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D1BPS2203 (S2) **Reg. No.....**

Name: .....

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2024
(Improvement/Supplementary)

PSYCHOLOGY
GPSY1C02T: DESCRIPTIVE STATISTICS

Time: 2 Hours **Maximum Marks: 60**

SECTION A: Answer the following questions. Each carries *two* marks.

(Ceiling 20 marks)

1. Calculate coefficient of variation of 33, 35, 41, 87, 34, 52, 20, and 49.
2. Define kurtosis. How do you measure kurtosis?
3. Give any two measures of skewness in common use.
4. Distinguish between graphs and diagrams.
5. What are the merits and demerits of arithmetic mean as a measure of central tendency?
6. If arithmetic mean and geometric mean of a distribution is 25 and 24 respectively, find harmonic mean.
7. Define range. Calculate the coefficient of range from the following data.

Marks	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
No. of Students	12	10	22	15	8	4

8. Define measures of dispersion? What are the different measures of dispersion?
9. Define standard deviation. What are the properties of standard deviation?
10. For a moderately skewed distribution, arithmetic mean = 160, mode = 157 and standard deviation = 50. Find Pearson's coefficient of skewness.
11. What is meant by Schedule?
12. Find the quartile coefficient of skewness from the following data.
    18, 32, 35, 24, 36, 75, 21, 42, 34,25, 13 and 4.

SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)

13. Distinguish between primary and secondary data. Explain.
14. Describe the different stages in conducting a statistical enquiry.
15. Draw a histogram for the following data:

Class	500 – 510	510 – 520	520 – 530	530 – 540	540 – 550	550 – 560	560 - 570
Frequency	8	18	23	37	47	26	16

(PTO)

16. Calculate geometric mean of the following data.

Class	1 - 4	5 - 8	9 - 12	13 -16	17 - 20
Frequency	5	13	12	6	4

17. Compute mean deviation about median from the following data:

Class	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44
Frequency	14	20	28	24	20	4

18. The runs scored by two batsmen in 5 innings are given below. Find who is more consistent batsman.

A	55	50	45	35	70
B	60	70	10	20	65

19. Prepare a continuous frequency table for the following observations:

15	45	40	42	65	69	40	35	37	40	75	75
80	81	50	60	62	68	70	42	31	45	42	43
25	26	31	32	78	45	60	62	58	43	55	56
78	80	81	62	75	62	68	45	69	70	50	72
56	58	84	65	75	55	42	25	70	56	78	69

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Calculate Q_3, D_4, P_{28} and P_{72} from the following data.

Value	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
Frequency	1	3	8	10	15	3

21. Compute Pearson's coefficient of skewness from the following data. Comment on it.

Class	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30	30 - 35
f	3	5	9	20	8	6	2

(1 x 10 = 10 Marks)