Banaras Hindu University

Question Paper Name: 746 **Subject Name:** 746

Creation Date: 2019-07-16 12:30:02

Duration:120Total Marks:300Display Marks:YesShare Answer Key With DeliveryYes

Engine:

Actual Answer Key: Yes

RET_Agri_Stat

Group Number:

Group Id: 19823615

Group Maximum Duration :0Group Minimum Duration :120Revisit allowed for view? :NoRevisit allowed for edit? :NoBreak time:0Group Marks:300

Methodology

Section Id: 19823635

Section Number:

Section type: Online
Mandatory or Optional: Mandatory

Number of Questions:40Number of Questions to be attempted:40Section Marks:120Display Number Panel:YesGroup All Questions:No

Sub-Section Number: 1

Sub-Section Id: 19823645 **Question Shuffling Allowed:** Yes

Question Number: 1 Question Id: 1982361509 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Which one of the following is non-probability sampling:

Options:

Snowball

2. Random
3. Cluster
4. Stratified
Question Number: 2 Question Id: 1982361510 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
"A systematic step-by-step procedure following logical process of reasoning" is called:
Options: 1. Experiment
2. Scientific method
Observation 3.
4. Deduction
Question Number: 3 Question Id: 1982361511 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
"Reasoning from general to particular" is called:
Options:
1. Induction
2. Observation
3. Deduction
4. Experience
Question Number: 4 Question Id: 1982361512 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Example of fact finding study is:
Options:

1. Pure research
2. Survey
Action research
4. Long term research
Question Number: 5 Question Id: 1982361513 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
Which of the following is an example of primary data?
Options:
1. Book
2. Journal
3. Interview
4. Census report
Question Number: 6 Question Id: 1982361514 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
A Hypothesis which develops while planning the research is:
Options:
1. Null Hypothesis
Descriptive Hypothesis
3. Relational Hypothesis
Working Hypothesis
Question Number: 7 Question Id: 1982361515 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question

Hypothesis testing is <i>not</i> required in case of : Options:
Descriptive research design
2. Experimental Design
3. Ex-post facto Design
4. Ex-post facto
Question Number: 8 Question Id: 1982361516 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The value of the variable for a particular individual is called as:
Options: Variate 1.
2. Data
Sample 3.
4. Variable
Question Number: 9 Question Id: 1982361517 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The acceptable probability level for accuracy of agricultural field experiments is:
Options: 1. 0.01
2. 0.05
3. 0.10
4. 0.015
Question Number: 10 Question Id: 1982361518 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question
The minimum degree of freedom required to detect the given difference at 5% level of significance is:
Options:
1. 20
2. 15
3. 12
4. 25
Question Number: 11 Question Id: 1982361519 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The error degree of freedom in randomized complete block design with 10 treatments
and 4 replications will be:
Options: 1.
2. 36
з. 30
4. 27
Question Number: 12 Question Id: 1982361520 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The design suited for factorial experiments involving two factors and both requiring larger plots is:
Options:
1. CRD
2. RBD
3. Split Plot
4. Strip Plot

Question Number: 13 Question Id: 1982361521 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
For the data following binominal distribution and expressed in decimal or percentage, the
transformation to be used is:
Options:
1. Square root
1. 5
2. Logarithmic
3. Arcsine
4. No transformation
Question Number: 14 Question Id: 1982361522 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
In factorial experiments, if there are n factors and p levels, it is designated as:
Options:
1. p ⁿ
2. n ^p
3. Both p ⁿ & n ^p
a . $n \times p$
Question Number: 15 Question Id: 1982361523 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Reduction in the experimental error with heterogenous material requires:
Options:
1. More replications
2. Use of randomization
3. Use of local control technique
4. More replications and use of local control technique

