The present study was conducted to provide some information and comparison about the achievement in mathematics subjects at secondary level in Birbhum District, West Bengal. Data was collected of 160 students from four higher secondary schools in Birbhum District, by randomly. The results revealed that 1) male and female students differ significantly with regard to achievement in mathematics subjects at secondary level, 2) urban male & rural male students differ significantly in achievement in mathematics at Secondary stages, 3) urban female & rural female students does not differ significantly in achievement in mathematics at Secondary level.

H01. There is no achievement difference in mathematics at Secondary stages between urban & rural male students significantly.

H02. There is no achievement difference in mathematics at Secondary stages between urban & rural female students significantly.

H03. There is no achievement difference in mathematics at Secondary stages between urban & rural female students significantly.

H04. There is no achievement difference in mathematics at Secondary stages between urban & rural male students significantly.

H05. There is no achievement difference in mathematics between rural and urban students.

SCOPE AND DELIMITATION:
To make the study intensive it was delimited in the following areas.

i. School:
All the Secondary and Higher Secondary School could be included in the study. But considering the facilities and time span, two Boy’s High School (one Rural and One Urban) and two Girls High School (one Rural and one Urban) were taken for the study.

ii. Area:
This type of study could be conducted in any district of West Bengal, However considering the availability of data and cooperation from the schools in view; Birbhum District was selected as the study area.

iii. Subject:
This type of study could be conducted with any subject and to estimate the achievement gaps between Urban and Rural. But initially it was decided that the study would be conducted on achievement different in Mathematics at Secondary level between rural and urban students. So, only mathematics subjects were taken into account for calculating the achievements of the students.

SAMPLING:
The random sampling procedure was adopted for selection of sample from the list of Secondary schools in district of Birbhum, two rural Secondary schools (one Boys school and one Girls school) and two urban Secondary schools (one Boys school and one Girls school) were selected randomly.

DATA BASE:
The data was collected through the following manners:

i. Name of the Student
ii. Total Marks in Mathematics Subject
iii. Total Percentage of Marks in Mathematics
iv. Percentage of Marks in Science Group
DATA ANALYSIS AND INTERPRETATION:

Hypothesis No – 1: There is no achievement difference in mathematics at Secondary level between urban and rural students significantly.

Table: 1
Comparison between Urban and Rural Students

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Students</td>
<td>80</td>
<td>54.83</td>
<td>14.48</td>
<td></td>
<td>5.93</td>
<td>significant</td>
</tr>
<tr>
<td>Rural Students</td>
<td>80</td>
<td>43.30</td>
<td>21.39</td>
<td></td>
<td>3.99</td>
<td>significant</td>
</tr>
</tbody>
</table>

Interpretation:
Table-1 indicates that the Mean 54.83 & 43.30, SD 14.48 & 21.39 and calculated ‘t’ value is 3.99 between urban and rural students in Mathematics subject on the basis of achievement at board of Secondary level. Our calculated ‘t’ value is greater than table value at 0.01 level and 0.05 level (df 80, 0.01 level 2.58 and 0.05 level 1.96). Thus, it is evident that there is significant difference between urban and rural students in Mathematics on the basis of achievement at board of Secondary Examination. Hence, the Hypothesis No.1 is rejected.

Hypothesis No 2: There is no achievement difference in mathematics at Secondary stages between urban & rural male students significantly.

Table: 2
Comparison between Urban and Rural Male Students

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Male</td>
<td>40</td>
<td>53.38</td>
<td>14.81</td>
<td></td>
<td>0.586</td>
<td>Not significant</td>
</tr>
<tr>
<td>Rural Male</td>
<td>40</td>
<td>55.45</td>
<td>16.78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:
Table-2 indicates that the Mean 53.38 & 55.45, SD 14.81 & 16.78 and calculated ‘t’ value is 0.586 between urban & rural male students in Mathematics on the basis of achievement at board of Secondary Examination. Our calculated ‘t’ value is greater than table value at 0.01 level and 0.05 level (df 78, 0.01 level 2.58 and 0.05 level 1.96). Thus, it is evident that there is no significant difference between urban and rural male students in Mathematics subject on the basis of achievement at board of Secondary Examination. Hence, the Hypothesis No.2 is accepted.

