LOYOLA COLLEGE (AUTONOMOUS) CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – **COUNSELLING PSYCHOLOGY**

SECOND SEMESTER – **APRIL 2025**

PCP 2301 – COMPUTER APPLICATIONS AND STATISTICS

Date: 09-05-2025 Dept. No. Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

PART – A

Answer any FOUR questions **(4 x 5 = 20)**

1. Write a short note on word processing software.
2. Explain how to create slide shows in MS Power Point.
3. Find the median for the following frequency distribution.

x	1	2	3	4	5	6	7	8	9
f	8	10	11	16	20	25	15	9	6

4. Find the range for the data: 1, 4, 6, 10, 3, 71, 100.
5. Explain about t-test and its assumptions.

PART – B

Answer any FOUR questions **(4 x 10 = 40)**

6. Write down various tools available under "Insert" tab in MS word.
7. Write down and explain some five functions used in MS Excel for mathematical calculations.
8. Compute $Q1$ and $Q3$ for the data relating to age in years of 543 members in a village for the following data.

Age in years	20	30	40	50	60	70	80
No. of students	3	61	132	153	140	51	3

9. Briefly explain the various menu items in "Menu Bar" is SPSS tool..
10. The following table shows the distribution of digits in numbers chosen at random from a telephone directory.

Digit	0	1	2	3	4	5	6	7	8	9
Frequency	1026	1107	997	966	1075	933	1107	972	964	853

Test whether the digits may be taken to occur equally frequently in the directory.
(The value of χ^2 significance at 5% level of significance for 9 degrees of freedom is 16.919.)

PART – C

Answer any TWO questions **(2 x 20 = 40)**

11. Calculate the mean and standard deviation for the following data giving the age distribution of 542 members in a club.

Age (in years)	20 –30	30 - 40	40 – 50	50 – 60	60 – 70	70 – 80	80 – 90
No. of members	3	61	132	153	140	51	2

12. Calculate the Karl Pearson's coefficient of correlation between X and Y from the following data.

X	65	66	67	67	68	69	70	72
Y	67	68	65	68	72	72	69	71

13. Define Analysis of Variance (ANOVA) and write down the steps in computation of One-way ANOVA. How do you achieve it in SPSS?
