



RAN-2408000601021011

F.Y.B.Com. (Data Science) (NEP) Examination November - 2025 Major - Statistics for Data Analytics (Theory) (Paper - I)

[Total Marks: 35]

સૂચના : / Instructions

(1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.

Fill up strictly the above details on your answer book.

Seat No.:

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Student's Signature

Q.1. Answer the following questions: (Any Five)

(10)

1. State the types of frequency distribution.
2. If $M = 36$ and $\bar{x} = 15$ then find the value of z .
3. If $n_1 = 30$, $n_2 = 20$, $\bar{x}_1 = 25$ and $\bar{x}_2 = 15$ then find Combined mean.
4. If $x_H = 114$, $x_L = 72$ then find Range.
5. If $\bar{x} = 113$ and S. D. = 3.1 then find C.V.
6. If $\sum (x - \bar{x})^2 = 54$ and $n = 10$ then find s_x .
7. If $b_{xy} = 0.7$ and $b_{yx} = 0.45$ then find the value of r .

Q.2. (A) Find median of the following frequency distribution:

(07)

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	42	38	120	84	48	36	32

(B) Obtain mean of the following frequency distribution:

(06)

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	1	7	15	27	20	8	2

OR

Q.2. (A) Find mean deviation for the following distribution.

(07)

x_i	60	61	62	63	64	65	66	67
f_i	7	15	38	54	70	26	10	10

(B) Find S.D. from the following distribution.

(06)

Class	100-200	200-300	300-400	400-500	500-600	600-700	700-800
f	13	25	38	45	36	30	13

Q.3 A) Find correlation coefficient by using Spearman's rank correlation method. **(06)**

x	35	40	42	43	40	53	54	49	41	55
y	102	101	97	98	38	101	97	92	95	95

(B) Find the equation of regression line of y on x from the following data and also estimate y for $x = 1$. **(06)**

x	3	2	-1	6	4	-2	5	7
y	5	13	12	-1	2	20	0	-3

OR

Q.3. (A) Explain the Scope of Statistics. **(06)**

(B) Give the definition of Quartile deviation. Also write its merits and demerits. **(06)**
