

Ques 1 :

Multinomial  $(20, 0.3, 0.4, 0.1)$

$$0.3 + 0.4 + 0.1 = 0.8 \neq 1$$

so, there are 4 components in

Multinomial  $(20, 0.3, 0.4, 0.1)$

with  $p_1 = 0.3$ ,  $p_2 = 0.4$ ,  $p_3 = 0.1$ ,  $p_4 = 0.2$