Question Number: 16 Question Id: 1982361524 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
PERT is:
Options:
1. Event oriented
2. Activity oriented
3. Programme oriented
4. Plan oriented
Question Number: 17 Question Id: 1982361525 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks : 3 Wrong Marks : 1 Question Label : Multiple Choice Question
The distance between first quartile and third quartile indicates a range of measurement :
Options: 50% of the items 1.
2. 25% of the items
3. 60% of the items
4. 75% of the items
Question Number: 18 Question Id: 1982361526 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Mean deviation is minimum when deviations are taken from:
Options:
1. mean
2. median
3. mode
4. zero

Question Number: 19 Question Id: 1982361527 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
Stratified sampling comes under the category of:
Options:
unrestricted sampling
1: 849 4965
2. subjective sampling
3. purposive sampling
4. restricted sampling
Question Number: 20 Question Id: 1982361528 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The test was given twice to the same group. The coefficient of correlation between the
scores of the two administrations was 0.90. The association refers to:
Options:
Reliability 1.
2. Validity
3. both reliability and validity
not related to reliability and validity 4.
Question Number: 21 Question Id: 1982361529 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
Ratio measurement has:
Options: Absolute zero 1.
2. Arbitrary zero
3. No zero

4. Infinity

Question Number : 22 Question Id : 1982361530 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The data obtained through ordinal scale is best suited for:

Options:

parametric tests

non parametric tests

parametric and non parametric tests

higher order mathematical tests

Question Number: 23 Question Id: 1982361531 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

In case of split-plot, the accuracy of estimates after confounding in sub-plots increases

for:

Options:

main plot treatments

all sub-plot treatments

all sub-plot treatments except those confounded

no treatment

Question Number: 24 Question Id: 1982361532 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Important characteristics of correlation are:

Options:

magnitude, direction and significance

2 magnitude and direction

direction only 4 magnitude only Question Number : 25 Question Id : 1982361533 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The main technical function of Research Design is to control variance through: MAXIMINCON principles Minimizing error of measurement Controlling variance of unwanted variables Maximizing variance of variables Question Number : 26 Question Id : 1982361534 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Agropedia was launched as a part of: **Options:** NATP project NAIP Project IVLP Project 4 ATMA project Question Number: 27 Question Id: 1982361535 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which one of the following represents the best estimate of the population mean? **Options:**

1. The sample means

The mean of several sample means The mode of several sample means The median of several sample means Question Number: 28 Question Id: 1982361536 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If you draw 100 samples from a population and plot all their means as a frequency histogram, then you have a: **Options:** 1 Mean distribution Skewed distribution Sampling distribution Binomial Distribution Question Number: 29 Question Id: 1982361537 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If you obtain a one-tailed p-value of 0.02 then the equivalent two-tailed p-value is: **Options:** 0.01 2. 0.04 0.02 0.4 Question Number: 30 Question Id: 1982361538 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The probability that an effect has arisen due to sampling error given that the null hypothesis is true is:

Negligible 1.
2. β
3. ^α
4. Y
Question Number: 31 Question Id: 1982361539 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
If you have a correlation coefficient of 0.4, how much variance is left unexplained?
Options: 16% 1.
2. 40%
3. ^{84%}
4. 4%
Question Number: 32 Question Id: 1982361540 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question All other things being equal:
Options:
The more sample size increases, the more power decreases
The more sample size decreases, the more power increases
3. Sample size has no relationship to power
The more sample size increases, the more indeterminate the power
Question Number: 33 Question Id: 1982361541 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question The value of χ^2 will always be :

Options: Positive 1.
2. Negative
3. High
4. Zero
Question Number: 34 Question Id: 1982361542 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question A population consisting of the results of the conceptually repeated trials is known as: Options:
infinite population
hypothetical population real population 4.
Question Number: 35 Question Id: 1982361543 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
Formula for standard error of sample mean \bar{x} based on sample size 'n' having variance
s^2 , when population consisted of N items is:
Options: $\frac{5}{n}$
2. $\sqrt[5]{n+1}$ 3. $\sqrt[5]{n-1}$
3. $\sqrt[5]{n-1}$
3. $\sqrt[3]{n}$

Question Number : 36 Question Id : 1982361544 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load :

