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<td>C 3.1</td>
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<tr>
<td>C 3.2</td>
<td>Transition Elements - I: Electronic Structure, Magnetism and Spectra</td>
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<tr>
<td>C 3.3</td>
<td>Chemistry of Natural Products -I</td>
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<tr>
<td>Ed3.1</td>
<td>Problems of Higher Education*</td>
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</tr>
<tr>
<td>C 3.4</td>
<td>Practical Physical Chemistry - III</td>
<td>2</td>
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<tr>
<td>C 3.5</td>
<td>Practical Inorganic Chemistry - III</td>
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<td><strong>IV SEMESTER</strong></td>
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<td>C 4.1</td>
<td>Chemical Kinetics, Photochemistry and Surface Phenomena</td>
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<td>C 4.2</td>
<td>Transition Elements - II: d and f block elements</td>
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<td>Chemistry of Natural Products -II and Synthetic Drugs</td>
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<td>Instructional Methodology* - IV</td>
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# APPENDIX II B

Outline of Course Content of M.Sc.Ed (Mathematics) Course

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title of the Course</th>
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<td>M 1.1</td>
<td>Algebra-I</td>
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<td>M 1.2</td>
<td>Analysis-I</td>
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<td>M 1.3</td>
<td>Theory of Numbers</td>
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<tr>
<td>M 1.4</td>
<td>Mechanics</td>
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</tr>
<tr>
<td>Ed 1.1</td>
<td>Science/Mathematics Education-I*</td>
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<tr>
<td></td>
<td>II SEMESTER</td>
<td></td>
</tr>
<tr>
<td>M 2.1</td>
<td>Algebra-II</td>
<td>4</td>
</tr>
<tr>
<td>M 2.2</td>
<td>Analysis-II</td>
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<tr>
<td>M 2.3</td>
<td>Probability</td>
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<td>M 2.4</td>
<td>General Topology</td>
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<td>Science/Mathematics Education-II*</td>
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<td>III SEMESTER</td>
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<td>M 3.1</td>
<td>Algebra-III</td>
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<td>M 3.2</td>
<td>Analysis-III</td>
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<td>Problems of Higher Education*</td>
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<td>IV SEMESTER</td>
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<td>M 4.1</td>
<td>Theory of Ordinary Differential Equations</td>
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### APPENDIX II C

Outline of Course Content of M.Sc.Ed. Physics Course

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<th>Course Credit Hours / Week</th>
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<td>P 1.1</td>
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<td>P 1.2</td>
<td>Classical Mechanics</td>
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<td>Classical Electrodynamics</td>
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<td>P 2.1</td>
<td>Quantum Mechanics-I</td>
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<td>P 2.2</td>
<td>Classical Electrodynamics</td>
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<td>P 2.3</td>
<td>Electronics-I</td>
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<td>Ed 2.1</td>
<td>Science/Mathematics Education*</td>
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<td>P 2.4</td>
<td>Practical-II (General)</td>
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<td>P 3.2</td>
<td>Atomic and Molecular Physics and General Theory of Relativity</td>
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<td>P 3.3</td>
<td>Electronics-II</td>
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<td>Ed 3.1</td>
<td>Problems of Higher Education*</td>
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<td>Practical-IV (Electronics-II)</td>
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<td>IV SEMESTER</td>
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<td>Statistical Physics</td>
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<td>P 4.2</td>
<td>Nuclear Physics</td>
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<td>P 4.3</td>
<td>Solid State Physics</td>
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<td>Instructional Methodology*</td>
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<td>P 4.4</td>
<td>Practical V (Nuclear Physics)</td>
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<td>P 4.5</td>
<td>Practical VI (Solid State Physics)</td>
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## APPENDIX II D

Course outline for Additional Education for fresh B.Sc.s. admitted to M.Sc.Ed. Chemistry / Mathematics / Physics Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title of the Course</th>
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<tbody>
<tr>
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<tr>
<td><strong>I SEMESTER</strong></td>
<td></td>
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<tr>
<td>Addl.Ed 1.1</td>
<td>Psychological Foundations of Education-I</td>
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<td>Addl.Ed 1.2</td>
<td>Sociological Foundations of Education-I</td>
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<td><strong>II SEMESTER</strong></td>
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<td>Addl.Ed 2.1</td>
<td>Psychological Foundations of Education-II</td>
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<td>Addl.Ed 2.2</td>
<td>Philosophical Foundations of Education-I</td>
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<td><strong>III SEMESTER</strong></td>
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<td>Addl.Ed 3.1</td>
<td>Teaching Methods</td>
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<td>Addl.Ed 3.2</td>
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<tr>
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### APPENDIX II E

Outline of course Content of M.Sc.Ed (Life Sciences)

<table>
<thead>
<tr>
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<tr>
<td>I SEMESTER</td>
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<tr>
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<td>Genetics and Biometry</td>
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<tr>
<td>2</td>
<td>Cytology and Molecular Biology</td>
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<td>3</td>
<td>Biophysics and Biochemistry</td>
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<td>4</td>
<td>Practical</td>
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<tr>
<td>Ed I</td>
<td>Educational Psychology</td>
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<td>II SEMESTER</td>
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<td>L.S 5</td>
<td>Microbiology</td>
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<td>6</td>
<td>Pathology</td>
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<td>7</td>
<td>Biology and its application</td>
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<td>Physiology</td>
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<td>Morphology</td>
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<td>15</td>
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<td></td>
<td>Life Science Project</td>
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<td>Higher Education</td>
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APPENDIX II F

