These formulas will be provided for you on your test paper. You will not be permitted to bring notes of your own. Of course you will need to understand what the formulas mean and how to use them before you start the test.

Formulas:

\[ P(n, k) = \frac{n!}{(n-k)!} \]
\[ C(n, k) = \frac{n!}{k!(n-k)!} \]
\[ P(E \cup F) = P(E) + P(F) - P(E \cap F) \]
\[ P(\overline{E}) = 1 - P(E) \]
\[ P(E|F) = \frac{P(E \cap F)}{P(F)} \]
\[ P(A_1|E) = \frac{P(A_1) \cdot P(E|A_1)}{P(A_1) \cdot P(E|A_1) + P(A_2) \cdot P(E|A_2) + \cdots + P(A_m) \cdot P(E|A_m)} \]