Hypothesis No 3: There is no achievement difference in mathematics in Mathematics subjects at secondary level significantly.

Table: 3
Comparison between Urban and Rural Female Students

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Female</td>
<td>40</td>
<td>56.28</td>
<td>14.18</td>
<td></td>
<td>6.81</td>
<td>significant</td>
</tr>
<tr>
<td>Rural Female</td>
<td>40</td>
<td>31.15</td>
<td>18.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:
Table 3 indicates that the Mean 56.28 & 31.15, SD 14.18 & 18.50 and calculated ‘t’ value is 6.81 between urban & rural female students in Mathematics group on the basis of achievement at board of Secondary Examination. Our calculated ‘t’ value is greater than table value at 0.01 level and 0.05 level (df 78, 0.01 level 2.58 and 0.05 level 1.96). Thus, it is evident that there is significant difference between urban and rural female students in Mathematics subject on the basis of achievement at board of Secondary level Examination. Hence, the Hypothesis No.3 is rejected.

Hypothesis No 4: There is no achievement difference in mathematics between urban male and rural female students under Secondary stages significantly.

Table: 4
Comparison between Urban Male and Rural Female Students

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Male</td>
<td>40</td>
<td>53.38</td>
<td>14.81</td>
<td></td>
<td>5.93</td>
<td>significant</td>
</tr>
<tr>
<td>Rural Female</td>
<td>40</td>
<td>31.15</td>
<td>18.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:
Table 4 indicates that the Mean 53.38 & 31.15, SD 14.81 & 18.50 and calculated ‘t’ value is 5.93 between urban male & rural female students in Mathematics subject on the basis of achievement at board of Secondary level Examination. Our calculated ‘t’ value is greater than table value at 0.01 level and 0.05 level (df 78, 0.01 level 2.58 and 0.05 level 1.96). Thus, it is evident that there is significant difference between urban male and rural female students in Mathematics subject on the basis of achievement at board of Secondary Examination. Hence, the Hypothesis No.4 is rejected.

Hypothesis No 5: There is no achievement difference in mathematics between urban female and rural male students under Secondary stages significantly.

Table: 5
Comparison between Urban Girls and Rural Boys Students

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Female</td>
<td>40</td>
<td>56.28</td>
<td>14.18</td>
<td></td>
<td>0.239</td>
<td>Not significant</td>
</tr>
<tr>
<td>Rural Male</td>
<td>40</td>
<td>55.45</td>
<td>16.78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:
Table-5 indicates that the Mean 56.28 & 55.45, SD 14.18 & 16.78 and calculated ‘t’ value is 0.239 between urban female & rural male students in Mathematics subject on the basis of achievement at board of Secondary level Examination. Our calculated ‘t’ value is less than table value at 0.01 level and 0.05 level (df 78, 0.01 level 2.58 and 0.05 level 1.96). Thus, it is evident that there is significant difference between urban female and rural male students in mathematics group on the basis of achievement at board of Secondary level. Hence, the Hypothesis No.5 is accepted.

FINDINGS OF THE PRESENT STUDY:
Following are the findings of the present investigation:

- Male and female students differ significantly with regard to achievement in mathematics subjects at secondary level Examination.
- Urban male & rural male students do not differ significantly in achievement in mathematics at Secondary stages.
- Urban female & rural female students differ significantly in achievement in mathematics at Secondary level.
- Urban male and rural female students differ significantly in achievement in mathematics subjects at Secondary level.
- Urban female and rural male students do not differ significantly in achievement in mathematics subjects at Secondary level Examination.
REFERENCE