RESEARCH AND STATISTICS IN PSYCHOLOGY

Semester	Subject Code	Category	Lecture		Theory		Practical	Credits
			Hrs/ Week	Hrs/ Sem	Hrs/ Week	Hrs/ Sem		
I	21CAPS1A	Allied-I	06	90	05	75	15	05

COURSE OBJECTIVE

This course gives an understanding of various statistical techniques in terms of their assumptions, interpretation and applications.

COURSE OUTCOMES

On successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	Recall the basics of research	K1-Remember
CO2	Discover the methods of data collection in order to make use of it during further studies.	K3- Apply
CO3	Recall the functions, scope and limitations of statistics	K1-Remember
CO4	Do quantitative analysis and graphically represent the data.	K3- Apply
CO5	Prepare normal curve and also to find correlation between two variables.	K3- Apply

Mapping with Programme Outcomes

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	M	M
CO2	S	S	S	S	M	M
CO3	S	S	S	S	S	S
CO4	S	S	S	S	S	S
CO5	S	S	S	S	S	S

S- *Strong* **M-***Medium* **L-***Low*

UNIT-I   **15 Hours**

INTRODUCTION TO RESEARCH - (Theory)

Meaning- Definition- Objectives-Types of research- Characteristics of research-Steps in research process- Criteria of good research-Techniques involved in defining a research problem-Ethical Consideration in Psychological research.

UNIT-II   **15 Hours**

SAMPLING - (Theory)

Population and Sample- Types of sampling: Probability and non-probability sample- Sources of data collection: Primary data, Secondary data -Experimental method of data collection.

UNIT-III   **20 Hours**

INTRODUCTION TO STATISTICS - (Theory)

Meaning of statistics- Definition-Functions and limitations of statistics –Discrete and continuous variables- Descriptive and inferential statistics -Applications of statistics in Psychology

UNIT-IV – (Theory and practical sums)   **20 Hours**

DATA ANALYSIS

Frequency distribution- Graphical representation of data- Types of Diagrams.

Measures of central tendency: Mean-Median-Mode- Computation, Uses and Application of mean, median, mode in Psychology

UNIT-V– (Theory and practical sums)   **20 Hours**

QUANTITATIVE ANALYSIS (Theory and Sums) AND CORRELATION (Theory)

Measures of Variability: Range- Standard Deviation-Computation, Uses and Application of range and standard deviation in Psychology

Correlation: Meaning- Types of Correlation: Positive-Negative-Zero correlation.

Practicum: Students have to carry out a practical based on methods of data collection.

Practicum Activities:

- Designing of questionnaire
- Data collection methods- interview, observation, questionnaire and other methods
- Data collection through Google forms.

Distribution of Marks: Theory 75% and **Problems 25%**

TEXT BOOKS:

S.No	Authors	Title	Publishers	Year Of Publication
01	Arthur Aron,ElaineN.Aron, Elliot,J.Coups	Statistics for Psychology,4th edition	New Delhi: Pearson Education Inc	2006
02	S.K.Mangal	Statistics in Psychology and education,2nd edition	New Delhi: Prentice-Hall of India.	2002
03	C.R.Kothari&GauravGarg	Research Methodology methods and techniques,3rd edition	New Age International Publishers	2014

REFERENCE BOOKS:

S.No	Authors	Title	Publishers	Year Of Publication
01	Gupta.S.P	Statistical methods	New Delhi:Sultan Chand and sons	2002
02	Frederick,J. Gravetter&Larry,B.Walluan	Essentials of Statistcs for the Behavioural sciences ,2nd edition	New York : West Publishing company	1993

WEB SOURCES:

- https://www.udemy.com/introductory-statistics-part1-descriptive-statistics/
- https://www.edx.org/course/introduction-statistics-descriptive-uc-berkeleyx-stat2-1x
- https://www.udemy.com/statistics-for-psychology/
- https://sol.du.ac.in/mod/book/view.php?id=1317
- https://www.cliffsnotes.com/study-guides/statistics/sampling/populations-samples-parameters-and-statistics
- http://itfeature.com/statistics/primary-and-secondary-data-in-statistics

- https://econtutorials.com/blog/types-frequency-distribution/
- https://statistics.laerd.com/statistical-guides/measures-central-tendency-mean-mode-median.php
- https://stattrek.com/descriptive-statistics/variability.aspx
- http://www.modares.ac.ir/uploads/Agr.Oth.Lib.17.pdf

TEACHING METHODOLOGIES:

- Group test
- Assignments
- Model preparation
- Peer tutoring
- Seminar.

SYLLABUS DESIGNERS:

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