

**Set A**

**BCA/Third Semester/ CACS 202: Probability and Statistics**

*Candidates are required to answer the questions in their own words as far as practicable.*

Name:.....

NCCS Reg no :.....

Section: .....

**Group “A”**

**Attempt all the questions.**

**[10×1=10]**

**1. Circle (O) the correct answer.**

**i.** Primary data are collected by using the method of

a. Interview

b. Mailed questionnaire method

c. Schedules sent through enumerators

d. All the above

**ii.** Which one of the following is not uniquely defined?

a. Mean

b. median

c. mode

d. All of these

**iii.** Which measure of dispersions is the quickest to compute?

a. Standard deviation

b. Mean Deviation

c. Quartile Deviation

d. Range

**iv.** The value of  $r^2$  lies between

a.  $-\infty$  to  $+\infty$

b. 0 to 1

c.  $-1$  to  $+1$

d. none of the above

**v.** The line of regression intersects at the point

a.  $(x, y)$

b.  $(\bar{x}, \bar{y})$

c. (0,0)

d. (1,1)

**vi.**  $P(B/A)$  Is defined only when

a.  $A$  is a sure event

b.  $A$  is not an impossible event

c. B is a sure event

d. B is an impossible event

**vii.** The skewness of binomial distribution will be zero if

a.  $P < \frac{1}{2}$

b.  $P > \frac{1}{2}$

c.  $P = \frac{1}{2}$

d.  $P < q$

**viii.** In sampling with probability proportional to size, the units are selected with probability in proportion to:

a. The size of the unit

b. The size of the population

c. The size of the sample

d. None of the above

**ix.** The degree of freedom for error in two-way ANOVA with k no. of treatments and h number of blocks (or varieties) is

a.  $(k - 1)$

b. (h-1)

c. (hk-1)

d. (h-1) (k-1)

**x.** A sample consists of:

a. All units of the population

b. 5% units of the population

c. 50% units of the population

d. any fraction of the population

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**Set B**

**BCA/Third Semester/ CACS 202: Probability and Statistics**

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**Name:**.....

**NCCS Reg no :**.....

**Section:** .....

**Group “A”**

**Attempt all the questions.**

**[10×1=10]**

**1. Circle (O) the correct answer.**

**i.** The word statistics is used as

- a. Singular                      b. Plural                      c. singular and plural both                      d. None of the above

**ii.** Which of the following represents median?

- a. First Quartile                      b. fiftieth percentile                      c. Sixth Decile                      d. none of the above

**iii.** Which one is difficult to compute?

- a. Relative measures of dispersion                      b. Absolute measures of dispersion  
c. Both a) and b)                      d. Range

**iv.** If  $y = a + bx$ , then what is the coefficient of correlation between X and Y?

- a. 1                      b.  $1 \text{ or } -1 \text{ according as } b > 0 \text{ or } b < 0$   
c. -1                      d. None of these

**v.** The two lines of regression become identical when

- a.  $r = 1$                       b.  $r = -1$                       c.  $r = 0$                       d. a or b

**vi.** If  $P(A/B) = P(A)$ , then

- a. A is independent of B                      b. E is dependent of A  
c. B is independent of A                      d. Both a and c

**vii.** If  $X \sim N(8, 64)$ , the probability density function for the normal variate X is:

- a.  $Z = \frac{X-64}{8}$                       b.  $Z = \frac{X-8}{8}$                       c.  $Z = \frac{X-8}{64}$                       d.  $Z = \frac{8-X}{8}$

**viii.** The number of possible samples of size n from a population of N units with replacement is:

- a.  $\binom{N}{n}$                       b.  $(N)_n$                       c.  $n^2$                       d.  $n!$

**ix.** How do you obtain degree of freedom in One-way ANOVA?

- a. (k, n-1)                      b. (k, n-k)                      c. (k-1, N-1)                      d. (k-1, N-k)

**x.** A parameter is a characteristic of

- a. Sample                      b. Population                      c. Both                      d. a and b

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