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question A Population was divided into clusters and it was found that within cluster variation was less than the variation between clusters. If a sample of units was drawn from each cluster, the sampling procedure used was: **Options:** nultistage sampling cluster sampling stratified sampling 4. simple random sampling Question Number: 37 Question Id: 1982361545 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question In a perfectly symmetrical distribution: **Options:** the values of mean, median and mode are identical mean is greater than mode median is greater than mode 4 median is greater than mean Question Number: 38 Question Id: 1982361546 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The significance of simple correlation coefficient can be tested by: **Options:** 1 't' test

Question Number: 39 Question Id: 1982361547 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Chi-Square test

2 'F test

4. 'Z' test

Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice C	Juestion
If in a split plot design A at 5	levels is allocated in main-plots and B in 4 levels in sub- 3 replications, then the sub-plot error degree of freedom
Options:	
1. 20	
2. 12	
3. ³⁰	
4. 18	
Question Number : 40 Question Id : 198 Single Line Question Option : No Option No Control Enable : Yes	32361548 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes n Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice C	Question
The degrees of freedom for χ^2 i	in case of dichotomized frequencies are:
Options:	
1.	
2. 1	
з. 2	
4.	
	Area Concerned
Section Id:	19823636
Section Number :	2

Section type :OnlineMandatory or Optional:MandatoryNumber of Questions:60Number of Questions to be attempted:60Section Marks:180Display Number Panel:YesGroup All Questions:No

Sub-Section Number: 1

Sub-Section Id: 19823646 **Question Shuffling Allowed:** Yes

Question Number: 41 Question Id: 1982361549 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The empirical relationship between mean deviation (M.D.) and standard deviation (S.D.) is: **Options:** $_{1}$ 3 M.D. = 2 S.D. $_{2}$ 5 M.D. = 4 S.D. $_{3}$ 6 M.D. = 5 S.D. 4. M.D. = S.D. Question Number : 42 Question Id : 1982361550 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question In tossing three coins at a time, the probability of getting at most one head is: **Options:** $1. \ 3/8$ 2. 7/8 3.1/24. 1/8 Question Number: 43 Question Id: 1982361551 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question The family of parametric distributions which has mean always less than variance is: beta distribution 2. log normal distribution 3 Weibull Distribution 4 negative Binomial Distribution

Question Number: 44 Question Id: 1982361552 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If Z is a standard normal deviate the proportion of items lying between Z = -0.5and Z = -3.0 is: **Options:** 1. 0.4987 2. 0.1915 0.3072 4. 0.5987 Question Number: 45 Question Id: 1982361553 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If X and Y are two gamma variate $\gamma(n_1)$ and $\gamma(n_2)$, the distribution of X/Y is: **Options:** $\beta_{\rm I}(n_1, n_2)$ Fn_1n_2 $_{3}$, $\beta_{II}(n_{1}, n_{2})$ $4. \frac{\gamma(n_1 + n_2)}{4}$ Question Number: 46 Question Id: 1982361554 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If n, the sample size is larger than 30, the student's t distribution tends to : **Options:** Normal distribution F distribution

3. Cauchy distribution

Chi-square distribution

Question Number: 47 Question Id: 1982361555 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

If you obtain a score of 13 on a questionnaire and you know that the population mean and standard deviation are 20 and 5 respectively, what is the z-score?

Options:

- 1. -2.33
- 2. -1.4
- 3. 1.33
- 4. 0

Question Number: 48 Question Id: 1982361556 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Factorisation theorem for sufficiency is known as:

Options:

- 1 Rao-Blackwell theorem
- Crammer- Rao theorem
- Chapman -Robins theorem
- Fisher-Neyman theorem

Question Number: 49 Question Id: 1982361557 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