Table showing the number of respondents from each department

<table>
<thead>
<tr>
<th>Name of the department</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education, Regional College of Education, Mysore</td>
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<tr>
<td>Department of Physics, Regional College of Education, Mysore</td>
<td>7</td>
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<tr>
<td>Department of Chemistry, Regional College of Education, Mysore</td>
<td>6</td>
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<tr>
<td>Department of Mathematics, Regional College of Education, Mysore</td>
<td>5</td>
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<tr>
<td>Department of Education, Regional College of Education, Bhubaneshwar</td>
<td>6</td>
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<tr>
<td>Department of Biosciences, Regional College of Education, Bhubaneshwar</td>
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</table>

Total number of respondents: 30
APPENDIX II G

Evolving a Programme of Teacher Education at Plus 2 Stage

Questionnaire for Teacher Educators

Regional College of Education

Centre of Advanced Study in Education,
Faculty of Education and Psychology,
M.S. University of Baroda,
Baroda-390002.
Centre of Advanced Study in Education
M. S. University of Baroda
Baroda

Dear Sir/Madam,

I am a research scholar working for my doctoral work at the Centre of Advanced Study in Education, M.S. University of Baroda, Baroda, specifically, the title of the research study is: 'Evolving a Programme of Teacher Education at Plus 2 Stage.' In order to investigate into this research problem, I have developed some questionnaires for higher secondary teachers, principals, co-ordinators, teacher-educators and experts in the field. This questionnaire has been specially prepared for teacher educators concerned with higher secondary teacher education course/s i.e. M.Sc.Ed. courses. The main purpose of this questionnaire is to study the components of M.Sc.Ed. courses in order to identify the specific needs for the higher secondary teacher training programme.

Sir/Madam, you have vast experience as you are actively involved in the teacher training programmes in many ways like framing the curriculum, organising the programme, Administration, implementation etc. Your valuable information, opinion, critical remarks, perceptions, observations, comments and suggestions will help me in identifying the relevant components of teacher training programme and evolving a need based teacher training programme for higher secondary teachers.

I, therefore, hereby request you to kindly give your opinions, comments, perceptions, ideas and suggestions freely. I know that answering these questions will demand quite a little bit of your valuable time. I shall be highly obliged and ever gratefully remembering your willing co-operation and contribution to this little piece of research.

With kind regards,

Yours sincerely,

DATE: 
PLACE: BARODA

R. S. Mani
(R. S. MANI)
General Information

Name of the Teacher Educator :

Address of the Institution :

Age : _______________ Years

Sex : Male ( ) Female ( )

Designation : _____________________________

Qualifications:

Specialization :

Experience :

Teaching :

a) At School _____________ years.

b) At college _____________ years.

c) Any other ________________ .

Research : _______________ years.

Subjects teaching at present

i)

ii)

iii)

iv)

v)
1. a) Do you think that the objectives of the M.Sc.Ed. Course would adequately cover the purposes of higher secondary science teaching?

Yes _________
No _________

b) If your answer for item No.1(a) is 'yes', then please tick (✓) the objectives which are relevant for higher secondary teacher training.

i) To enable student teachers to understand and appreciate the basic structure of science and its relation with the environment. ( )

ii) To enable the student teachers to understand the changing nature of the objectives of science at various stages of school education in general and particularly at the high school and +2 stage. ( )

iii) To enable the student teachers to plan, design and execute appropriate learning experiences in science. ( )

iv) To develop cognitive, affective and psychomotor skills for teaching science by providing appropriate learning experiences with reference to high school and +2 stage. ( )

v) To expose the student teachers to modern techniques of evaluation in science. ( )

vi) To develop skills in making use of educational technology in teaching science ( )

vii) To provide knowledge about the bio-psycho-social needs of the adolescent and the problems arising out of their non-fulfilment ( )
viii) To develop skills in guiding and counselling the adolescent in solving his personal and academic problems

ix) To develop innovative attitude towards teaching

x) Any other (please specify)

c) If your answer to item 1(a) is 'No', then what are the inadequacies you have observed in successfully fulfilling the objectives of the M.Sc.Ed. course?

i) 

ii) 

iii) 

iv) 

v) 

vi) 

Section 2: Curriculum

2. a) Do you think that the present curriculum in M.Sc.Ed. programme (you are working with) is able to satisfy all the needs of higher secondary science teachers?

Yes 

No 

b) If your answer to item No.2(a) is 'No', what are the reasons you assign for the inadequancies in the M.Sc.Ed. course?

i) 

ii) 

iii) 

iv) 

v) 

vi) 

3. In your opinion, how effective is the integrated programme?
4. Would you like to suggest any other alternative model?

5. a) In your opinion, with regard to the depth of the content covered, is M.Sc.Ed. programme at par with the M.Sc. programme offered in your university?

Yes _____
No _____

b) If your answer to item No.5(a) is 'No', why M.Sc.Ed. programme is not considered equivalent to M.Sc. programme with regard to the coverage of the subject matter?

6. a) For primary and secondary stages there are separate training programmes for teachers. But, there is no separate training programme for higher secondary teachers (in different states). The M.Sc.Ed. courses offered by Regional Colleges of Education are not able to train all the teachers needed for teaching at higher secondary level. In view of the fact that the higher secondary stage has emerged as a distinct stage, a few alternative models of teachers training are given below. Please tick (/) the model you approve and give detailed comments.*

i) A separate teacher training programme for higher secondary teachers should be organized ( )

* If the space provided is not sufficient, please give your comments on the blank sheets provided at the end of the questionnaire.
ii) In the present B.Ed. training programme two streams could be made i.e. stream
   a) for secondary teachers and stream
   b) for higher secondary teachers

iii) In the present B.Ed. programme a special orientation could be given to higher secondary teachers

iv) Any other (please specify)............... 

