

## Dr. D.Y. Patil Vidyapeeth's Padmashree Dr. D. Y. Patil College of Nursing

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## First Year M. Sc Nursing

Subject: - Statistics Faculty: - Mrs. Vidya

Unit	Hours	Content	Lesson in Hours	Lesson Series
I	7(Theory) 4(Practical)	<b>Introduction :</b> • Concepts, types, significance, and scope of statistics meaning of data, parametric and no-parametric data	2	2
		· Sample, parameter	1	3
		• Type and levels of data and their measurement	1+1	4-5
		<ul> <li>Organization and presentation of data – Tabulation of data:</li> </ul>	1+1	6-7
		Frequency distribution	1+1	7-8
		Graphical and tabular presentations	1+1	9-10
II	4(Theory) 4(Practical)	Measures of central tendency : Mean, Median, mode	4+4	11-18
III	4(Theory) 5(Practical)	<ul> <li>Measures of variability:</li> <li>Range, Percentiles, average deviation,</li> </ul>	2+3	19-23
		quartile deviation, standard deviation	2+2	24-27
IV	4(Theory) 5(Practical)	<b>Normal Distribution :</b> Probability, Characteristics and application of normal	1+2	28-30
		Probability curve; sampling error.	1+1	31-32
		Cumulative distribution	1+1	33-34
		The cumulative frequency graph, Percentiles and percentile ranks	1+1	35-36
		The Cumulative percentage curve		
V	6(Theory)	Measures of relationship :         · Correlation – need and meaning	2+1	37-39

	8(Practical)	· Rank order correlation	1+1	40-41
		· Scatter diagram method	1+2	42-43
		Product moment correlation	1+2	44-45
		· Simple linear regression analysis and prediction.	1+2	46-47
		Designs and meaning: • Experimental designs	2+1	48-50
VI	4(Theory) 2(Practical)	Comparison in pairs, randomized block design, Latin squares	2+1	51-53
VII	8(Theory) 10(Practical)	Significance of statistic and significance of difference between two statistics (testing hypothesis) • Non parametric test – Chi – square test, Sign median test, Mann-Whitney test.	4+5	54-61
		<ul> <li>Parametric test – `t' test, ANOVA, manova, ancova, Pearson's r</li> </ul>	4+5	62-71
VIII	5(Theory) 5(Practical)	Use of statistical methods in psychology and education: • Scaling – Z Score, Z Scaling.	3	72-74
		Standard Score and T score	3	75-77
		Reliability of test Scores: test-retest method, parallel forms, spilt half method	4	78-81
IX	4(Theory) 6(Practical)	<b>Application of statistics in health:</b> ratios, Rates, Trends	1	82
		· Vital health statistics – Birth and death rates.	2+3	83-87
		· Measures related to fertility, morbidity and mortality	1+3	88-92
x	3(Theory) 6(Practical)	<b>Use of computers for data analysis</b> Use of statistical package.	3+6	93-100