KANYASHREE UNIVERSITY

Full Marks-40   Time- 2:00 Hours

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1. Calculate the value of Mean, Median and Mode:
   3+3+2 = 8

Class	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94
Frequency	3	3	4	6	6	14	9	8	2	4	1

Interpret the result.

OR

Class	55-64	65-74	75-84	85-94	95-104	105-114	115-124	125-134	135-144
Frequency	1	2	9	22	33	22	8	2	1

Interpret the result.

2. Calculate the value of Standard Deviation: 8

Class	18-20	21-23	24-26	27-29	30-32	33-35	36-38	39-41	42-44	45-47	48-50
Frequency	1	2	3	4	7	8	6	5	2	1	1

OR

Class	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	90 - 100
Frequency	50	20	31	39	35	30	25	18

3. What do you mean by Narrative analysis? Briefly discuss the steps of Narrative analysis. **4+2**

4. Calculate the Value of P_{60}. **5**

Class	55 – 59	50 – 54	45 – 49	40 – 44	35 – 39	30 – 34
Frequency	11	9	10	5	7	8

OR

Calculate the Value of P_{80}.

Class	50 – 55	45 – 50	40 – 45	35 –40	30 – 35	25 – 30
Frequency	8	7	10	8	9	8

5. Determine 'Product Moment Correlation' from the given two variables and explain the results. **6**

Variable X	20	37	42	25	27	45	39	31
Variable Y	26	39	35	24	29	49	38	22

Interpret the coefficient of correlation for the result obtained.

OR

Following marks have been obtained by a group of students in two subjects. Determine coefficient of correlation between the two subjects by Rank Difference method and explain the result:

1st Subject	35	30	42	29	36	25	34	33	28	29	33	37
2nd Subject	38	28	39	31	32	29	36	35	33	28	31	36

6. An aptitude test was administered on two randomly selected groups of teachers, one of 32 males and the other 34 females. The data are summarized in the following table.   7

Statistics	Male Teachers	Female Teachers
N	32	34
Mean	87.43	82.58
SD	6.27	6.39

Test the Significance difference between the performance of Male and Female teachers in the test.

[Critical value (Two-tailed Test) of 0.05 level of significance is 1.96]

OR

A math teacher divides his class into two random groups. He provides a technique invented by him for 30 minutes daily in solving problems to the experimental group besides regular class with a hope that the technique will help students solve problems. The control group was not provided the technique. At the end of the session, he administered an achievement test on math and collected data as under.

Statistics	Experimental Group	Control Group

Mean	40	35
SD	5	6
N	50	40

Is this gain (different between means) Significance enough to indicate that the technique help solving mathematical problem?

[Critical value (One-tailed Test) of 0.05 level of significance is 1.65]