a) T (n) = 3T (n/2) + n

**ANS :** **T (n) = Θ(nlog23)** (Case 1)

b) T (n) = 64T (n/8) − n^2(log n)

**ANS** : **NA**

(f(n) is not positive)

c) T (n) = 2nT (n/2) + n^n

**ANS : NA** (a is not a constant)

d) T (n) = 3T (n/3) + n/2

**ANS: Θ(n log n)** (Case 2)

e) .T (n) = 7T (n/3) + n^2

**T (n) = Θ(n2 )** (Case 3)