## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -1 EXAMINATION- 2025

## **BBA-III Semester**

COURSE CODE (CREDITS): 23BB1HS311 (4)

MAX. MARKS: 15

COURSE NAME: STATISTICS FOR BUSINESS DECISIONS

COURSE INSTRUCTORS: ASA

MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

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

| O No           | for solving prob  |                                       |                | One   | stion   |         |           |        |         | 1 0            | CO                         | Marks  |
|----------------|---|---------------------------------------|----------------|-------|---------|---------|-----------|--------|---------|----------------|----------------------------|--|
| Q.No           | Short answer (max 100 words)  |                                       |                |       |         |         |           |        | 1       | 1x3=3          |                            |  |
| Q1             | a) What is the difference between descriptive statistics and  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | inferential statistics?   |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | b) What is the difference between population and sample in  |                                       |                |       |         |         |           |        |         | Marketon Line  |                            | in the Control of the |
|                | statistical analysis?   |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | c) What is the purpose of using a histogram in statistics?  |                                       |                |       |         |         |           |        |         |                | ANTONIO DE MONTO           |  |
|                | c) what is  | no par                                | poor c         | 1 000 | 8       |         | Mary Mary | )      |         | 17575.0,000    |                            |  |
| Q2             | In 2024, a college had a total of 1,800 students. Out of these 1,200 were                                       |                                       |                |       |         |         |           |        |         | 4              | 2+2=4                      |  |
|                | for Graduation and the rest for Post-Graduation (P.G.). Out of the 1,200  |                                       |                |       |         |         |           |        |         |                | 10 51 73-00                |  |
|                | Graduate students 180 were girls. However, in all there were 520 girls  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | in the college  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | In 1997, the number of Graduate students increased to 1,500, out of   |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | which 300 were girls, but the number of P.G. students fell to 400, of   |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | which only 120 were hows  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | In 2002, out of 900 garls, 700 were for Graduation, whereas the total   |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | number of graduates was 1,800. The number of boys and girls in P.G.   |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | classes was equal.  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | a) Represent the above information in a tabular form (show boys,  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | girls and totals for Graduation and P.G. for each year).  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | b) Calculate the percentage increase in the number of Graduate  |                                       |                |       |         |         |           |        |         |                |                            |  |
|                | students in 2002 as compared to 2024.   |                                       |                |       |         |         |           |        |         | . Construction |                            |  |
|                | Compute the mean and median of the following data:  |                                       |                |       |         |         |           |        |         | 1              | 2+2=4                      |  |
| Q3.            | Compute the me  | ean and median of the following data. |                |       |         |         |           |        | •       | 2.2            |                            |  |
|                | 10. N.  | 115                                   | 125            | 135   | 145     | 155     | 165       | 175    | 185     | 195            |                            | 2000.000   |
|                | Mid Value   | 115                                   | 25             | 48    | 72      | 116     | 60        | 38     | 22      | 3              |                            |  |
|                | Frequency   | 6                                     | 25             | 40    | 12      | 110     | 00        | 30     | 22      |                | 2) et singe                |  |
|                |   |                                       |                |       |         |         |           |        |         |                |                            |  |
| esto estampete | 4   |                                       |                | - 1   | 1.      | 1.      | ata - C   | G      | 2000    | outive         | 1                          | 2+2=4  |
| Q4.            | A retail firm recorded its annual sales growth rates for five consecutive                                       |                                       |                |       |         |         |           |        |         | cunve          | 1                          | 212-4  |
|                | years as follows: 8%, 12%, 5%, 15% and 10%. Compute the arithmetic, geometric and harmonic mean for the return. |                                       |                |       |         |         |           |        |         | 136 17 111     | of the same of the same of |  |
|                | 1 2   |                                       | and the second |       | 0 0 1 1 | 2011120 | nio m     | an for | r tho r | eturn          |                            |  |