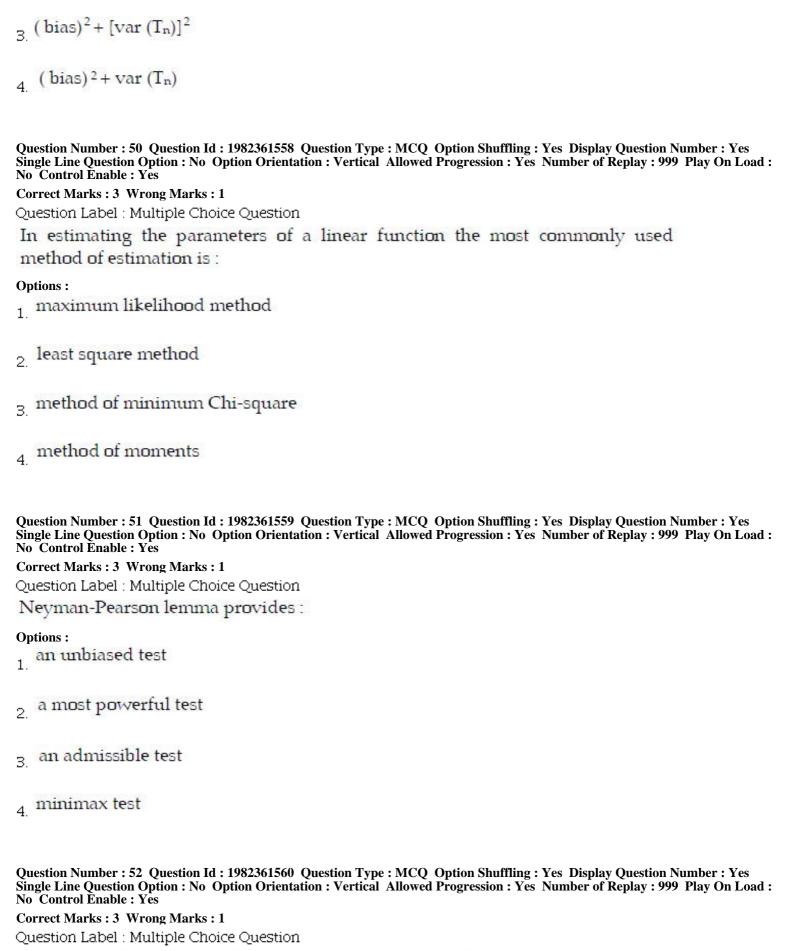
No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Mean squared error of an estimator T_n is expressed as :

- bias + $var(T_n)$
- $_{2}$ [bias + var (T_{n})]²



Equality of several normal population means can be tested by :

Options:

2 F-test

Bartlett's test

```
3. \chi^2-test
4 t-test
Question Number: 53 Question Id: 1982361561 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question
Kruskal-Wallis analysis of data is meant for :
Options:
1 One way classified data
2 Two way classified data
3. Three way classified data
4. nonclassified data
Question Number: 54 Question Id: 1982361562 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The significance of rank correlation can be tested by :
Options:
   χ<sup>2</sup>-test
2 t-test
3 Z-test
4 F-test
Question Number: 55 Question Id: 1982361563 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:
No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label: Multiple Choice Question
Regression coefficient is independent of :
Options:
   origin
2 scale
```

3 both origin and scale

4 neither origin nor scale

Question Number: 56 Question Id: 1982361564 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

If the correlation coefficient between the variables X and Y is ρ , the correlation coefficient between X2 and Y2 is:

Options:

- 2. p²

Question Number: 57 Question Id: 1982361565 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The function:

$$\frac{1}{\gamma} = \alpha \beta^{X} + \gamma$$
 for α , β , $\gamma > 0$ represents

Options:

- logistic growth curve
- compertz curve
- equilateral hyperbola
- exponential growth curve

