ANSWER ANY THREE (3) QUESTIONS

1. The Central Limited Theorem is the foundation on which sample surveys is built. Discuss.

2. Assume that you are required to measure the services provided by the Health Centre at your University over a six month period. How would you proceed and why? Your study should include:
   a) The target group
   b) The variables to be measured
   c) The frequency of measurement
   d) The use of index numbers
   e) The analysis of your findings

3. Complete and analyse the following Analysis of Variance table.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to Regression</td>
<td>3</td>
<td>27,932.82</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td>1502.75</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You may assume that your hypothesis is that the incidence of crime can be explained by poverty, peer pressure, overcrowding, lack of training in conflict resolution, among others.
4. Assume that you are asked to design a survey in order to determine the impact of crime on businesses in Jamaica. How would you design such a survey? Please state your assumptions clearly.

5. What is an analytical plan? Demonstrate as clearly as you can, the relationship between the analytical plan and the accompanying questionnaire.

END OF QUESTION PAPER