**Input Data:**

: Actual required number of CSAs at Site of OU of Planning Group at shift h

: 1 if Shift covers time interval otherwise 0.

Current Seat Utilization of Site i

Maximum Seating Capacity of Site i

: Constant

**Index:**

S: Set of Sites, real names set of strings

U: Set of OUs,

K: Set of Skills,

T: Time intervals in 24 hours; we have 48 intervals of 30 min each,

H: Set of shifts,, each shift of 9 hours starting from time interval t

**Decision Variables:**

Total number of CSAs assigned at Site of OU of Planning Group at shift h after allowing a leverage of β and

: Total number of seats being utilized for site i at time interval t

: Maximum number of seats Utilized at Site i

=Total number of CSAs allotted for the site i

: Penalty of minimizing

**Parameters:**

A certain allowable percentage of CSAs that can be less than the Actual required number of CSAs (lower bound)

A certain allowable percentage of CSAs that can be more than the Actual required number of CSAs (upper bound)

**Objective Function:**

Minimize

**Constraint To:**

…. (1)

…. (2)

…. (3)

…. (4)

…. (5)

…. (6)