SPSS SOFTWARE AND GEOGRAPHY

About the Workshop:

The IBM SPSS® software platform offers advanced statistical analysis, a vast library of machine- learning algorithms, text analysis, open-source extensibility, integration with big data and seamless deployment into applications. Its ease of use; flexibility and scalability make IBM SPSS accessible to users with all skill levels and outfits projects of all sizes and complexity to help you and your organization find new opportunities, improve efficiency and minimize risk. SPSS is a software package used for interactive or batch statistical analysis. Long produced by SPSS Inc., it was acquired by IBM in 2009. The current versions are named IBM SPSS Statistics. SPSS is super easy software for analyzing data and running statistical tests. SPSS is a widely used program for statistical analysis in social science. It is also used by market researchers, health researchers, survey companies, government, education researchers, marketing organizations, data miners, and others. It is therefore preferred data analysis software among students and professional researchers due to its numerous SPSS software importance in analyzing data since it is capable of analyzing a large amount of data.

The study of geographic phenomena often requires the application of statistical methods to produce new insight. Statistical techniques and procedures are applied in all fields of Geography wherever data are collected and summarized or wherever any numerical information is analyzed or research is conducted, statistics are needed for sound analysis and interpretation of results. Many geographical studies and researches use various quantitative analyses which try to find out the real situations. Geographers study the space and the temporal database distribution of phenomena, processes, and features as well as the interaction of humans and their environment. Because space and place affect a variety of topics, such as economics, health, climate, plants and animals, population, agriculture, industries etc. thus Geography is highly interdisciplinary. Statistical analysis is one of the widely used quantitative methods. The course will introduce various multivariate statistical techniques commonly employed by geographers and researchers in allied fields. After studying the SPSS, students will be able to distinguish different statistical models, recognize the assumptions of various statistical models, understand statistical methods and their procedures, perform statistical analyses using computers and evaluate and interpret the results of various statistical models useful in Geography. Statistical geography is the study and practice of collecting, analyzing and presenting data that has a geographic or areal dimension, such as census or demographics data. It uses techniques from spatial analysis, but also encompasses geographical activities such as the defining and naming of geographical regions for statistical Geostatistics is a branch of statistics focusing on spatial or spatiotemporal datasets where SPSS software is very much useful developed originally to predict probability distributions of ore grades for mining operations, it is currently applied in diverse disciplines such as climatology, social geography, economic geography, agriculture, geology, geomorphology, hydrogeology, hydrology, meteorology, oceanography, geochemistry, forestry, soil science and agriculture (esp. in precision farming). SPSS software is applied in varied branches of geography, particularly those involving the spread of diseases (epidemiology), the practice of commerce and military planning (logistics), and the development of efficient spatial networks. Geostatistical algorithms are incorporated in many places, including geographic information systems (GIS) and the R statistical environment

Functions:

1. Describe and summarize data

2. Make generalizations concerning complex spatial patterns

3. Estimate likelihoods of outcomes for events at particular location(s)

4. Use sample data to make inferences about a larger set of data (a population)

5. Learn whether actual pattern matches an expected or theoretical

6. Compare or associate (correlate) patterns of distributions

Types of Statistics:

■ Descriptive Statistics- concise numerical or quantitative summaries of the characteristics of a variable or data set (e.g. mean, standard deviation, etc.)

■ Inferential Statistics- here we wish to make generalizations about a statistical population (total set of information or data under investigation) based on the information from a sample

The following is a brief overview of some of the functionalities of SPSS:

Data transformations

Data Examination

Descriptive Statistics. Contingency tables. Reliability tests Correlation

T-tests ANOVA MANOVA

General Linear Model (Release 7.0 and higher) • Regression. Nonlinear Regression Logistic Regression Log Linear Regression Discriminant Analysis Factor Analysis Cluster analysis Multidimensional scaling Probity analysis Forecasting/Time Series Survival analysis. Nonparametric analysis Graphics and graphical interface.

In SYLLABUS central tendency and standard deviation is given which means (measure of central tendency) central or typical value for a probability distribution. It may also be called a center or location of the distribution. Measures of central tendency are often called averages. The most common measures of central tendency are the arithmetic mean, the median and the mode. A central tendency can be calculated for either a finite set of values or for a theoretical distribution, such as the normal distribution. Occasionally authors use central tendency to denote "the tendency of quantitative data to cluster around some central value. The standard deviation (SD, also represented by the lower case Greek letter sigma & or the Latin letter s) is a measure that is used to quantify the amount of variation or dispersion of a set of data values. A low standard deviation indicates that the data points tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values. The standard deviation of a random variable, statistical population, data set, or probability distribution is the square root of its variance. It is algebraically simpler, though in practice less robust, than the average absolute deviation. A useful property of the standard deviation is that, unlike the variance, it is expressed in the same units as the data.