Comments/observation with regard to the model

b) In the model you have suggested, what subjects (foundation course and other special courses) should be included to meet the needs of higher secondary teachers?

i)
ii)
iii)
iv)
v)
vi)
vii)
viii)
Section 3 : Methods of Teaching

7. Do you follow any special method of teaching (apart from the traditional lecture method) to train higher secondary teacher trainees? (M.Sc.Ed. student teachers). Please indicate your answer putting tick (/) mark against the right alternative/s.

   i) Demonstration (    )
   ii) Lecture-cum-Demonstration (    )
   iii) Seminar (    )
   iv) Symposium (    )
   v) Panel discussion (    )
   vi) Any other (place specify) .......

8. a) Do you give assignment or projects to M.Sc.Ed. students?

          Yes _____

          No _____

   b) If your answer is 'yes' to item 8(a), please give two assignments/projects which you had assigned in the previous year.

9. a) In your opinion, what are the teaching skills needed for higher secondary teacher to teach effectively?

   i) 
   ii) 
   iii) 
   iv) 
   v) 
   vi) 

   b) In order to develop the above teaching skills what is the method of training you have adopted? Please give details.
10. a) Do the M.Sc. Ed. students give any seminar?

Yes _____
No _____

b) If your answer to item No.10(a) is 'yes' how many seminars a student has to give in your subject?

11. a) Do the M.Sc.Ed. students come to you with their personal/teaching problems? If so, generally what is the nature of the problem? Please give two or three problems you have faced recently?

i) 
ii) 
iii) 
iv) 

b) What measures you have taken to solve the problems as mentioned in 11(a) of M.Sc.Ed. students?

i) 
ii) 
iii) 
iv) 

12. a) Do you find any scope for using simple gadgets and audio-visual aids in M.Sc.Ed. course? (for e.g. tape recorder, over head projector, slides etc.)

Yes _____
No _____

b) If your answer is 'yes' to item 12(a), what is the nature of training imparted to M.Sc.Ed. students? Please give details.
13. a) To prepare the M.Sc.Ed. students to teach effectively in higher secondary science classes, (practicals). You may be giving training to the M.Sc.Ed. students in certain practical (laboratory) skills. Please list the same:

i)
ii)
iii)
iv)
v)
vi)
vii)

b) In your opinion, what are the (other additional) practical skills a higher secondary teacher has to be equipped with to teach effectively in practical (laboratory) classes? (apart from the practical skills in which the M.Sc.Ed. students are already being trained).

14 'Over crowded class-rooms are a reality today' therefore, in the M.Sc.Ed. programme what sort of training is given for effective class-room management?

15. a) In your opinion, is there any need to provide training in techniques of guidance and counselling to each higher secondary teacher?

Yes _____
No _____

b) If your answer to item 15(a) is 'yes', what is the nature of training given in M.Sc.Ed. programme with regard to the techniques in guidance and counselling? Please give details.
Section 4 : Evaluation

16. a) Do the M.Sc. Ed. students complain about evaluation problems? If so, please list two or three problems they have faced in the recent past.

i) 
ii) 
iii) 
iv) 
v)

b) What measures you have taken to solve the evaluation problems of M.Sc. Ed. students?

i) 
ii) 
iii) 
iv) 

.c) Do you think that there is need for suitable training in evaluation theory and techniques for M.Sc.Ed. students?

Yes ______
No ______

d) If your answer is 'No' to item 16(c), why do you think that M.Sc. Ed. students do not require training in evaluation theory and techniques?

17. a) What are the techniques/methods of evaluation you use for evaluating performance of M.Sc.Ed. students? Please tick (✓) the right response/s.

i) Essay type tests/s ( )

ii) Objective type tests ( )

iii) Both essay and objective type tests ( )

iv) Teaching skills evaluation with
- check list ( )
- observation schedule ( )
- rating scale ( )

v) Any other (please specify) 

... ... ... ... ...
18. a) What is the percentage of weightage given to the following components of the M.Sc.Ed. course:

i) Theory papers
ii) Practical activities
iii) Practice teaching (Internship)
   - Observation record
   - Teaching
iv) Community living
v) Any other (please give details)

b) In your opinion, what weightage should be given to

i) Theory papers
ii) Practical activities
   - Practicals
   - Practical record keeping
iii) Internship programme
   - Observation record
   - Teaching

Section 5: Practice Teaching or Internship Programme

19. a) Do the M.Sc.Ed. students have to undergo Internship programme compulsorily?

   Yes _____
   No _____

b) If your answer is 'No' to item No.19(a), what is the alternative experience you are providing to the M.Sc.Ed. students? Please give details.
c) When do you exempt a M.Sc.Ed. student from undergoing Internship programme?

Please tick (/) the right alternative.

i) When the M.Sc.Ed. student has already done B.Ed. course ( )

ii) When the M.Sc.Ed. student has already passed Diploma in Teaching ( )

iii) Any other (please specify)....................

d) If your answer is 'Yes' to item 19(a),

i) What is the duration of the Internship programme?
   - 30 days ( )
   - 45 days ( )
   - 60 days ( )
   - Any other.........................

ii) Do you think the present duration of Internship programme is adequate?

   Yes ______
   No ______

If your answer is 'No', then what is the period you think would serve the purpose?

iii) Generally, in which part of the academic year (in which month/s), Internship begins?

iv) Do you have Internship programme in every semester?

e) At what level the M.Sc.Ed. students are sent for Internship programme? (Please indicate your answer by putting tick (/) mark against the right alternatives).
20. a) Do the M.Sc.Ed. students come to you with some problems in undergoing Internship programme? If so, please list 2 or 3 problems?

i)  

ii)  

iii)  

iv)  

b) What measures you have taken to solve such problems?

