بو غفط إبراهيم البات   (ث.و)

1) $250 C_2 = \dfrac{250!}{2!\,(250-2)!} = 31195$

2) Population $= 3.0\ \&\ 2.1 = 5$

Ans $= 5! = 120$

3)

$\boxed{\geq 1} \times \boxed{2} \times \boxed{2} \times \boxed{2} \times \boxed{1}$

No. of
possible
Probability $= 2^3 = 8$

4)

$30 C_3 = \dfrac{30!}{3!\,(30-3)!} = 4060$

5)

$6 C_3 = \dfrac{6!}{3!\,(6-3)!} = 20$

6) at least one of three times

you roll $7 = \frac{5}{6} \times \frac{5}{6} \times \frac{5}{6}$

$= 0.57 = 57\%$

So it will be $100\% - 57\% = 43\%$

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7) ∴ there are 2 books shouldn't be chosen together

~~we suppose that they are 1 book~~

∴ choose 3 books from $6 = 6C_3 = 20$

~~chose~~

there are 2 books shouldn't be chosen togeth
$= 4C_3 = 4$

Final result $= 20 - 4 = 16$

8) Population= 25 student

Ahmed → 2

Sally → 2

Mariam → 2

Yousef → 2

Ibrahim → 2

[a]

$$20C_9 = 167960$$

[b] $(2C_2)^4 \times 20C_4 = 4845$