EASTERN UNIVERSITY, SRI LANKA
DEPARTMENT OF MATHEMATICS
FIRST YEAR EXAMINATION IN SCIENCE – 2013 / 2014
SECOND SEMESTER (April / May, 2016)
CC 106 – BIO STATISTICS
(PROPER &REPEAT)

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uestions
Time : **One** hour
les and calculators will be provided

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pose you grew fifty baby carrots using special soil. You dig them up and measure their length (to nearest mm) and group the results.

Length (mm)	Frequency
150 - 154	5
160 - 164	6
165 - 169	8
170 - 174	9
175 - 179	11
180 - 184	6
185 - 189	3

e mean, median and mode of length of the baby carrots.

a on age and glucose level of six persons are given in following table.

Age (X)	Glucose Level (Y)
43	99
21	65
25	79
42	75
57	87
59	81

(P.T.O)

(i) Briefly comment on the relationship between the age and the glucose level using coef correlation.

(ii) Fit a regression model of the form, $Y=\beta_0+\beta_1 X$, where β_0 and β_1 are arbitrary real cons the above data and estimate the glucose level of a person having the age of 30.

02 (a) A die is tossed three times. What is the probability of

(i) no fives turning up,

(ii) one five,

(iii) three fives?

(b) From data collected over a year, it is calculated that the mean number of accident in a wo 2.2 per month. What is the probability of getting a month with

(i) no accident,

(ii) one accident,

(iii) two accidents?

(c) A class teacher claims that the average mark of students in a class for a certain subject is h 60. To check this claim following data have been collected by a student.

Sample Data

40,50,60,70,75,45,60,80,90

Test the validity of the claim at 5% significance level by assuming that marks follow a nor distribution with unknown mean μ and variance 9.