21. a) Are you in charge of organising Internship programme?

Yes _____

No _____

b) If your answer is 'yes' to item 21(a), have you come across any problem in organising/participating the Internship programme? If so, please give details.

c) In your opinion, how Internship programme could be improved?
22. a) Do you go for supervision of lessons in the Internship programme?
   Yes _____
   No _____

b) If your answer is 'Yes' to item 22(a) have you faced any problem in doing supervision work? If so, please give one or two instances in which you faced some problems. Please give details.
   i) 
   ii) 
   iii) 
   iv) 

c) Have you come across any problem of assessment in practice teaching?
   Yes _____
   No _____

d) If your answer is 'Yes' to item 22(c), please tick (✓) the nature of problem you are faced with from the list of problems provided below:
   i) My specialization is different ( )
   ii) I have not studied the subject which I am supervising. ( )
   iii) The criteria of evaluation are not clear ( )
   iv) Any other (please specify) . . . . . . .

e) What steps you have taken to solve the above problems?
   i) 
   ii) 
   iii) 
   iv) 

23. a) Is there any demonstration lessons given before the commencement of Internship programme?
   Yes _____
   No _____
b) If your answer is 'Yes' to item 23(a) how many demonstration lessons are given in your subject?

c) Are the regular teachers in higher secondary schools invited to give demonstration lesson for M.Sc.Ed. students?

Yes _____
No _____

24. a) What practical work is assigned to the M.Sc.Ed. students during Internship programme?

   i) Lesson planning ( )
   ii) Preparing Audio-visual Aids ( )
   iii) Observing lessons ( )
   iv) Writing observations ( )
   v) Any other (please specify) . . . . .

Section 6 : Administration and Organisation

25. a) Do you have some special administrative training activities for M.Sc.Ed. students?

   Yes _____
   No _____

b) If your answer is 'yes' to item 25(a), please give details.

Section 7 : Co-curricular activities

26. a) Do you organize or participate in any co-curricular activities like debate, excursion, music, etc.?

   Yes _____
   No _____
b) If your answer is 'Yes' to item 26(a), what are the activities you organize/participate in? Please specify.
   i)
   ii)
   iii)
   iv)
   v)

c) In your opinion, is it necessary to train M.Sc.Ed. students in organizing co-curricular activities also?
   Yes _____
   No _____

Section 8: In-service Programmes

27. a) Have you been involved in in-service training of higher secondary teachers?
   Yes _____
   No _____

b) If your answer is 'Yes' to item 27(a), what is the nature of your involvement? Please indicate your response by putting tick (✓) mark against the right response.
   i) For giving lecture/s ( )
   ii) Conducting seminar/s ( )
   iii) Conducting workshop/s ( )
   iv) Any other (please specify) . . . . . . .

28. a) In your opinion, is there any need to give orientation course/programmes in content area (disciplines like physics, chemistry, mathematics etc.) for higher secondary teachers?
   Yes _____
   No _____
b) If your answer is 'Yes' to item 28(a), how such a programme has to be organized?

c) In your opinion, in what aspects in-service training should be given?

d) What are the in-service training programmes you suggest for higher secondary teachers?

29. Have you developed any resource material for higher secondary teachers? If so please give details.

30. Do the higher secondary teachers come to you with some academic problems? If so, please give details of how you have tried to solve them.

31. a) Do you have any follow-up programme of the M.Sc.Ed. course?

   Yes ____
   No ____

b) If your answer is 'Yes' to item 31(a) please give details.
32. Any other comment (remarks / suggestion you would like to provide with regard to the needed training (education) for higher secondary teachers/trainees in terms of curriculum.

Methods of teaching

Evaluation

Administration and organisation

Internship programme

Co-curricular activities

In-service training

(Thank you for your kind co-operation)
Evolving a Programme of Teacher Education at Plus 2 Stage

Questionnaire for Teacher Educators

Regional College of Education

Centre of Advanced Study in Education, Faculty of Education and Psychology, M. S. University of Baroda, Baroda 390 02
Dear Sir/Madam,

I am a research scholar working for my doctoral work at the Centre of Advanced Study in Education, M.S. University of Baroda, Baroda, specifically, the title of the research study is: *Evolving a Programme of Teacher Education at Plus 2 stage.* In order to investigate into this research problem, I have developed some questionnaires for higher secondary teachers, principals, co-ordinators, teacher-educators and experts in the field. This questionnaire has been specially prepared for teacher educators concerned with higher secondary teacher education course/s i.e. M.Sc.Ed. courses. The main purpose of this questionnaire is to study the components of M.Sc.Ed. courses in order to identify the specific needs for the higher secondary teacher training programme.

Sir/Madam, you have vast experience as you are actively involved in the teacher training programmes in many ways like framing the curriculum, organising the programme, Administration, implementation etc. Your valuable information, opinion, critical remarks, perceptions, observations, comments and suggestions will help me in identifying the relevant components of teacher training programme and evolving a need based teacher training programme for higher secondary teachers.

I, therefore, hereby request you to kindly give your opinions, comments, perceptions, ideas and suggestions freely. I know that answering these questions will demand quite a little bit of your valuable time. I shall be highly obliged and ever gratefully remembering your willing co-operation and contribution to this little piece of research.

With kind regards,

Yours sincerely,

R. S. Mani

(R. S. MANI)

DATE:

PLACE: BARODA
General Information

Name of the Teacher Educator :

Address of the Institution :

Age : _____ years
Sex : Male ( ) Female ( )

Designation :

Qualification/s :

Specialization :

Experience :

Teaching :
a) At school. .. .. .. years.
b) At college. .. .. years
c) Any other .. .. .. ..

