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Shift-2

EE24BTECH11063 - Y.Harsha Vardhan Reddy

Integer Type

1) The number of words(with or without meaning) that can be formed from all the letters of the word "LETTER" in which vowels never come together is:
2) If $\bar{x}$ and $\bar{y}$ be two non-zero vectors such that $|\bar{x}+\bar{y}| = |\bar{x}|$ and $2\bar{x}+\lambda\bar{y}$ is perpendicular to $\bar{y}$, then the value of λ is
3) Consider the data on x taking the values 0,2,4,8, ...,2n with frequencies ${}^nC_0, {}^nC_1, {}^nC_2, ..., {}^nC_n$,respectively. If the mean of this data is $\frac{728}{2^n}$, then n is equal to:
4) Suppose that function $f : R \to R$ satisfies $f(x+y) = f(x)f(y)$ for all $x, y \in R$ and $f(1) = 3$. If $\sum_{i=1}^{n} f(i) = 363$, then n is equal to:
5) The sum of distinct values of λ for which the system of equations

$$(\lambda - 1)x + (3\lambda + 1)y + 2\lambda = 0$$

$$(\lambda - 1)x + (4\lambda - 2)y + (\lambda + 3)z = 0$$

$$2x + (3\lambda + 1)y + 3(\lambda - 1)z = 0$$

has non-zero solutions, is :