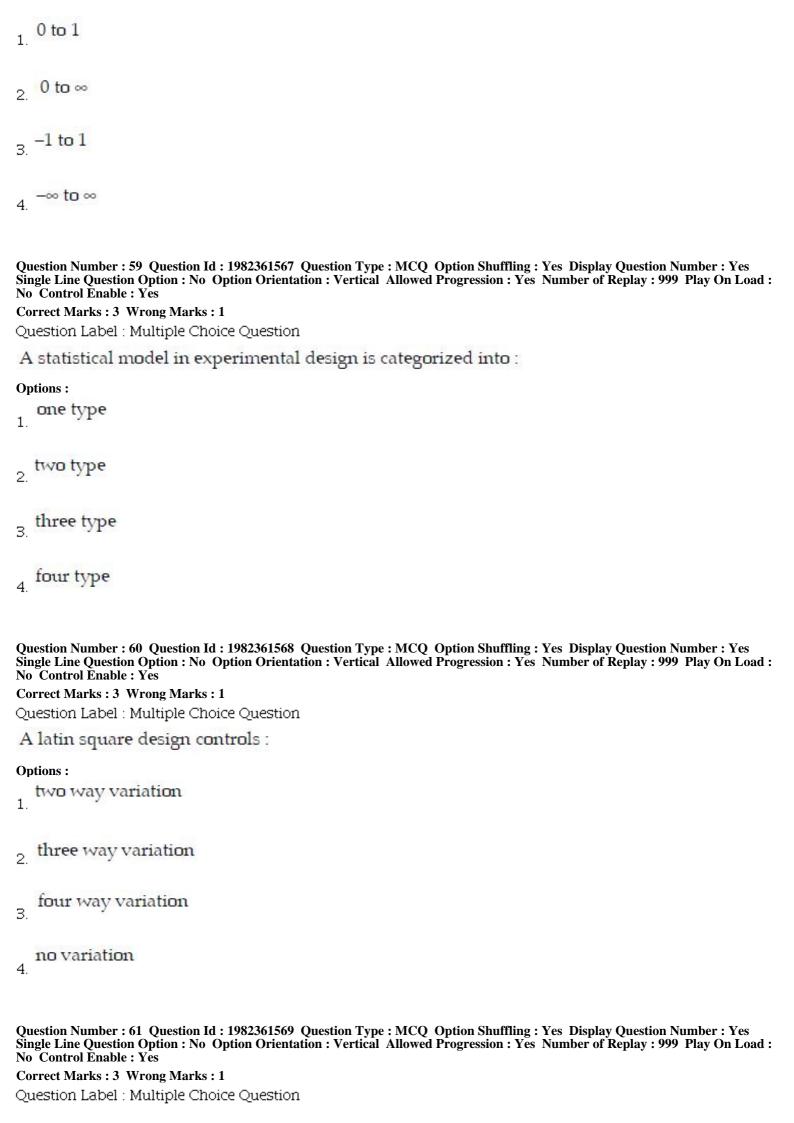
Question Number: 58 Question Id: 1982361566 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The range of multiple correlation coefficient R is:



If 'a' is the actual value and 'e' is the estimated value, the formula for the relative error is :
Options:
1. a/e
(a - e)/e
3. a-e /e
$\frac{1}{4} (a - e)/a$
Question Number: 62 Question Id: 1982361570 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes
Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes
Correct Marks : 3 Wrong Marks : 1
Question Label : Multiple Choice Question
Statistical results are :
Options:
Absolutely correct
2. Not true
True on the average
Universally true
Question Number: 63 Question Id: 1982361571 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question
The data given as, 5, 7, 12, 17, 79, 84, 91 will be called as :
Options:
a continuous series 1.
a discrete series
an individual series
time series 4.

