CDOE
MASTER OF BUSINESS ADMINISTRATION (HUMAN RESOURCE) (CBCS - 2020 COURSE)
M.B.A. (H.R.) Sem-I : WINTER :- 2021
SUBJECT: STATISTICAL TECHNIQUES

Day : Friday   Time : 10:00 AM-12:00 PM
Date 11/2/2022   W-22980-2021   Max. Marks: 50

N.B.

1) Attempt any **THREE** questions from Section I and attempt any **TWO** questions from Section II.
2) Both the Sections should be written in the **SAME** answer book.
3) Figures to the right indicate full marks
4) Use Graph paper if required. Use of NON-PROGRAMMABLE calculators is allowed

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SECTION- I

Q.1 The mean of the following frequency distribution was found to be 1.46.   **(10)**

Number of accidents	Number of days
0	46
1	?
2	?
3	25
4	10
5	5
Total	200 days

Find the missing frequencies.

Q.2 Asha, Beena and Chandani are given a problem to solve. The chances   **(10)**
that they can solve the problem are 1/3, 1/2 and 1/4 respectively. What
is the probability that the problem will be solved?

Q.3 The following table indicates the data on the number of patients visiting   **(10)**
a hospital daily for a period of time.

Number of patients	0-10	10-20	20-30	30-40	40-50	50-60
Number of days	7	11	16	28	24	14

Compute the median and mode.

Q.4 A survey is conducted to study the effectiveness of an advertisement by calling people at random by asking the number of advertisements read or seen in a week (X) and the number of items purchased (Y) in that week **(10)**

X	5	10	4	3	2	7	3	6
Y	10	12	5	2	1	3	4	8

Calculate the Karl Pearson's Coefficient of correlation and comment on the result.

Q.5 Write short Notes (Any TWO) **(10)**

    a) Advantages of sampling

    b) Scatter diagrams

    c) Conditional probability

    d) Coefficient of Variation

SECTION- II

Q.6 Marks scored by two students in 5 tests are as follows **(10)**

A	68	71	70	75	76
B	61	92	93	51	48

Find coefficient of variation to conclude
    a) Who is a better scorer?
    b) Who is more consistent? Why?

Q.7 Given the two regression lines, $x - y - 5 = 0$ and $x + y - 4 = 0$ **(10)**

Find

    a) Mean for X and Y
    b) Using regression lines, Predict X when Y = 50

Q.8 The weekly wages of workers in a factory is distributed as follows. **(10)**

Wages (Rs.)	No. of employees
300-350	8
350-400	13
400-450	18
450-500	25
500-550	16
550-600	13
600-650	7

a) Draw histogram.
b) Determine the modal wage of the workers

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