Answer 3

Probability of answering each question correctly, $p = \frac{1}{5} = 0.2$

" " " " " incorrectly, $(1-p) = 1-0.2 = 0.8$

Let's say X = # of correct answers ~ binomial R.V.

$\therefore P(X=9) = \binom{n}{x} p^x (1-p)^{n-x}$ [from pmf of binomial RV]

$= \binom{10}{9} (0.2)^9 (0.8)^{10-9}$

$= 0.0000041$.