Question Number: 64 Question Id: 1982361572 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question			
In case of positive skewed distribution, the extreme values lie in the :			
Options:			
1. Left tail			
2. Right tail			
3. Middle tail			
4. Anywhere			
Question Number: 65 Question Id: 1982361573 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The limiting relative frequency approach of probability is known as:			
Options: Statistical probability 1.			
2. Classical probability			
3. Mathematical probability			
Conditional probability 4.			
Question Number: 66 Question Id: 1982361574 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question			
If X is a random variable, $E(e^{itx})$ is known as:			
Options:			
1. Characteristic function			
Moment generating function 2.			
3. Probability generating function			
all of these			
Question Number: 67 Question Id: 1982361575 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes			

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The relation between statistics t and χ^2 (Chi-Square) is:

Options:

$$t_1^2 = \chi_{\infty}^2$$

2.
$$t_n^2 = \chi_1^2$$

3.
$$t_{\infty}^2 = \chi_1^2$$

4.
$$t_1^2 = \chi_1^2$$

Question Number : 68 Question Id : 1982361576 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The range of F - variate is:

Options:

Question Number : 69 Question Id : 1982361577 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

The number of possible samples of size n out of N populations units without replacement is:

$$\binom{N}{n}$$

2.
$$(N)_n$$

$$3^{n^2}$$

4 n

Question Number: 70 Question Id: 1982361578 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

A function of variates for estimating a parameter is called:

Options:

an estimate

an estimator

a frame

a statistic

Question Number: 71 Question Id: 1982361579 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Stratified sampling comes under the category of :

Options:

unrestricted sampling

subjective sampling

purposive sampling

restricted sampling

Question Number: 72 Question Id: 1982361580 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Systematic sampling means:

Options:

Selection of *n* contiguous units

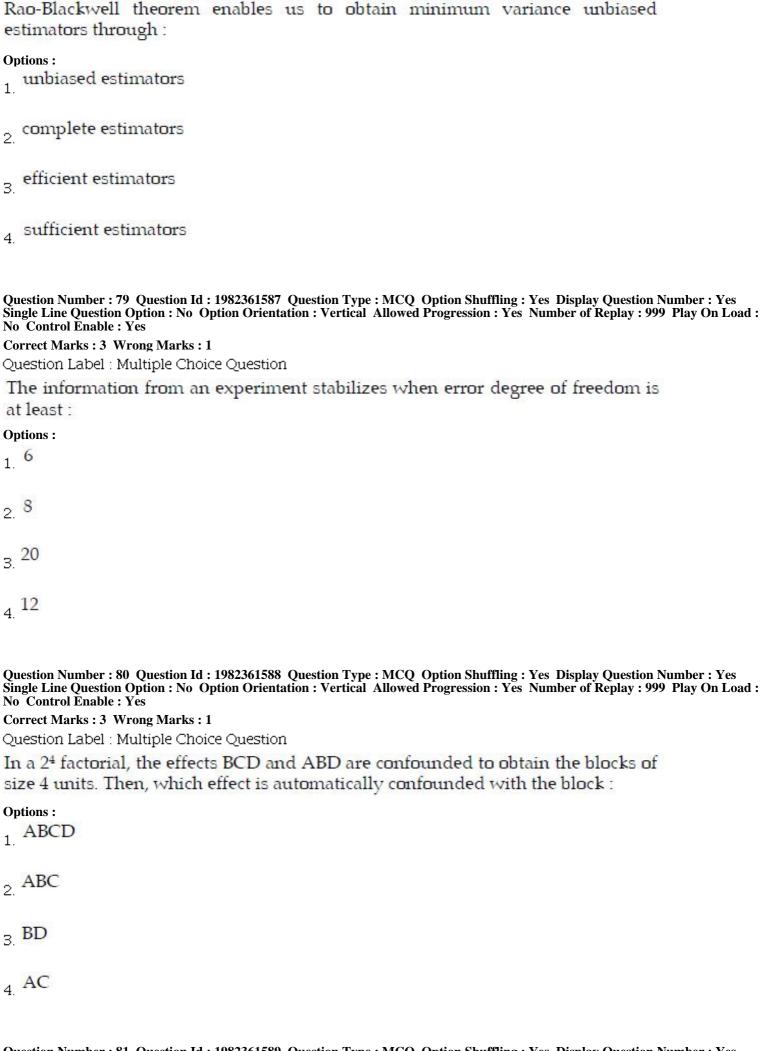
Selection of n units situated at equal distances 2.
Selection of n largest units
$_{4.}$ Selection of n middle units in a sequence
Question Number: 73 Question Id: 1982361581 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Double sampling is also known as:
Options:
two stage sampling 1.
two phase sampling 2.
two directional sampling
4. all of these
Question Number: 74 Question Id: 1982361582 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
The errors emerging out of faulty planning of surveys are categorised as:
Options:
non-sampling errors 1.
non-response errors 2.
sampling errors 3.
absolute errors 4.
Question Number: 75 Question Id: 1982361583 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes
Correct Marks: 3 Wrong Marks: 1
Question Label : Multiple Choice Question

