Question 2

8.1 Solution:

Let e = [E], s = [s], a = [ES], e = [E], and p = [P] where e, s a, e and p denotes the active mass of corresponding substance.

$\frac{de}{dt} = (k_2 + k_3)a - k_1 es$

$\frac{ds}{dt} = k_2 a - k_1 es$

$\frac{da}{dt} = k_1 es - (k_2 + k_3)a$

$\frac{dp}{dt} = k_3 a$