Rabfa

Dr. B. B. Rahane

Head, Department of Geography

Date: 20th October, 2018

To

    The Principal,

    Sathaye College,

    Vile Parle (East),

    Mumbai

Sub.:   Inviting Prof. Dnyaneshwar D. Bombe as a Resource Person in the one day workshop on SPSS [Statistical Package for Social Science]

Dear Sir/Madam,

        Department of Geography, Sonopant Dandekar College, Palghar Organizes One day workshop on SPSS for Geography teachers and students on 2nd (Friday) November 2018 at Sonopant Dandekar College, Palghar.

        I request you please depute **Prof. Dnyaneshwar D. Bombe,** Head Dept. of Geography, Sathaye College, Vile Parle, Mumbai as a Resource person for this one day workshop.

        Thank you in advance.

        Yours faithfully,

        (Dr. Kiran J.Save)

        Principal

01st November, 2018

Department of Geography

NOTICE

This is to inform you that the Department of Geography has organized a One Day workshop on SPSS [Statistical package for Social Science] for Geography teachers and students on 2nd (Friday) November 2018 at Sonopant Dandekar College, Palghar.

We strongly encourage you to attend this workshop.

WORKSHOP ON SPSS

Date	:	**2nd November, 2018**
Time	:	**9:30 am to 05:30 pm**
Venue	:	**Sonopant Dandekar College, Palghar**
Contact Person	:	**Dr. B. B. Rahane**
Contact Number	:	**9403077290**
Email	:	**bbrahane99@gmail.com**

(Dr. Kiran J.Save)
Principal

Sonopant Dandekar Shikshan Mandali's

Sonopant Dandekar College, Palgahr.
IQAC & Department of Geography
ORGANISESE ONE DAY WORKSHOP ON
SPSS [STATISTICAL PACKAGE FOR SOCIAL SCIENCE]

REGISTRATION　　　　Date:02nd November,2018

Sr. No.	Name of The Teacher/Student	Name of the College	Mob. No./ Email	Signature
1	D. D. Bombe	Sathaye College	9960876105 dnyaneshwar.bombe. Pmfri@gmail.com	
2	Prof. Nahire Dinesh Jagannath	SGVSSP's Arts, commerce & Sci college. Onde, Vikramgad.	9404554390 dineshjnahire2020@ gmail.com	
3	Dr. B.B. Rahane	Sonopant Dandekar College, Palghar	bbrahane99@gmail.com 9403077290	
4	Prof Pandharinath Devram Ghode	S.D.S.M. College Palghar	pdghode83@gmail.com 9763543199	
5				
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Sr. No.	Name of The Teacher/Student	Name of the College	Mob. No./ Email	Signature
10	pratiksha Gurunath pagdhare	S.D.S.M. college. palghar.	9561216256	Poof
11	Shreya manohar kini	S.D.S.M. college Palghar	9168225525	Smkini
12	Mitali Kishor Makane	S.D.S.M. college Palghar	9765925456	Makane
13	Sameer Rajesh chaudhari	S.D.S.m. College Palghar	9158317363	Sameer
14	Namrata Munnalal Chauhan	S.D.S.m. College Palghar	9226263925	Nhuhn
15	Prachi Kumar Raut.	S.D.S.M. college Palghar	9011874978	Raut.
16	Sunito shantaram Varga	S.D.S.M college palghar	9673788723	Svarga
17	Nutan kashinath Govari	S.D.S.M. College Palghar	8087343247	Ngovari
18	Asmita Lahu Lade	S.D.S.M. college paelghar	9145148106	Aade
19	Madhukar Dasama Gimbhal	S.D.S.M. ←1 ̄	7057270997	Ghathy.
20	PRIYANKA VILAS SUMADA	S.D.S.M. college palghar	9145608266	Bsumada
21	Vanita kueshna Bhoye	S.D.S.M. college palghat	9766073086	Vbhys

