Ans 1

TPR=.82

Test Incidence=0.41

H(X|Y)=0.6395

(cell L45) New\_Information-Gain-Calculator sheet.xls "part1 ans13"

Ans 2

I(X;Y)=0.1718

(cell O7) New\_Information-Gain-Calculator sheet.xls "part1 ans13"

H(X)=0.8113

(cell O9) New\_Information-Gain-Calculator sheet.xls "part1 ans13"

Ans 3

PIG=Information Gain/Initial entropy

=0.1718 / 0.8113

=21.18%

(cell O11) New\_Information-Gain-Calculator sheet.xls "part1 ans13"

Ans 4

dollor saving = dollor saved per event / IG

=525(from ans 7 part I) / 0.1718( from ans 2 part III)

=$3056

Ans 5

0.1205

Cell L35 New\_Information-Gain-Calculator sheet.xls " part3 ans5"

Ans 6

14.85

Cell O11 New\_Information-Gain-Calculator sheet.xls " part3 ans5"

Ans 7

412/.1205=3419

**Select 3427**

Ans 8

Information Gain(my model) = 0.1718

Information Gain(egger model) = 0.1205

Ans= -0.0513

Ans9

Since Information Gain of Eggertopia model is less, we will not take its services

Ans 10

Not using Eggertopia model , so it will be same as that of my model 0.1718 bits per event