1. If X and Y denote the random variables, then which is not random variable?
2. None of the above
3. If then
4. 1/7
5. 2/7
6. 3/7
7. 4/7

ANS: A

1. Consider the statements:
2. For a discrete random variable X, the probability at a point is always vanish.
3. For a continuous random variable X, the probability at a point is always vanish.
4. The statement (i) is correct but not (ii).
5. The statement (ii) is correct but not (i).
6. The statements (i) and (ii) both are correct.
7. Neither the statement (i) nor (ii) is correct.

ANS: B

1. Statement: The variance

Reason: The variance is independent of change of origin.

1. Statement and reason both are correct.
2. Statement is correct but not the reason.
3. Reason is correct but not the statement.
4. Neither the statement nor the reason is correct.

ANS: C

1. The covariance is

ANS: D

6. Two regression lines coincide if the correlation coefficient is

(A) (b) (c) (d) all are possible

ANS: D

7. If Two regression lines coincide then possible angle between them is/are

(A) and (b) 0 but not (c) but not 0 (d) None

ANS: C

8. The regression coefficient of X on Y is defined by

1. (b) (c) (d)

ANS: C

9. The product of two regression coefficients will be

(A) positive correlation only

(B) Negative correlation only

(C) May be positive or negative

(D) regression and correlation coefficient are not related.

ANS: C

10. The range of correlation and rank correlation coefficients is

(A) equal and positive but less than unity

(B) equal and negative but less than zero

(C) equal and lies between negative unity to positive unity

(A) not equal

ANS: C

1. Ten coins are tossed simultaneously. The probability of getting no head is
2. None

ANS: A

1. Select the correct option regarding mean and variance of Poisson distribution.
2. Mean is greater than variance.
3. Mean is less than variance.
4. Mean is equal to variance.
5. Mean and variance both are equal to 1.

ANS: C

1. Select the correct option regarding mean and variance of Negative Binomial distribution.
2. Mean is greater than variance.
3. Mean is less than variance.
4. Mean is equal to variance.
5. Mean and variance both are equal to 1.

ANS: B

1. If a company producing the large number of items, then the probability of 4 defective items can be obtained by
2. Bernoulli distribution
3. Binomial distribution
4. Negative Binomial distribution
5. Poisson distribution

ANS: C

1. The moment generating function of r.v. X can be obtained from
2. Expectation of X
3. Variance of X
4. Expectation of tx
5. Expectation of exponential (tX)

AND: D