The concept of consistency, efficiency, and sufficiency are due to :

Options:
J. Neyman 1.
2. R.A. Fisher
3. C.R. Rao
4. J. Berkson
Question Number: 76 Question Id: 1982361584 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
The maximum likelihood estimators are necessarily:
Options: unbiased 1.
2. sufficient
most efficient 3.
unique 4.
Question Number: 77 Question Id: 1982361585 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question
Student's t-test is applicable only when :
Options:
1. the variates values are independent
2. the variable is distributed normally
3. the sample is not large
4. all of these
Question Number: 78 Question Id: 1982361586 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question



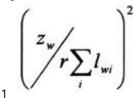
Question Number: 81 Question Id: 1982361589 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Sum of squares due to a contrast $z_w = l_{w1}T_1 + l_{w2}T_2 + ... + l_{wk}T_k$ is given by :

Options:



$$\int_{2}^{z_{w}^{2}} r \sum_{i} l_{wi}^{2}$$

$$z_w^2 / r \sum_i l_{wi}$$

$$\int_{4.}^{z_w^2} r^2 \sum_{i} l_{wi}$$

Question Number: 82 Question Id: 1982361590 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

If R, C and E are row, column and error mean squares, respectively, then which of the following expressions is correct for the relative efficiency of a Latin Square design of order 'k' over a completely randomized design:

$$\frac{R+C+E(k-1)}{(k+1)E}$$

$$\frac{R+C(k-1)+E}{(k-1)E}$$

$$\frac{R(k+1) + C + E}{(k-1)E}$$

$$\frac{R+C(k+1)+E}{(k+1)E}$$

Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question Which of the following Basic Principles of Design of Experiment ensures that experimental errors are independent? **Options:** randomization 2. replication 3 local control 4 all Question Number: 84 Question Id: 1982361592 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question When the number of treatments in Kruskal-Wallis test is two, the Kruskal-Wallis statistic H reduces to? **Options:** Mann-Whitney U statistic 2. Wilcoxon's U statistic Both Mann-Whitney U statistic and Wilcoxon's U statistic Wald-Wolfowitz statistic Question Number: 85 Question Id: 1982361593 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question In BIBD with parameters v, b, r, k, λ , if v = b, r = k, λ , then such BIBD is called: **Options:** symmetrical 2. dual 3 repeated 4. complementary

Question Number: 86 Question Id: 1982361594 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

Variance of \bar{x}_{st} under random sampling, proportional allocation and optimum allocation hold the correct inequality as:

Options:

$$1 V_{ran}(\overline{x}_{st}) \le V_{prop}(\overline{x}_{st}) \le V_{opt}(\overline{x}_{st})$$

$$V_{ran}(\overline{x}_{st}) \le V_{opt}(\overline{x}_{st}) \le V_{prop}(\overline{x}_{st})$$

$$V_{ran}(\overline{x}_{st}) \ge V_{prop}(\overline{x}_{st}) \ge V_{opt}(\overline{x}_{st})$$

$$V_{prop}(\overline{x}_{st}) \le V_{opt}(\overline{x}_{st}) \le V_{ran}(\overline{x}_{st})$$

Question Number: 87 Question Id: 1982361595 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

X is a binomial variate with parameters 'n' and 'p'; B(n, p). If n = 1, the distribution of X reduces to :

Options:

- 1 Poisson distribution
- Binomial distribution
- 3 Bernoulli distribution
- 4 Discrete Uniform distribution