Research .. .. .. years

Subjects teaching at present

i)
ii)
iii)
iv)
v)
Section 1: Objectives of the M.Sc.Ed. Course

1. a) Do you think that the objectives of the M.Sc.Ed. course would adequately cover the purposes of higher secondary mathematics teaching?

Yes _____
No _____

b) If your answer for item No.1(a) is 'yes', then please tick (✓) the objectives which are relevant for higher secondary teacher training.

i) To enable student teachers to understand and appreciate the basic structure of mathematics and its relation with the life ( )

ii) To enable the student teachers to understand the changing nature of the objectives of mathematics at various stages of school education in general and particularly at the high school and +2 stage. ( )

iii) To enable the student teachers to plan, design and execute appropriate learning experiences in mathematics. ( )

iv) To develop cognitive, affective and psychomotor skills for teaching mathematics by providing appropriate learning experiences with reference to high school and +2 level. ( )

v) To expose the student teachers to modern techniques of evaluation in mathematics. ( )

vi) To develop skills in making use of educational technology in teaching mathematics. ( )
vii) To provide knowledge about the bio-psycho-social needs of the adolescent and the problems arising out of their non-fulfilment ( )

viii) To develop skills in guiding and counselling the adolescent in solving his personal and academic problems. ( )

ix) To develop innovative attitude towards teaching ( )

x) Any other (please specify) . . . . . . . . .

c) If your answer to item 1(a) is 'No', then what are the inadequacies you have observed in successfully fulfilling the objectives of the M.Sc.Ed. course?

i)  

ii)  

iii)  

iv)  

v)  

Please Note:

All the questions from Section 2 to Section 8 in the Questionnaire for Teacher Educators, Regional College of Education (Science) i.e. in Appendix II G, has been repeated in this questionnaire also. To minimise the space, it has not been given here. Therefore, please refer all the questions in Section 2 to Section 8 in Appendix IIG.
Questionnaire for Superintendent, Regional College of Education, Mysore

1. When were the following courses started in this college?
   - B.A. Ed. _____
   - B.Sc.Ed. _____
   - B.Com.Ed. _____
   - M.Sc.Ed. _____

2. What is the Philosophy behind starting these integrated courses?

3. During which period the above mentioned courses (item number 1) were discontinued and what was the reason for discontinuing the course/s?
   - B.A. Ed. _____
   - B.Sc. Ed. _____
   - B.Com.Ed. _____
   - M.Sc. Ed. _____

4. When were these courses revived/restarted?

5. What are the reasons provided by the concerned committee to revive (restart) the course?
Ordinances and Regulations relating to the Diploma in Higher Education (Dip. H.E.) (Revised Course).

O.2472. A candidate for admission to the course for the Diploma in Higher Education must be a teacher in a University Department/affiliated college/recognized post-graduate Institution/Junior College/Higher Secondary School or must possess a Master's degree of this University in any Faculty in the Second Class or a degree of another University in the Second Class recognised as equivalent to the said degrees of this University or must have any of the alternative qualifications laid down for the post of lecturer in a college affiliated to this University.

O.2473. The course for the Diploma in Higher Education will be of one year duration.

O.2474. The examination for the Diploma in Higher Education will be held once in a year.

O.2475. The Diploma in Higher Education shall not be conferred upon a candidate unless he/she has passed in all the papers, practice lessons and essays prescribed for the examination, in accordance with the provisions of R.2247.

R.2245. Candidates will be examined in the following subjects:—

Part A

Theory—(400 marks)

Paper 1—Philosophical and Sociological Foundations of Education. (One paper—3 hours—100 marks).

*The revised Diploma in Higher Education (Dip. H.E.) course will be introduced from the academic year 1988-89.*
Section II

Sociological

1. Sociological basis of education.
2. Role of different social institutions in educating the individual—process of socialisation and modernisation.
3. Social agencies of education—formal, informal and nonformal.
4. Social factors influencing education—language, culture, race, caste, religion, economic systems, location, communication, political ideologies and state policies.
5. Education for social change and social reconstruction.

Books recommended for study

2. Taneja, V. R.—Educational Thought and Practice, University Publishers, Mori Gate, Delhi, 1965.
Paper III—Methods of Instruction and Evaluation

Section I

Methods of Instruction

1. The Principles of teaching and learning.

2. Types of knowledge—skill, appreciation, application, radio and TV.

3. Methods of teaching—inductive, deductive, lecturing, demonstration, experimental, discovery, group method (workshop, seminar, symposium) programmed instruction, diagnosis, and remedial teaching.

4. Special methods relating to: languages, social sciences, physical and biological sciences, mathematics, and commerce.

5. Teaching aids and projection techniques.

Section II

Evaluations

1. Basic concept of Evaluation.


3. The essay versus objective type examination—its merits and demerits.

4. Practical and oral examinations.

5. Periodical tests—unit, bimonthly, quarterly, term and annual.

Books recommended for Study


4. Lulia, B. P.—Essentials of Educational Administration.


8. Annual Reports of the University of Bombay.

Books recommended for Study


O.2476. 70 marks are set a part for Teaching Practice (Part ‘B’) done by the candidate during the academic year. 80 marks are set apart for Essays (Part ‘C’) to be written in the course of the academic year by the candidates on the given themes. The Head of the Institution conducting the course shall forward in a sealed cover the marks assigned to the candidates in Parts ‘B’ and ‘C’ to the University before the commencement of the Theory examination.

