

# Rani Rashmoni Green University

MBA 1<sup>st</sup> Semester Examination, 2025

Subject: Statistics for Business Decisions

Course code: MBA-104 (Unit: \_\_\_\_\_)

Time: 2 Hours

Full Marks: 40

1. Answer any four questions from the followings:  $2 \times 4 = 8$

- Mention any two applications of Statistics in Business.
- What are the various measures of central tendency?
- Write the relations among mean, median, and mode.
- Mention any two properties of normal distribution.
- What do you mean by correlation?
- What is cost of living index?

2. Answer any four questions from the followings:

$4 \times 4 = 16$

- Mention any five limitations of statistics.
- Discuss various types of correlation with the help of scatter diagrams.
- State various types of Skewness with diagrams.
- Explain the trend equation and explain the components of it.
- Find the mean and SD of 'n' natural numbers.
- Establish the relation between correlation and regression coefficient.

3. Answer any two questions from the following:

$2 \times 8 = 16$

- Explain the concept of a probability distribution. Give two examples of how probability distribution is used in the decision-making process.  $(4 + 4)$
- In a multiple-choice examination, there are 20 questions. Each question has four alternative answers and the students must select the one correct answer. Four marks are given for the correct answer and one mark is deducted for every wrong answer. A student must secure at least 50% of the maximum possible marks to pass the examination. Suppose that a student has not studied at all so he decides to select the answers to the questions on a random basis. What is the probability that he will pass the examination?
- Briefly discuss various types of probability sampling techniques.
- When Poisson distribution formula is the best for approximation? Interpret the value of  $R^2 = .60$  in regression.  $(4 + 4)$