Question Number: 88 Question Id: 1982361596 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

If the entries in rows of a Latin Square are same as its columns, the Latin Square is called:

- 1. conjugate
- 2. self-conjugate
- 3. orthogonal

Question Number: 89 Question Id: 1982361597 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

A population of N units is divided into k strata. A sample of size n' is to be selected. Let N_i be the stratum size and n_i be sample size from i^{th} strata (j = 1, 2, ..., k). Then, formula for selection of n_i under proportional allocation is:

$$n_j = \frac{N_j}{N}$$

$$n_j = \frac{n}{N}$$

$$n_j N_j = Nn$$

$$n_j N = N_j n$$

Question Number: 90 Question Id: 1982361598 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

For estimating the population mean T, let T_1 be the sample mean under SRSWOR and T_2 be sample mean under SRSWR. Then:

Options:

$$Var(T_1) = Var(T_2)$$

$$2. Var(T_1) = 1/Var(T_2)$$

$$3 Var(T_1) < Var(T_2)$$

$$_{4} Var(T_{1}) \geq Var(T_{2})$$

Question Number: 91 Question Id: 1982361599 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load:

No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

In case of inverse sampling, the proportion 'p' of 'm' units of interest contained in a sample of 'n' units is : **Options:** m/n (m-1)/(n-1) $3. \frac{(m-1)/n}{}$

3.
$$(m-1)/n$$

$$4. \frac{m}{(n-1)}$$

Question Number: 92 Question Id: 1982361600 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label : Multiple Choice Question

A letter is known to have come either from TATANAGAR or from CALCUTTA. On the envelope just two consecutive letters "TA" are visible. What is the probability that the letter came from CALCUTTA?

Options:

1 4/11

2. 1/7

3.2/8

4. 2/7

Question Number: 93 Question Id: 1982361601 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

If X and Y are two random variables such that their expectations exist and $P(x \le y) = 1$, then:

$$E(X) = E(Y)$$

2.
$$E(X) \le E(Y)$$

$$E(X) \ge E(Y)$$

Question Number: 94 Question Id: 1982361602 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Which of the following is a unit less measure of dispersion? **Options:** Standard Deviation 2. Range Coefficient of variation Mean Deviation Question Number: 95 Question Id: 1982361603 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label : Multiple Choice Question If the sample size in Wald-Wolfowitz runs test is large, the variate R is distributed with mean: **Options:** 2mn

$$\frac{2mn}{m+n}$$

$$\frac{mn}{m+n}$$

$$\frac{2mn}{m+n}+1$$

$$\frac{2mn}{m+n}-1$$

Question Number: 96 Question Id: 1982361604 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

If \overline{x} is a sample mean from the Binomial Distribution B(n, p). Then:

- \overline{x} is a sufficient estimator of p
- 2. \bar{x} is a efficient estimator of p

₃ both \overline{x} is a sufficient estimator of p and \overline{x} is a efficient estimator of p \bar{x} is neither sufficient nor efficient estimator of p Question Number: 97 Question Id: 1982361605 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Fixed, random and mixed effect models were given by: **Options:** 1 Eisenhart 2 Keifer 3 Nair 4 Fisher Question Number: 98 Question Id: 1982361606 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question The design which provides maximum number of degrees of freedom for error with same total number of plots and treatments is: **Options:** CRD LSD 4 Split Plot Question Number: 99 Question Id: 1982361607 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Allowed Progression: Yes Number of Replay: 999 Play On Load: No Control Enable: Yes Correct Marks: 3 Wrong Marks: 1 Question Label: Multiple Choice Question Measures of association deals with: **Options:** attributes 2 quantitative factors

3. variables

numbers

Question Number : 100 Question Id : 1982361608 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes

Correct Marks: 3 Wrong Marks: 1

Question Label: Multiple Choice Question

Time series consists of :

- 1. Two Components
- Three Components
- 3. Four Components
- 4. Five Components