VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

## Department of Statistics

REMEDIAL COACHING

2022-2023

12 September, 2022 to 22 September, 2022
(For B.Sc.I)


ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणपप्रसार'
-शिक्षण महर्षी डॉं बपुजी साकुंखे

## VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR REMEDIAL COACHING

## Goals \& Objectives

1) Finding out the strengths and weaknesses of the average students.
2) To increase the academic ability of average students as compared to normal students.
3) To help increase the prior knowledge of the average students.
4) To add to the knowledge of dynamic students with changing times.
5) To provide facilities for academic improvement of average students.


# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR <br> Department of Statistics REMEDIAL COACHING 

## NOTICE

Date: 15/09/2022

All the students of B.Sc.I (Statistics) are hereby informed that, lectures of "Remedial Coaching" will be conducted from 12/09/2022 to $22 / 09 / 2022$. Those students should be present for lectures.
Place $:$ Department of Statistics, Room No. 33
Time $: 3.00 \mathrm{pm}$ to 4.00 pm
Contact Details : Ms. V. V. Pawar (HOD) (9823717300)

Ms. P.C. Patil (7757899082)

Ms. V, V, Pawar
Dopartment Vivekanand $C$

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR <br> Department of Statistics <br> <br> REMEDIAL COACHING 

 <br> <br> REMEDIAL COACHING}

## TIMETABLE

Date: 12/09/2022 to 22/09/2022 (Ten Days)
Time: 3.00 pm to 4.00 pm

| Sr. No. | Date | Name of Teacher | Sign |
| :---: | :---: | :---: | :---: |
| 1. | 12/09/2022 | Prof. V. V. Pawar | var |
| 2. | 13/09/2022 | Prof. V. V. Pawar | for |
| 3. | 14/09/2022 | Prof. A. B. Bhosale | ABher |
| 4. | 15/09/2022 | Prof. A. B. Bhosale | ABhors |
| 5. | 16/09/2022 | Prof. A. M. Makandar | Alowang |
| 6. | 17/09/2022 | Prof. A. M. Makandar | Bsturang |
| 7. | 19/09/2022 | Prof. P. C. Patil | 2 atb |
| 8. | 20/09/2022 | Prof. P. C. Patil | Bet |
| 9. | 21/09/2022 | Prof. S.S. Patil | Fanl |
| 10. | 22/09/2022 | Prof. S.S. Patil | Fotil |



Ms. V. V. Pawar

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR <br> Department of Statistics <br> REMEDIAL COACHING 

## SYLLABUS \& TIMETABLE

| Sr. No. | Unit No. | Name of Unit | No. of <br> Hours |
| :---: | :---: | :---: | :---: |
| 1. | Unit 1 | Sample space \& Event | 1 |
| 2. | Unit 2 | Probability | 2 |
| 3. | Unit 3 | Conditional Probability | 2 |
| 4. | Unit 4 | Independence of Event | 1 |
| 5. | Unit 5 | Mathematical Average, <br> Positional Average \& Typical <br> Average | 2 |
| 6. | Unit 6 |  <br> Binomial Distribution | 2 |



Ms. V. WhePawar Oooart me-HOD tatiatics
oge, Kolhapuf

Date:

1. All Questions are compulsory.

Time:
Marks: 50
2. Each Question carry 2 Marks Snehal khopKal
Name of Student:- Sneh al

