1. The product of sum expression of a Boolean function $F(A, B, C)$ of three variables is given by

$$F(A, B, C) = \left(A + B + \bar{C}\right) \cdot \left(A + \bar{B} + \bar{C}\right) \cdot \left(\bar{A} + B + C\right) \cdot \left(\bar{A} + \bar{B} + \bar{C}\right)$$

The canonical sum of product expression of $\mathrm{F}(A, B, C)$ is given by

(A) $\bar{A}\ \bar{B}\ C + \bar{A}\ B\ \bar{C} + A\ \bar{B}\ C + A\ B\ C$

(B) $\bar{A}\ \bar{B}\ \bar{C} + \bar{A}\ B\ \bar{C} + A\ \bar{B}C + A\ B\ \bar{C}$

(C) $A\ B\ \bar{C} + A\ \bar{B}\ \bar{C} + \bar{A}\ B\ C + \bar{A}\ B\ C + \bar{A}\ \bar{B}\ \bar{C}$

(D) $\bar{A}\ \bar{B}\ \bar{C} + \bar{A}\ B\ C + A\ B\ \bar{C} + A\ B\ \bar{C} + A\ B\ C$

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