

## 7DAYS- SPSS MENTORSHIP PROGRAMME

### PROGRAMME

With an objective to acquaint the students with a widely used statistical software- SPSS (Statistical Product and Service Solutions), Statistika- The department of Statistics, Mata Sundri College for Women with collaboration with IQAC, organized a 7-days interdisciplinary workshop on SPSS which used to take place on weekends between 17th september - 8th october.

AKANKSHA GOEL, NAVDEEP KAUR, HARSHITA JOSHI and VRINDA SHARMA from 3rd year, BSc. (H) Statistics took initiative for mentoring this workshop and the event was successful one under the guidance of our Principal ma'am- Prof. Harpreet Kaur, Teacher In-charge- Dr. Prabhsharn kaur, Convener- Dr. Kalpana and Co-convener- Dr. Meenu Goel.

The enormous response was well recognised through the registration of around 80 students from various departments like Statistics, Computer Science, Mathematics, Psychology, BCom hons, BA prog. and so on. The workshop was well appreciated by the students. It has inspired them to explore these areas further and it has given them a platform to create new visualizations for different data sets.

Overview of topic discussed

#### DAY-1

(Downloading SPSS and basics of SPSS)

Me Akanksha Goel started the session by giving a brief introduction about SPSS and explained the use of this software and then went on explaining the basics of the software. Further they elaborated the goal for this program and the procedure to download it.

Mentees were also taught how to save data, how to open saved SPSS files, copying and pasting data to other applications, importing files from other applications, etc. along with the doubt clearing sessions.

#### DAY - 2

(Introduction to graphs)

Day 2 began with Mentor Navdeep Kaur explaining about graphs, choosing appropriate graph and then went on with the brief explanation of frequency table and how to make it using SPSS, introduced students with line graph, bar graph, pie chart, stem and leaf, frequency polygon, ogives, box plot and how to use them in SPSS and then even gave the students time to complete the data visualization and clear their doubts right away.

An assignment was also provided to students for the purpose of better understanding of SPSS.

#### DAY-3

(Introduction with correlation and detailed explanation of its various aspects)

The session started with mentor Harshita Joshi giving introduction of correlation, types of correlation, coefficient of correlation and various ways to get correlation via. Karl Pearson's correlation and Spearman's rank correlation method. The session also included how to Calculate correlation using SPSS.

#### DAY - 4

( Introduction with various distribution of random variables)

The mentor Akanksha Goel and Harshita Joshi started with clearing doubts of previous session and then started with introduction of distributions, UNIFORM, NORMAL, EXPONENTIAL, BINOMIAL, POISSON, and GAMMA including their pdf's, graphs, and how to generate random sample for these distributions mentioned above.

Also, assignment was allocated to the mentees regarding the topics explained in previous sessions.

#### DAY-5

##### (Testing of Hypothesis)

The session started with Mentor Vrinda Sharma talking about Hypothesis, Null hypothesis, Alternative hypothesis and she explained the statistical terms to non stats background students then further explained how to test a hypothesis in SPSS. At the end the mentor taught about T-test, one sample t-test and explained the result analysis and their significance.

#### DAY-6

##### ( Chi& z-test)

Day-6 started in continuation with the topics of Day-5 continuing the testing of Hypothesis. In this session mentor Vrinda Sharma explained about z-test and its result analysis in spss furthermore, she explained about chi test and it's result analysis.

#### DAY- 7

The session started with clearing of doubts, then further it goes with MCQs assigned to the students after that test was given to the students. The session ended with interaction between mentors and the students, discussion on some topics for better understanding and it ended with lovely smiles.

The objective of the programme was achieved. The overall session discussion benefitted participants and mentors as well. This programme definitely helped the participants to visualize their data in an effective way and also helped them to do the implementation in their future analysis which made data more interesting and did not remain just a mere set of numerical values. .