Sr. No.	Name of The Teacher/Student	Name of the College	Mob. No./ Email	Signature
22	Nita Vasant Chauee	S.D.S.M. College Palghar	9607719982	
23	Sopal Dashrath Panera	S.D.S.M. College Palghar	9607715189	
24	Pratibha Devram Dhodade	S.D.S.M. College Palghar	9284529378	Dhodade
25	Manali Dilip Baswat	S.D.S.M College Palghar	7559433531	
26	Chitra Dayanand Pawade	S.D.S.M college Palghar	9119526654	Paul
27	Monika Pravin Kumar	S.D.S.M College palghar.	9637833104	
28	Kanchan Jaykant Tare	S.D.S.M. college Palghar	9637204034	Kare
29	Sunita Ramesh Mali	S.D.S.M. College palghar	9823299058	Mali
30	Sumitra Pandu Golim	S.D.S.M. College Palghar	7030716635	
31	Archana Moreshwar Mandal	S.D.S.M. College Palghar	7798118373	
32	Kalpita chandrakant Dalvi	S.D.S.M College Palghar	9763419510	
33	Ruchita Ravindra Patil.	S.D.S.M college Palghar	8390760116	Patil.

Sr. No.	Name of The Teacher/Student	Name of the College	Mob. No./ Email	Signature
34	Sanjivani Lahu Bhuyal	S.D.S.M. College, Palghar	9370225035	Bhuyal
35	Suvarna Rakash Ravate	S.D.S.M. College, Palghar	7769035867	Ravate
36	Punam Balji Pesardu	S.D.S.M college Palghar	9607720068	Raul.
37	Priya Barolya Patil	S.D.S.M. College Palghar	7719877926	Patil
38	chandrad vasant kuvara	S.D.S.M. college Palghar	9607715019	
39	Rupali Manik Nokti	S.D.S.M college. Palghar	7875970519	
40	Prachiti Dilip Mali	S.D.S.M College Palghar	7558006575	Mali
41	Shailesh Suresh Rawte	S.D.S.M. College palghar	7066883379	
42	Swapnil santosh Tare	S.D.S.M. College palghar	9112016082	
43	Parankush Madhukar Hadal	S.D.S.M college palghar	9923263275	
44	Sushant shankar Kadam	S.D.S.M College -11	9767408275	Sushant
45				

Letter of Appreciation:

Date: 02-11- 2018

To,

Prof. Dnyaneshwar D. Bombe,

Head, Dept. of Geography

Sathaye College,

Vile Parle (East), Mumbai

Dear Sir,

I express sense of gratitude for accepting our invitation and sharing your expertise knowledge in a One Day workshop on "SPSS [Statistical package for Social Science]" organized by IQAC and Department of Geography, Sonopant Dandekar College , Palghar for Geography teachers and students held on 2nd November (Friday), 2018 at Sonopant Dandekar College, Palghar.

We value your association with us in this regard.

Thank you.

Yours faithfully,

Received
प्रणाम.

(Dr. Kiran J.Save)

Principal

SONOPANT DANDEKAR COLLEGE, PALGHAR
Palghar (W), Tal. & Dist. Palghar – 401 404

IQAC & Department of Geography
Organised One Day Workshop on
SPSS
Statistical package for Social Science

Certificate

This is to certify that,

Prof./Mr. **Dnyaneshwar D. Bombe** of **Sathaye College Vile Parle, Mumbai** has worked as a Resource Person in the **Workshop on SPSS [Statistical Package for Social Science]** organized by **Department of Geography, Sonopant Dandekar College, Palghar** on **2nd November, 2018.**

Date : 02/11/2018

DR. RAHANE B.B.
CONVENER
SONOPANT DANDEKAR
COLLEGE, PALGHAR

DR.KIRAN J.SAVE
PRINCIPAL
SONOPANT DANDEKAR
COLLEGE, PALGHAR

Department of Geography

Event Report

Name of the Event – One Day Workshop on SPSS

Date – 2nd November, 2018   **Time** – 9.30am -5.30pm

Venue – Sonopant Dandekar College, Palghar   **No. of participants:** 39

About the Event-

On 2nd November, 2018 the Geography Department of Sonopant Dandekar College of Palghar organized a one-day workshop focused on Statistical Package for the Social Sciences (SPSS) for geography students. The workshop aimed to enhance students' analytical skills and equip them with practical knowledge in data analysis, particularly tailored to geographical research.

Event Objectives-

- To introduce to the students the SPSS software and its application in geography
- To explain text and statistical analysis using SPSS
- To engage them in hands-on exercises and case studies relevant to geography.

Learning Outcomes:

- Students gained a comprehensive understanding of SPSS software and its applications in geographical research.
- Students were able to develop practical skills in data import, cleaning, analysis, and visualization.
- Students learned how to conduct statistical analysis specific to geographical datasets, enhancing their research capabilities.

Dr. B. B. Rahane
Head, Department of Geography

GLIMPSES: WORKSHOP ON SPSS

Prof. Dnyaneshwar Bombe engaging the students through interaction