

APPENDIX

- I Pretest
- II Post-test
- III MPIT
- IV JIM Scale
- V Attitude Scale
- VI Unstructured Interview Schedule for students of
 standard XI Sci.
- VII Structured Interview schedule for chemistry teacher
- VIII Content of organic compounds
- IX Content of Energy
- X Content of Bonding and molecular structure.
- XI Unstructured Interview schedule for students of
 standard XI Science and Chemistry teacher.
- XII Instructional Manual
- XIII Score of Experimental and Control Group Students: Pre-
 test, Post-test, MPIT, JIM Scale.

APPENDIX (I)

PRE-TEST

Time : 2 Hrs.

Marks : 50

- N.B. : 1) All questions are compulsory
2) Write answers of the questions in the space provided below the question.

1. Draw the structure of diamond & Graphite. (4)

Diamond

Graphite

2. Give three points of differences between diamond and Graphite. (3)

Diamond

Graphite

1)

2)

3)

3. List the important sources of energy of in our life. (2)

(i)

(iii)

(ii)

(iv)

4. Write the meaning of :

(a) Renewable sources of energy : (2)

(b) Non-Renewable sources of energy : (2)

5. What is an atom ? Draw it's structure. (4)

6. Give structural and electron dot formula of the following : (6)

(i) Methane.
Structural
Formula :

(ii) Butene
Structural
Formula :

Electron dot
Formula :

Electron dot
Formula :

(iii) Pentyne
Structural
Formula :

(iv) Ethene
Structural
Formula :

Electron dot
Formula :

Electron dot
Formula :

7. Give molecular formula for the following compounds after giving general formula. (9)

(1) Alkane :
General Formula :

Formula For C_{15} :

Formula For C_{20} :

(2) Alkene :
General Formula :

Formula For C_{25} :

Formula For C_{10} :

(3) Alkyne :
General Formula :

Formula For C_{39} :

Formula For C^{18} :

8. Define Isomerism ? Give isomers of butane and pentane. (8)

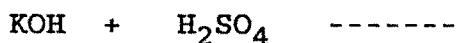
Definition of isomerism :

Isomers of Butane :

Isomers of Pentane :

9. Write Chemical Equation showing the neutralization of caustic potash (KOH) with sulphuric acid. Define the process of neutralization. (4)

Chemical Equation :



Definition of Neutralization process :

10. Give scientific reasons :

(a) Yellow phosphorous is kept under water. (3)

(b) Non-metallic elements are different from the metallic elements. (3)