## Eastern University, Sri Lanka

First year Second Semester Examination in Science 2008/20 09 Srit CC 106: Biostatistics

## Answer all questions <br> Allowed Time: $\mathbf{1} \mathbf{h r}$

1. a) Describe the following terms,
I. Dependent event in theory of probability.
II. Class boundary in frequency distribution.
b) The mean weight of grapefruits is 10 kg with standard deviation of 1.5 kg . If these weights are normally distributed what percentage of grapefruits do you expect between 12 to 14 kg ?
c) Briefly explain the simple linear correlation with suitable graphs.
2. a) A set of five events is observed to occur with frequencies. Computed $X^{2}$ value is 12.5. State whether observed frequencies differ significantly from expected frequencies at $\mathrm{P}=0.05$.
b) Write the steps involved in constructing the ANOVA (Analysis of Variance).
c) Compute the range, mean deviation, standard deviation and variance for the following data set.

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32,35,38,33,54,66,45,55,60 \text { and } 49 .
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