Standard for Passing the Examination

R.2247. In order to qualify for the Diploma, a candidate must obtain a minimum of 85 per cent marks in each Theory paper separately; a minimum of 85 per cent marks (i.e. 24 marks out of 70) in Part ‘B’ Practice Lessons, a minimum of 85 per cent marks (i.e. 10 marks out of 80) in Parts ‘C’—Essays, and a minimum of 45 per cent of the aggregate marks in Parts ‘A’, ‘B’ and ‘C’ taken together.
EVOLVING A PROGRAMME OF TEACHER EDUCATION AT PLUS 2 STAGE

QUESTIONNAIRE FOR CO-ORDINATORS (EXTENSION PROGRAMMES)

Centre of Advanced Study in Education
Faculty of Education and Psychology
M. S. University of Baroda
Baroda - 390 002
Dear Sir,

I am a research scholar working for my doctoral work at Centre of Advanced Study in Education, M.S. University of Baroda, Baroda. Specifically, the title of my research study is: 'Evolving a Programme of Teacher Education at Plus 2 Stage'. Sir, in order to investigate into this research problem I have been collecting data from various personnel viz. Co-ordinators, Principals, Teacher educators, Higher secondary teachers and experts in the field. For this purpose various research tools have been developed. Among the various tools, the following questionnaire has been specially prepared to study the in-service training programmes organized for higher secondary as well as secondary teachers.

This questionnaire consists of three sections (I, II & III). Section I is concerned with the in-service training programmes organized for higher secondary teachers, Section II is concerned with the in-service training programmes organized for secondary teachers and section III is concerned with the other activities of the extension centre organized for higher secondary as well as secondary teachers.

I am sure that with your vast experience in organising in-service training programmes, you will be able to give me objective data with regard to in-service training programmes organized for secondary and higher secondary teachers and also give your perceptions, opinions, and critical comments. I, therefore, hereby request you to kindly give information required and express your viewpoints freely in this questionnaire.

With kind regards,

Yours faithfully,

R. S. Mani

BARODA:

DATE : March 12, 1984.
1. Name and address of the Extension Services Department:

2. Name of the university/college:

3. Place:

4. Year of Establishment of the Extension Department:

5. Geographical area covered by the Extension Department:

SECTION-I

Objectives of the in-service programmes

1. What are the general objectives of the in-service programmes for higher secondary teachers?
   i)
   ii)
   iii)
   iv)

2. Do you think that the above objectives have been realised by your department? If so, how far you have been able to realize the objectives?

3. From this extension service department (centre) have you conducted any field survey to ascertain the training needs of higher secondary teachers? If so, please give details.

Purpose

Sample

Geographical area covered

Results
4 A) What were the types of in-service programmes organized in your extension service department (centre) specially for higher secondary teachers?

Please mention in the following table, the type of the programme and indicate the subject areas and the number of times such programmes have been organized in each subject area in the last three years.

<table>
<thead>
<tr>
<th>Name of the programme</th>
<th>Mode of conduct of the programme (Lecture, Seminar, Symposium, Conference, Lecture-cum-Demonstration etc)</th>
<th>Arts</th>
<th>Science</th>
<th>Commerce</th>
<th>Language</th>
<th>Or other?</th>
</tr>
</thead>
</table>

4 B) How many participants were there in each programme? Please indicate in the following table the number of participants in each programme under each subject area.

<table>
<thead>
<tr>
<th>Type of the programme</th>
<th>Arts</th>
<th>Science</th>
<th>Commerce</th>
<th>Language</th>
<th>Or other?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Seminar</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>b) Workshop</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>c) Extension Lecture</td>
<td></td>
<td></td>
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<tr>
<td>d) Symposium</td>
<td></td>
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<td></td>
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<tr>
<td>e) Conference</td>
<td></td>
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</tbody>
</table>
4 C) What was the geographical area/s from which these teachers were selected for the programme?

a) ........................................

b) ........................................

c) ........................................

d) ........................................

4 D) When do you arrange in-service programmes for teachers of higher secondary schools? (Please tick (/) the right response).

a) During weekly holidays

b) In the first term vacation

c) In summer holidays

d) On working days.

4 E) What was the duration of each in-service programme that you had organized during the last three years?

<table>
<thead>
<tr>
<th>Title of the in-service programme</th>
<th>Nature of in-service programme</th>
<th>Duration of the in-service programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
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<td>ii)</td>
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<td>vi)</td>
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<tr>
<td>vii)</td>
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</tbody>
</table>
Pedagogical Aspects

5. What were the pedagogical techniques you did apply in each of the in-service training programme/s organized for higher secondary teachers?

<table>
<thead>
<tr>
<th>Title of the programme</th>
<th>Pedagogical Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lecture</td>
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<td></td>
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<td></td>
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</tr>
</tbody>
</table>

i.

ii.

iii.

iv.

Motivational Aspects

6. What incentives does a higher secondary teacher get to attend the in-service training programme? (Please tick (/) the alternatives).

a) Monetary
b) Promotion
c) Increment
d) Any other (please specify).

Curricular Aspects

7. What were the curricular aspects that were included in each of the in-service training programme organized for higher secondary teachers from the last three years?

<table>
<thead>
<tr>
<th>Title of the programme</th>
<th>Type of the programme</th>
<th>Content covered under each programme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
8. What are the audio-visual aids/techniques that your extension centre has and to what extent they have been utilized in successful organization of the in-service training programmes for secondary and higher secondary teachers?

Evaluation

9. What type of evaluation procedures did you adopt to evaluate the higher secondary teachers?

(Please tick (/) the right alternative)

a) Oral feedback
b) Questionnaire
c) Rating scale
d) Any other (please specify) ..............

