

STATISTICS

- If mean of the first n natural numbers is 20, then n is equal to
(A) 40 (B) 39
(C) 20 (D) None of the above
- The measurement scale to be used for collecting data on religion is
(A) nominal (B) ordinal
(C) interval (D) None of the above
- The median of a distribution is not same as the
(A) 2nd quartile (B) 5th decile
(C) 50th percentile (D) 1st quartile
- Which one of the following statements is not correct?
(A) Arithmetic mean cannot be calculated, if extreme classes are open.
(B) Median is not affected by extreme values.
(C) For skewed data, mean is more suitable than median.
(D) Both the Arithmetic mean and Geometric mean are based upon all the observations.
- Which one of the following statements is *not* true about Pearsonian correlation coefficient r between two variables X and Y ?
(A) $-1 \leq r \leq 1$
(B) $r = 0$ means X and Y are independent
(C) r is independent of change of origin
(D) $r = 0$ means there is no linear relationship between X and Y
- The two lines of regression
(A) intersect at the point (\bar{x}, \bar{y})
(B) never intersect
(C) never coincide
(D) passes through the point $(0, 0)$ only
- If $y = e^{\cos x}$ then $\frac{dy}{dx}$ is
(A) $-\sin x e^{\cos x}$ (B) $\sin x e^{\cos x}$
(C) $\cos x e^{\sin x}$ (D) $\sin x e^{\sin x}$
- If $f(x)$ is an even function of x then the value of $\int_{-a}^a f(x) dx$ is
(A) same as $2 \int_0^a f(x) dx$ (B) same as $-\int_{-a}^a f(x) dx$
(C) always 0 (D) always 1