1. $\qquad$ is not based on all observations.
A) A.M.
B) G.M.
R) HMM.
D) Mode
2. The value of median for the data $3,1,9,7,0,4,2,5$ is...
A) 4.5
B) 3.5
e) 8
D) None of them
3. Quartiles divide the data into $\qquad$ equal parts.
A) 2
B) 3
C) 4
D) 10
4. Mean of first $n$ natural number is $\qquad$ .
A) $\frac{n+1}{2}$
B) $\frac{n(n+1)}{2}$
C) $\frac{n}{2}$
D) None of these
5. Point of intersection of Less than ogive curve and more than ogive curve is $\qquad$ .
A) $(\mathrm{N} / 2$, Median $)$
B) (Median, N/2)
C) (N, Median)
D) $($ Median, N$)$
6. A primary data is a data collected from $\qquad$
A) Office record
B) Direct interview
C) Bulletins
D) Annual records
7. The mean and variance of the series $7,7,7,7,7$, is $\qquad$ .
A) $(0,7)$
B) $(7,0)$
C) $(7,14)$
D) $(7,7)$
8. Consider the following probability distribution:
1) The value of Mean is equal to:
A) 2.5
B) 3
C) 1
D) may not be unique
9. If riv. $X$ has binomial distribution with parameters $n$ and $p$, then......
A) mean< variance
B) mean $>$ variance
C) mean=variance
D) mean $\leq$ variance
10. If $X \rightarrow B(n, p)$ and $E(X)=5 / 3, \operatorname{var}(X)=10 / 9$. Then the value of $q$ is
A) $1 / 3$
B) $2 / 3$
C) $1 / 6$
D) $5 / 6$
11. Find the value of $n$, If ${ }^{n} P_{3}=5 .{ }^{n} P_{2}$
$\infty$
A) 5
B) 7
C) 6
D) None of these
12. The total number of all possible outcomes when a die is rolled once and a card is drawn from a deck of card is....
A) 58
B) 324
e) 312
D) 302
13. The relationship between permutation and combination is...
A) $r!{ }^{n} P_{r}={ }^{n} C_{r}$
B) $r!^{n} \mathrm{C}_{\mathrm{r}}={ }^{\mathrm{n}} \mathrm{P}_{\mathrm{r}}$
C) ${ }^{n} P_{r}={ }^{n} C_{r}$
D) None of these
14. If $A$ and $B$ are any events and $P(A)=2 / 5, P(B)=1 / 4, P(A U B)=1 / 2$ then $P(A \cap B)=\ldots$
A) $3 / 20$
B) $4 / 15$
C) $7 / 20$
D) $8 / 15$
15. How many ways are there to arrange the letters in the word MOTHER with the vowels alphabetical order?
A) 120
B) 240
C) 360
D) 480
16. The number of permutations of all the letters in the word BALBHARATI is...
A) 10 !
B) $\frac{10!}{2!2!}$
C) $\frac{10!}{2!3!}$
D) $\frac{10!}{3!2!2!}$
17. Three coins are tossed simultaneously. The probability of getting at most 2 tails is..
A) $3 / 8$
B) $1 / 8$
C) $3 / 4$
D) $7 / 8$
18. The probability of certain event is...
A) 0
B) 1
C) 0.5
D) None of these
19. The range of the values $-4,-20,-30,-44,-36$ is
A) -48
B) 40
C) -40
D) 48
20. If the variance of the data is 121 , then the standard deviation of the data is ...
A) 121
B) 11
C) 2
(Б) 12
21. Two dice are rolled. The probability that the product of the numbers on the dice is perfect square is...
A) $2 / 9$
B) $7 / 36$
C) $1 / 6$
D) $1 / 9$
22. If $P\left(A^{\prime}\right)=0.6 . P(B)=0.8$ and $P(B / A) 0.3$, then $P(A / B)=\ldots$
A) $3 / 4$
B) $9 / 20$
C) $7 / 20$
D) $3 / 20$
23. If $A$ and $B$ are independent events and $P(A)=3 / 5, P(B)=2 / 3$, then $P\left(A^{\prime} \cap B^{\prime}\right)=\ldots$
A) $2 / 15$
B) $4 / 15$
C) $1 /$
D) $7 / 15$
24. Coefficient of variation is computed by....
A) $\frac{S . D .}{|M e a n|}$
B) $\frac{\mid \text { Mean } \mid}{S . D .}$
C) $\frac{\text { S.D. }}{\mid \text { Mean } \mid} * 100$
D) $\frac{\mid \text { Mean } \mid}{S . D .} * 100$

25 . The probability of impossible event is..
A) 0
B) 1
C) 0.5
D) None of these

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR Department of Statistics REMEDIAL COACHING 

Students List

| Sr. No. | Name of Student | Percentage | Sign |
| :---: | :---: | :---: | :---: |
| 1. | Snehal Khopakar | $48 \%$ |  |
| 2. | Sharayu Prakash Sutar | $48 \%$ |  |
| 3. | Abhijeet Laxman Kalake | $40 \%$ | Akenlater. |
| 4. | Avishkar Kamble | $32 \%$ | tamele. |
| 5. | Sahil Chetan Patanekar | $40 \%$ | Patanetave |
| 6. | Manasi Madhukar Patil | $40 \%$ | Manus |
| 7. | Samruddhi Sanjay Bhosale | $44 \%$ | solle |
| 8. | Shweta R. Salokhe | 32 \% | Solokke |
| 9. | Rutuja Ramesh Thanekar | $36 \%$ | Putatinckar |
| 10. | Abhishek Bhagvan Patil | $28 \%$ | (Aatil |
| 11. | Riddhi Satyawan Raorane | $36 \%$ | Fratery |
| 12. | Prerana Vishwas Patil | $40 \%$ | -teratic |
| 13. | Pratiksha Tanaji Shinde | $20 \%$ | Rativesha |
| 14. | Suhani Madhav Vhatkar | $22 \%$ | suatker |