10. What type of feedback you have been getting from the participants and how far are they really helpful in reorganising the in-service training programmes?
11. a) Is there any follow-up programmes after the in-service programme organized by your department (centre)? Yes/No.

b) If yes (to item 11 a), what is the nature of the follow-up programme undertaken. (If so, please give details about the sample, geographical area covered and results of such follow-up programme)

Sample:

Geographical area covered:

Results:

c) What is the reaction of higher secondary teachers for the follow-up programmes undertaken?

d) Is there any resistance from schools for such follow-up programmes? If so, what is the nature of resistance?

12. What innovative or special programmes did you organize for the last three years for higher secondary teachers?

SECTION - II

Objectives of the in-service programme

13. What are the general objectives of the in-service programmes for secondary teachers?

i)

ii)

iii)

iv)

v)
14. Do you think that the above objectives have been realized by your department? If so, how far you have been able to realize the objectives?

Nature of programmes

15. A) What were the types of in-service programmes organized in your extension service department (centre) for secondary teachers?

Please mention in the following table the type of the programme and indicate the subject areas and the number of times such programmes organized in each subject area from the past three years.

<table>
<thead>
<tr>
<th>Name of the programme</th>
<th>Mode of conduct of the programme</th>
<th>Arts</th>
<th>Sci-</th>
<th>Comm-</th>
<th>Lang-</th>
<th>Or any other?</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Lecture, Lecture-cum-demonstration, Seminar, Symposium, Conference etc.)</td>
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<td></td>
</tr>
</tbody>
</table>
B) How many participants were there in each programme?

Please indicate in the following table the number of participants in each programme under each subject area.

<table>
<thead>
<tr>
<th>Type of the programme</th>
<th>Arts</th>
<th>Science</th>
<th>Commerce</th>
<th>Language or any other</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Seminar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Extension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Symposium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C) What was the geographical area from which these teachers were selected for the programme?

a) ................
b) ................
c) ................
d) ................

D) What was the duration of each in-service programme that you had organized during the last three years?

<table>
<thead>
<tr>
<th>Title of the in-service programme</th>
<th>Nature of in-service programme</th>
<th>Duration of the in-service programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When do you arrange in-service programmes for teachers of secondary schools?
(Please tick (✓) the right response)

a) During weekly holidays
b) In the first term vacation
c) In summer holidays
d) On working days

Pedagogical Aspects

16. What were the pedagogical techniques you did apply in each of the in-service training programme/s organized for secondary teachers?

<table>
<thead>
<tr>
<th>Title of the programme</th>
<th>Pedagogical Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lect-</td>
</tr>
<tr>
<td></td>
<td>ture</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>i.</td>
<td></td>
</tr>
<tr>
<td>ii.</td>
<td></td>
</tr>
<tr>
<td>iii.</td>
<td></td>
</tr>
<tr>
<td>iv.</td>
<td></td>
</tr>
<tr>
<td>v.</td>
<td></td>
</tr>
</tbody>
</table>

Motivational Aspects

17. What incentives does a secondary teacher get to attend the in-service training programme?
(Please tick (✓) the alternatives).

a) Monetary
b) Promotion
c) Increment
d) Any other (please specify) . . . . . . . .

Curricular Aspects

18. What were the curricular aspects that were included in each of the in-service training programme organized for secondary teachers from the last three years?

| Title of the programme | Type of the programme | Content covered under each programme |
Evaluation

19. What type of evaluation procedures did you adopt to evaluate the secondary teachers?
(Please tick (✓) the right alternative)

a) Oral feedback
b) Questionnaire
c) Rating scale
d) Any other (please specify). . . . . . . .

20. What type of feedback you have been getting from the participants and how far are they really helpful in reorganising the in-service training programmes?

Follow-up

21. a) Is there any follow-up programmes after the in-service programme organized by your department (centre)?
Yes / No.

b) If yes (to item No. 21 a) what is the nature of the follow-up programme undertaken (If so, please give details regarding the sample and geographical area covered and results of such follow-up programme).

Purpose :

Sample :

Geographical area covered :

Results :

c) What is the reaction of secondary teachers for the follow-up programmes undertaken?
d) Is there any resistance from schools for such follow-up programmes? If so, what is the nature of resistance?

22. What innovative or special programmes did you organize from the past three years for secondary teachers?

SECTION-III

Other activities of the extension centre

23. a) Do you have any library services for
   i) higher secondary teachers Yes / No
   ii) secondary teachers? Yes / No

b) If yes (to item 23 a) what is the nature of library services offered? Please give details.

24. Do you have any correspondence course or programme for
   i) secondary teachers Yes / No
   ii) higher secondary teachers? Yes / No

   If so, please give details about the same.

25. Does your extension centre have an technology cell? If so, what are the services it offers to the secondary and higher secondary schools? Please furnish details.
26. A) Have you been publishing any news letter/Journal/Monograph from your department? 
   Yes / No

   B) If yes (to item 26-A)
      a) What is the name of the news letter/Journal/Monograph?
      b) At what interval it is published? (periodicity)
         (Please tick (/) the right response).
         i) Weekly
         ii) Fortnightly
         iii) Monthly
         iv) Quarterly
         v) Half yearly
         vi) Annually
         vii) Any other
              (Please specify) . . . . . . . . .
      c) Generally, what are the areas
         (Teaching, Teacher Education, Evaluation, Curriculum, Guidance, etc.)
         covered by your News letter/Journal/Monograph? (Please specify).
      d) Do you lay special emphasis on the problems of higher secondary teachers
         in the News letter/Journal?

27. a) Do you convene meetings of higher secondary teachers and principals from local schools?
      Yes / No

   b) If yes (to item 27 a)
      i) With what purpose such meetings are arranged?
      ii) How often such meetings are convened?
      iii) What are your perceptions about convening such meetings?

