

**Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.
Department of STATISTICS
Class :- B. Sc. III (Semester-V)
Session: - 2020 - 2021
Unit Test I**

**Name of the Teacher: - V. Chainani
Subject :- Statistics (Paper- II)**

**Date: 30/11/2020
Batch :- M8-M9(SCSM)**

S.no.	Students Full Name	Unit Test Marks (out of 20)
1	ADITI RAJENDRA MUDGAL	10
2	AKANKSHA ANIL SINHA	13
3	DIVYA PUNARAM ARBAT	7
4	HIMALI NIWAS HALMARE	6
5	KETKI KUNAL KALE	7
6	MANSI NITIN ELGUNDE	A
7	MRUNAL R. MALOKAR	15
8	NAYNA ANAND KALBANDE	5
9	PRANJALI PRAVIN KADOO	15
10	SAMIDHA P. DESHMUKH	A
11	SAMRUDDHI A.LOKHANDE	9
12	SANYOGITA SANJAY GUPTA	A
13	S.P. SHINGANJUDE	A
14	S. VIJAY GHARPURE	15
15	SRUSHTI VINOD GHARPURE	8
16	TANYA RAJU KALEWAR	6
17	VAIBHAVI JITENDRA TANNA	11
18	VAIBHAVI PRASHANT KALE	14
20	VAISHNAVI A. HIWASE	8
21	VRUSHALI SANTOSH YEDME	A
22	ABHISHEK ANIL AGRAWAL	A
23	DEVESH GAJESH BOBDE	5
24	HOMESH LALIT PARDHI	11
25	MAYUR DAMODHAR DEOLE	A
26	PRAFUL KISHOR DANGRE	12
27	SHUBHAM S. AGLAWE	14
28	SHUBHAM S. PALTANKAR	11
29	SUDHANSHU M. JOSHI	A
30	TARSH M. PATEL	13
31	TEJAS P. TOTADE	6
32	VISHAL R. WARTHI	A
33	V. NANDKISHOR NAGHATE	14

Ahainani

Signature of Teacher



M. Panale

Head

Head

Department of Statistics
Shivaji Science College
Congress Nagar, Nagpur

Bachelor of Science (B.Sc.) Semester—V Examination 2020
STATISTICS
Unit Test –I
Semester V Paper—II

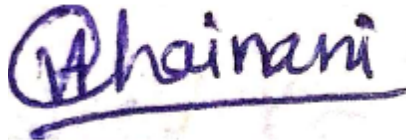
Time : 45 min]

Maximum Marks : 20.

Date: 30/11/2020


NOTE: All questions carry equal marks

1. Describe the divisions and functions of C.S.O. and N.S.S.O.
2. Describe the advantages of sample survey over complete enumeration method.
3. Show that in case of SRSWOR :
 - (i) Sample mean is an unbiased estimator of population mean
 - (ii) Sample mean square is an unbiased estimator of population mean square
- 4.) Distinguish between SRSWOR and SRSWR.



Signature of Teacher




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Department of Statistics
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Congress Nagar, Nashik.

**Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.
Department of STATISTICS
Class :- B. Sc. III (Semester-V)
Session: - 2020 - 2021
Unit Test II**

**Name of the Teacher: - V. Chainani
Subject :- Statistics (Paper- II)**

**Date: 07/12/2020
Batch :- M8-M9(SCSM)**

S.no.	Students Full Name	Unit Test Marks (out of 20)
1	ADITI RAJENDRA MUDGAL	9
2	AKANKSHA ANIL SINHA	A
3	DIVYA PUNARAM ARBAT	13
4	HIMALI NIWAS HALMARE	5
5	KETKI KUNAL KALE	12
6	MANSI NITIN ELGUNDE	A
7	MRUNAL R. MALOKAR	12
8	NAYNA ANAND KALBANDE	A
9	PRANJALI PRAVIN KADOO	10
10	SAMIDHA P. DESHMUKH	A
11	SAMRUDDHI A.LOKHANDE	13
12	SANYOGITA SANJAY GUPTA	8
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30	TARSH M. PATEL	9
31	TEJAS P. TOTADE	9
32	VISHAL R. WARTHI	A
33	V. NANDKISHOR NAGHATE	5

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Congress Nagar, Nagpur

Bachelor of Science (B.Sc.) Semester—V Examination 2020

STATISTICS

Unit Test –II

Semester V Paper—II

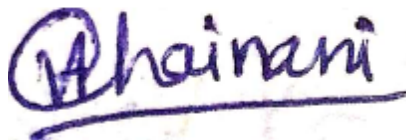
Time : 45 min]

Maximum Marks : 20.

Date: 07/12/2020

NOTE: All questions carry equal marks

1. Define proportional allocation and obtain the formula for variance of the sample mean under this allocation. Compare stratified sampling under proportional allocation with SRSWOR. Comment on the efficiency.
2. Derive an expression for the estimated gain in precision due to stratification.
3. Obtain an expression for efficiency of cluster sampling with that of SRSWOR in terms of intraclass correlation coefficient..
- 4 For a population with linear trend $Y_i = \mu + \theta.i$ for $i = 1, 2, \dots, N$; find,
(i) an expression for the population mean.



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