

click-throughs got for A, B, C, D, E are
10, 22, 36, 7, 26 respectively.

total number of visitors was 28

2100.0 visitors

total number of visitors was 3.5k at

10pm & 2000.0 visitors was 3.6k at

11pm. Step A order has early trap. It

is typical pattern as was big spread

and many traps of visitors for a

10pm. Many trap of visitors are 3

and become very small. This next period

was high as high. Most visitors depend on bus

as traps and there many traps. At

11pm. There was no trap. Most visitors

was end and many traps were in well

the house from bus

③ The perfect matchings are: a_0-b_0 , a_1-b_2 , a_2-b_3 , a_3-b_1 , a_0-b_3 , a_1-b_2 , a_2-b_0 , a_3-b_1 , a_0-b_4 .

④ Since, in slot 1, the expected revenue for A is higher i.e., 0.0015

In slot 2, C is selected because 0.00112 is higher

In slot 3, E is selected because 0.0006 is higher

The first phase ends when A gets 10 click-throughs and now A runs out of budget and it is not eligible for second phase.

B is selected to first slot because 0.016 is higher than C, D, E. Then C gets second slot and E gets third slot based on highest ones.

The second phase ends when B gets 22 click-throughs and runs out of budget.

Now, in the third phase, C takes the first position and next second will be taken by D and third by E.

At the end of 3rd phase, summing up click-throughs for C, D, E in all phases, we get 36 click-throughs for C, 7 click-throughs for D, 26 click-throughs for E.

Assignment - 10

① yzyy is one sequence of four queries which yields the optimum i.e., \$3.

yyxx is another sequence of four queries in which one advertiser is assigned to first slot and the other is assigned to second slot.

② Given sets are: AB, BC, CD, DE, EF, FG, GH, AH, ADG, ADF

Dumb method: AB, BC, CD, DE, EF, FG, GH → 7

Simple method: AB, BC, CD, DE, EF, FG, GH → 7

Layout - First method: ADG, ADF, AB, BC, DE, GH → 6

Most - Help method: ADG, BC, EF, AH → 4

The optimum one is most Helped method since size of 4.

Ratio of Dumb and Most Help methods = $\frac{7}{4} = 1.75$

Ratio of Simple and most Help methods = $\frac{7}{4} = 1.75$

Ratio of Layout - First and most Help method

$$\approx \frac{7}{4} = 1.75$$