28. Is there any difference between the in-service programmes organized for secondary and higher secondary teachers? If so, please give details.
Problems

29. What sort of difficulties or problems you find in carrying out the co-ordination work effectively?

Future Plans

30. What are the future plans you have for organising in-service programmes for higher secondary teachers?

Please provide details.

31. Any other details you would like to provide.
**APPENDIX - L**

Table showing the Extension Services Department/Centres covered under the Study

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Extension Services Department/Centre</th>
<th>Name of the University/College</th>
<th>Place</th>
<th>Year of establishment of the department</th>
<th>Geographical area covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Extension Services Unit G.B.T.C.(College), Chhatra Vilas Rajpipla 393145</td>
<td>Graduate Basic Training Centre, Rajpipla</td>
<td>Rajpipla</td>
<td>About in 1954</td>
<td>Bheruch District</td>
</tr>
<tr>
<td>3.</td>
<td>Extension Services Centre R.G. Teachers College (Govt.), Porbandar, Junagadh</td>
<td>K.U.Teachers College (Govt.)</td>
<td>Porbandar</td>
<td>1962</td>
<td>Formerly all districts of Saurashtra. Now, it covers Rajkot and Junagadh Districts</td>
</tr>
</tbody>
</table>

*contd.*
<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the Extension Services Department/Centre</th>
<th>Name of the University/College</th>
<th>Place</th>
<th>Year of establishment of the department</th>
<th>Geographical area covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Extension Services Department, College of Education, Gujarat Vidyapith, Ahmedabad</td>
<td>Gujarat Vidyapith Ahmedabad</td>
<td>Ahmedabad</td>
<td>1965</td>
<td>Gujarat state post Basic schools and primary Teacher's Training Colleges 270 Post Basic Schools (High Schools)</td>
</tr>
<tr>
<td>6.</td>
<td>Centre for Continuing Education, Shri Rang Shikshan Mahavidyalaya, Bilimora, District, Valsad 396321</td>
<td>Shri Rang Shikshan, Mahavidyalaya, College Campus, Chikhli Road, Bilimora</td>
<td>Bilimora Valsad District</td>
<td>1981</td>
<td>Valsad and Dangs districts and Union territories viz. Dadara Nagar Haveli, Daman</td>
</tr>
<tr>
<td>8.</td>
<td>E.S.D. A.G. Teachers College, Ahmedabad</td>
<td>A.G. Teachers College Ahmedabad Gujarat University</td>
<td>Ahmedabad</td>
<td>1956</td>
<td>Ahmedabad (City Urban and Rural areas), Mehsana District and Gandhinagar District.</td>
</tr>
<tr>
<td>SI. No.</td>
<td>Name of the Extension Services Department/College</td>
<td>Name of the University/Establishment</td>
<td>Place</td>
<td>Year of establishment of the department</td>
<td>Geographical area covered</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------</td>
<td>-------</td>
<td>----------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>9.</td>
<td>Extension Services Centre, Faculty of Education and Psychology, M.S. University, Baroda</td>
<td>M.S. University of Baroda, Baroda</td>
<td>Baroda</td>
<td>1955</td>
<td>Baroda City, Baroda district and Panchmahals District.</td>
</tr>
<tr>
<td>10.</td>
<td>Extension Services Department, Regional College of Education, Shyamala Hills, Bhopal</td>
<td>Bhopal University</td>
<td>Bhopal</td>
<td>1964</td>
<td>Western Region: Madhya Pradesh, Gujarat, Maharashtra and Union Territories of Goa, Daman, Div and Dadra Nagar Haveli.</td>
</tr>
<tr>
<td>12.</td>
<td>Extension Services Department, Regional College of Education, Mysore 570006</td>
<td>University of Mysore, Mysore</td>
<td>Mysore</td>
<td>1965-66</td>
<td>Southern Region: Andhra Pradesh, Kerala, Tamil Nadu, Karnataka and Pondicherry</td>
</tr>
<tr>
<td>13.</td>
<td>Extension Services Department, Regional College of Education, Bhubaneshwar</td>
<td></td>
<td></td>
<td></td>
<td>Eastern Region: Orissa, Arunachal Pradesh, Assam, Meghalaya, Manipur, Tripura, Andaman and Nicobar Islands.</td>
</tr>
</tbody>
</table>
Interview Schedule for Co-ordinators

Name of the Respondent : 
Designation : 
Address : 

Date : 
Time :

1. What are the inservice training programmes you have organized for higher secondary teachers?

2. a) What difficulties are you facing in organizing the inservice programmes?
   i) Administrative
   ii) Lack of physical facilities like building, furniture, gadgets, etc.
   iii) Financial problems
   iv) Lack of resource persons
   v) Any other

b) What measures have you taken to overcome these difficulties?

3. a) Which organisation finances you?
   i) N.C.E.R.T.
   ii) State government
   iii) Private organisations such as Industry, voluntary agency, etc.

b) How do you assess the training needs of teachers?

c) Do the institutions request you to organize any training programme?
4. What are the subject areas in which more inservice programmes are organized? Why?

5. In your opinion, what are the subject areas which need urgently the inservice training programmes?

6. How do you evaluate the training programmes?

7. a) In your opinion, is there any need to organize training programmes to orient higher secondary teachers in content aspects?

   b) Do you follow-up the programmes thus organized?

   c) If you followed up any of your programmes what have been the steps of such follow up activities?

8. What are the recent innovations you have tried out in the inservice training?

9. What are the future plans for organizing inservice training programmes for higher secondary teachers?

10. In your opinion, what should be the main aspects of inservice training programmes for +2 stage teachers?