JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

Make-up Examination-Nov-2025

BBA-III Semester

COURSE CODE (CREDITS): 23BB1HS311 (4) MAX. MARKS: 25

COURSE NAME: STATISTICS FOR BUSINESS DECISIONS

COURSE INSTRUCTORS: ASA MAX. TIME: 1 Hour 30 Minutes

Note: Note: *(a) All questions are compulsory.*

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q1 (CO: 4, Marks: 6 (3+1+1+1))

The following observations are for two quantitative variables, X and Y.

Observation	X	Y	Observation	X	Y
1	28	72	11	13	98
2	17	99	12	84	21
3	52	58	13	59	32
4	79	34	14	17	81
5	37	60	15	70	34
6	71	22	16	47	64
7	37	77	17	35	68
8	27	85	18	62	67
9	64	45	19	30	39
10	53	47	20	43	28

a. Develop a crosstabulation for the data, with X as the row variable and Y as the column variable. For X use classes of 10–30, 30–50, and so on; for Y use classes of 40–60, 60–80, and so on.

b. Compute the row percentages.

c. Compute the column percentages.

d. What is the relationship, if any, between X and Y?

Q2 (CO: 1, Marks: 6 (2+2+2))

Find the value of mean, mode and median from the data given below:

Height (cm)	93-97	98-102	103-107	108-112	113-117	118-122	123-127	128-132
No of Kids	3	5	12	17	14	6	3	1

<table>
<tr>
<td>Q3</td>
<td>Lives of two models of bikes in a recent survey are given here:
<table>
<tr><th>Life (No of Years)</th><th>Model 1</th><th>Model 2</th></tr>
<tr><td>0 – 2</td><td>5</td><td>2</td></tr>
<tr><td>2 – 4</td><td>16</td><td>7</td></tr>
<tr><td>4 – 6</td><td>13</td><td>12</td></tr>
<tr><td>6 – 8</td><td>7</td><td>19</td></tr>
<tr><td>8 – 10</td><td>5</td><td>9</td></tr>
<tr><td>10 - 12</td><td>4</td><td>1</td></tr>
</table>
What is the average life of each model? Which model has greater uniformity?</td>
<td>2</td>
<td>4 (2+ 2)</td>
</tr>
<tr>
<td>Q4</td>
<td>Given that the mean of a distribution is 4, the variance is 16, and the moment coefficient of skewness is 2, find the first three moments about the origin.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Q5</td>
<td>Write short notes on the following (max 50 words)
a) Quartiles
b) Descriptive Statistics
c) Histogram
d) Sampling
e) Scatter Plot</td>
<td>1</td>
<td>5 (1x 5)</td>
</tr>
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