Introduction :

Teacher's preparation is regarded one of the most important issues that is the focus of interest of most people in the world; especially the educationalists. This is because the teacher is one of the decisive factors in achieving the objectives of various policies. Also, the educational process is useless without a well -prepared teacher who can employ different means to serve the educational process. Thus, teacher's suitable preparation does not only lead to the success of the educational process but also a condition of its success.

The purpose of establishing Elementary education section at Faculties of education is to raise the standard of the teacher at this stage. But, the objectives were nearly absent and the subjects that should be treated have not been determined. Therefore, there is a must to develop a preparation programme for those teachers.

Study Problem :

The problem of this study is summerized in how science teachers' preparation programmes at Elementary education section in Faculties of Education can be developed. This requires answering the following questions :

1- What are the main scientific conepts that should be implemented in teachers' science preparation programme at the elementary education stage, in Faculties of Education?

2- To what extent does the present preparation programmes for science teachers perform their roles in acquiring these concepts?

3- What is the concept of the suggested programme for science teachers' preparation in the light of science basic concepts?

4- What is the effectiveness of a unit from this suggested programme in acquiring the scientific concepts and the accompanied attitudes?

Hypotheses of the study :

First : Hypotheses of the evaluative study :

1- The present academic preparation programme at the faculties of education does not lead the elementary education students (science) to the mastery learning in the concepts that should be studied.

2- It does not lead them to mastery learning in physics concepts that should be studied.

3- It does not lead them to the mastery learning in the environmental concepts that should be studied.

4- It does not lead them to the mastery learning in the chemical concepts that should be studied.

5- It does not lead them to the mastery learning in the biological concepts that should be studied.

Second : Hypotheses of the experimental study :

1- The suggested unit has an effectiveness on the experimental group in acquiring the environmental concepts as measured by Blake formula.

2- It is effective in enhancing the experimental group environmental attitudes.

Procedures of the study :

First : To determine the basic concepts that should be included in science teachers' preparation programme, the following steps were followed :

1- Review of literature and the most related studies that dealt with science teachers' preparation.

2- Review of the content of science teachers' academic preparation programs in some Arabic and foreign countries.
3- Designing a list of the concepts that should be provided and acquired by elementary science teachers from the researcher's point of view.
4- Validating the list.

Second : Review of the actual state of the preparation programmes in current-use through :

1- Reviewing of science courses that are taught in some faculties of education, elementary section to know the existance of the previously determined concepts in these courses.
2- Designing a diagnostic test in these concepts for fourth year students, science, and validating it.
3- Calculating the validity and the reliability of the test by using the "split-half method.
4- Applying the test to the fourth year, elementary science students at faculties of education in : Benha, Zagazig, Shebin El-koum, Mansoura, Sohag, El-Minia, and El-Fayoum. The total number is 195 students (boys and girls).
5- Results of the test and judging the effectiveness of the present programme with revealing points of shortage.

Third: Designing the suggested concept of the science teacher's preparation academic programme, distributed to study years through:

1- Employing the previously determined concepts list.
2- Using the results of the previous diagnostic test.
3- Designing the primary concept of the suggested programme.
4- Validating the programme.

5- Designing the final framework of the programme in the light of the modifications given by experts.

Fourth: To know the effectiveness of the suggested programme, the following steps were carried out :

1- Preparing a unit entitled by "Man in his local environment it includes (objectives, content, methods of teaching Aids and activities-evaluation).

2- Designing a teacher's manual for the unit.

3- Designing an achievemental test to measure learning points included in the unit.

4- Validating the unit and its contents.

5- Pre-test.

6- Pre-application of the attitudes measurement prepared by Abo-El-Sooud Mohamed.

7- Teaching the unit for the third scientific year students (30) at Benha, Faculty of Education as an experimental group.

8- Post-test.

9- Post-application of the attitudes measurement.

10- Results of the study and recommendations.

Results of the study :

First : Results of the evaluative study :

1- The study revealed that there is a shortage in the present scientific academic teachers' preparation programmes at Faculties of Education.

2- There is a shortage in the concepts included in physics course.

3- There is also a shortage in the environmental sciences.

4- Also, there is a shortage in chemistry courses.

5- There is also a shortage in Biological sciences. All these results were justified.

Second : Results of the experiemental study : The results of the study reveal the effectiveness of the procedures followed in teaching the experimental unit.

This unit is effective as proved by using Blake formula. The success of teaching the unit reflects the success of this programme and its effectiveness in achieving the desirable objectives. The results of the study also maintain that the unit is not effective in changing the environmental attitudes of the experimental group.