## Vivekanand College Kolhapur(Autonomous) Department Of Statistics

## Remedial Coaching

Sub:- Statistics (B.Sc. I)
2022-23

| Sr No | Name |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $12 / 09122$ | $13 / \mathrm{log} / 22$ | $14 \log 122$ | 25log/22 | 16/09/22 | $17 / 0 \mathrm{~g} / 2$ |
|  |  | Sign | sign | sign | sign | sign | stign |
| 1 | Avishkar 5. Kamble | Framule | Stautle | Sarule | Sambe | Soculele | Sauble |
| 2 | Abhijeet. L. Kalake | Aftele: | Apteate | Aekale | A榷 | Aetar | Alkeb |
| 3 | Sahil Shamrao Kamble | T | - | ) | To | T | tamar |
| 4. | Riddhi Saturwan Raprone | FRavary | Tअ4900 | [racom | Throanes, | FRatas) |  |
| 5. | Prerana Vishwas Patil | \$ratil | tratic | tratit | Frat | Brater | tratit |
| 6. | Snehal Madhukur Khopkol |  | WRup/5 | WNaplue |  | (xamp |  |
| 7. | samruddhi Sanjay Bhosale | gulue | give | sulve | sulue | Bure | glle |
| 8. | Sharau Prakastsataor | (1) | 68)w | ar. | 2 2 \% | 0 | Send |
| $g$. | Monas Madhuka Pud | 1) ${ }^{\text {anasi }}$ | Manasi | (Xanas | Mlahai | Pamai | Monasi |
| 10. | Shewto R.Solokhe | Salckiche | Ssatokhe | Ssalokhe | Ssatothe | Sulochre | Salukhe |
| 11. | Rratujd Romesh Thaneks | Rethelar | Prettelar | Rander | Rabielar | Buther. | Rabhes |
| 2. | Abhionek. B. Potil | Asaty | Aatil | Alati | (A)ath | (A)atl | A) atil |
| 13 | Prativesha shinde | Dathsel | Puthe | Pout | Cath | Piets |  |
| $k$ | Suhoni Vhattor | 8sheter | ssinter | Whas- | suak | surker | Ssutar |
|  |  | $\pm$ |  |  | 50 | $\pm$ |  |
|  |  | \$ |  |  |  | § | $\bigcirc$ |
|  |  | 4 |  |  | 0 | 0 | ई |
|  |  | + | $\pm$ |  | - | 7 | t |
|  |  |  | E | $t$ | से |  |  |
|  |  | $\bigcirc$ | - | - | ¢ | $\checkmark$ | $\bigcirc$ |
|  |  | 6 | 8 | 合 | $\stackrel{T}{2}$ | $\delta$ | 6 |
|  |  |  | ठ | $\bigcirc$ | है | $\bigcirc$ | $\bigcirc$ |
|  |  | $\stackrel{\sim}{2}$ | ¢ | $\bigcirc$ | \% | ई | $\xi$ |
|  |  | ह | \# | ${ }^{8}$ | $\bigcirc$ | $\frac{1}{2}$ | q |
|  |  | 8 |  | $\bigcirc$ | ¢ | Q | 7 |
|  |  | V | 1 |  | 6 | + | $\bigcirc$ |
|  |  |  |  |  |  |  | $\sigma$ |

## Vivekanand College Kolhapur(Autonomous) Department Of Statistics <br> Remedial Coaching

Sub:- Statistics (B.Sc. I)
2022-23


# ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार' 

-शिक्षण महर्षी डॉ. बपुजी साळुंखे

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR Department of Statistics REMEDIAL COACHING 

## NOTICE

Date: 23/09/2022

All the students of B.Sc.I are hereby informed that, lectures of "Remedial Coaching" were conducted from 12/09/2022 to $22 / 09 / 2022$. Those students who are participated their exam will be conducted on 26/09/2022 at 10.30 am to 11.00 am .

Place : Department of Statistics, Room No. 33
Time $: 10.30 \mathrm{am}$ to 11.00 am .


ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार'
-शिक्षण महर्षी डॉ. बपुजी साकुंखे

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR <br> Department of Statistics <br> REMEDIAL COACHING 

| Marklist |  |  |
| :---: | :---: | :---: |
| Date: |  |  |
| Sr. No. | Name of Student | Marks |
| 1. | Snehal Khopakar | 36 |
| 2. | Sharayu Prakash Sutar | 34 |
| 3. | Abhijeet Laxman Kalake | 38 |
| 4. | Avishkar Kamble | 28 |
| 5. | Sahil Chetan Patanekar | 32 |
| 6. | Manasi Madhukar Patil | 34 |
| 7. | Samruddhi Sanjay Bhosale | 36 |
| 8. | Shweta R. Salokhe | 34 |
| 9. | Rutuja Ramesh Thanekar | 36 |
| 10. | Abhishek Bhagvan Patil | 30 |
| 11. | Riddhi Satyawan Raorane | 38 |
| 12. | Prerana Vishwas Patil | 40 |
| 13. | Pratiksha Tanaji Shinde | 26 |
| 14. | Suhani Madhav Vhatkar | 42 |
|  |  |  |

1) All observations in a data set are equal then median of the data set is equal to the value of ...
A)One of the observations
B) Mean
C) Mode
D) All of the above
2) Which of the following is not positional average?
A) Median
D) Range
C) Quartile
D) Deciles
3) In a class test 40 students, out of 50 are passed with average 6.0 and the overall average of a whole class is 5.5 then find the average of failed students.
A) 5.5
B) 6.8
C) 4.8
D) 3.5
4) Two series having same mean, median mode then these two series are
A)have same values
B)not have same values
B) both (A) and (B)
D)none of these
5) The first raw moment about origin is $\qquad$ .
A)Zero
B)Mean
C) One
D)Variance
6) The mean, median and mode of the distribution is 87,79 and 65 respectively then the distribution is $\qquad$ .
A)Positively Skewed
B)Negatively Skewed
B) Symmetric
D)Normal
7) If population is homogeneous, then $\qquad$ is better method of sampling
A)SRS
B)Stratified
C)Systematic
D)None of these
8) Jersy number on T-shirt of a player is $\qquad$ .
A) Ordinal scale
B)Ratio Scale
C)Nominal Scale
D)Interval scale
9) Sum of squares of deviation taken from mean is always $\qquad$ .
A)Zero
B)One
C)Minimum
D)None of these
10)If a constant value 10 is subtracted from each observation of a set, the variance is $\qquad$ .
A)Increased by 100
B)Decreased by 10
B) Decreased by 100
D)Not changed
10) If $B \subset A$ then $P(A / B)$ is $\qquad$
A) 0
B) $P(A) / P(B)$
C) 1
D) $\mathrm{P}(\mathrm{B}) / \mathrm{P}(\mathrm{A})$
11) In a single throw of a die, the variable $X$ denotes outcome of an experiment then $X$ is $\qquad$
A) Discrete random variable
B) Continuous random variable
C) Both (i) and (ii)
D) none of these
12) If $A$ and $B$ are any two events defined on sample space $\Omega$, then $P\left(A^{c} \cap B\right)=$
A) $P(A)-P(A \cap B) B) P(B)-P(A \cap B)$
C) $P(A) \cdot P(B)$
D) $P\left(A^{c}\right) \cdot P(B)$
13) The probability of an event always lies between.
A) $-\infty$ to $\infty$
B) 0 to 1
C) -1 to 1
D) 0 to $\infty$
14) If $P(A)=0.4$ and $P(B)=0.6$ are independent events then $P(A \cap B)$ is $\qquad$
A) 0.36
B) 0.24
C) 1
D) 0
15) If $P(A)=0.4$ and $P(B)=0.4$ are independent events then $P(A / B)$ is
A) 0.2
B) 0.16
C) 0.4
D) 0
16) Two coins are tossed simultaneously, the sample space contains -------- number of outcomes.
A) 1
B) 2
C) 3
D) 4
17) If $A$ and $B$ are two mutually exclusive events defined as $\Omega$, then $P(A \cap B)$ is equal to.
A) $\mathrm{P}(\mathrm{A})+\mathrm{P}(\mathrm{B})+\mathrm{P}(\mathrm{A} \cap \mathrm{B})$
B) $\mathrm{P}(\mathrm{A}) \cdot \mathrm{P}(\mathrm{B})$
C) $P(A)+P(B)$
D) 0
18) If $P(A)=0.3$ and $P(B)=0.4$ are two mutually exclusive events defined as sample space $\Omega$, then $P(A \cap B)$ is equal to......
A) 0.7
B) 0.3
C) 0.4
D) 0
19) Among following statements------ is true
A) A and $A^{c}$ form partition of $\Omega$
B) A and $\Omega$ form partition of $\Omega$
C) A and $A^{c}$ do not form partition of $\Omega$
D) Only two events cannot form a partition of $\Omega$
20) The Probability of sure event is ------
A) 0
B) 1
C) NOT defined
D) All the above
21) If $A$ and $B$ are independent then
A) $\mathrm{P}(\mathrm{AUB})=\mathrm{P}(\mathrm{A})+\mathrm{P}(\mathrm{B})$
B) $\mathrm{P}(\mathrm{AUB})=\mathrm{P}(\mathrm{A}) \cdot \mathrm{P}(\mathrm{B})$
C) $P(A \cap B)=P(A)+P(B)$
D) $\mathrm{P}(\mathrm{A} \cap \mathrm{B})=\mathrm{P}(\mathrm{A}) \cdot \mathrm{P}(\mathrm{B})$
22) If $A$ and $B$ are independent then $P(A / B)$ is
A) $P(A)$
B) $\mathrm{P}(\mathrm{B})$
C) Both A \& B
D) None of these
23) If $A$ and $B$ are mutually exclusive then $P(B / A)$ is
A) 0
B) 1
C) $P(A)$
D) $\mathrm{P}(\mathrm{B})$
24) If $P(A)=P(B)$. $A B$ are $B$ are independent then $P(A / B)$ is...
A) 0
B) 1
C) $\mathrm{P}(\mathrm{A})$
D) $\mathrm{P}(\mathrm{B})$

ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षणप्रसार'
-शिक्षण महर्षी डॉँ. बपुजी साळुंखे

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

## Department of Statistics

## REMEDIAL COACHING

## Progress Report

| Sr. <br> No. | Name of Student | Previous <br> Marks | Remedial <br> Marks | Progress |
| :---: | :--- | :---: | :---: | :---: |
| 1. | Snehal Khopakar | 24 | 36 | $40 \%$ |
| 2. | Sharayu Prakash Sutar | 24 | 34 | $34.4828 \%$ |
| 3. | Abhijeet Laxman Kalake | 20 | 38 | $62.069 \% \%$ |
| 4. | Avishkar Kamble | 16 | 28 | $54.5405 \%$ |
| 5. | Sahil Chetan Patanekar | 20 | 32 | $46.1539 \%$ |
| 6. | Manasi Madhukar Patil | 20 | 34 | $51.8519 \%$ |
| 7. | Samruddhi Sanjay Bhosale | 22 | 36 | $48.2759 \%$ |
| 8. | Shweta R. Salokhe | 16 | 34 | $72.00 \omega 7$. |
| 9. | Rutuja Ramesh Thanekar | 18 | 36 | $66.6667 \%$. |
| 10. | Abhishek Bhagvan Patil | 14 | 30 | $72.7273 \%$. |
| 11. | Riddhi Satyawan Raorane | 18 | 38 | $71.4286 \%$ |
| 12. | Prerana Vishwas Patil | 20 | 40 | $66.6667 \%$. |
| 13. | Pratiksha Tanaji Shinde | 10 | 26 | $113.043 \% \%$. |
| 14. | Suhani Madhav Vhatkar | 22 | 42 | $62.5 \%$. |

# VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR <br> Department of Statistics REMEDIAL COACHING 

2022-2023
12 September, 2022 to 22 September, 2022

## Report

On behalf of the Statistics department, to organize remedial coaching classes for the development of comprehension skills for average students and to acquire knowledge of Statistical concepts from $12^{\text {th }}$ September, 2022 to $22^{\text {nd }}$ September, 2022 from 10.30 am to 11.30 am daily with attachments of Syllabus, Time Table, Student Attendance, Photographs, Question Papers. In this remedial coaching class of B.Sc.I, 14 students participated spontaneously. This coaching class was planned by Mr. A. B. Bhosale, Ms. A. M. Makandar, Ms. P. C. Patil Ms. S. S. Patil. Principal of the college, Mr. R. R. Kumbhar and Head of Statistics Department Ms. V. V. Pawar. This report is being submitted for the information of the college.

