## Villa Marie Degree College for Women

(Affiliated to Osmania University)

### Program B.Sc.

# Bridge Course- Fundamentals in Mathematics & Statistics Academic Year 2022 - 23

#### **Course Objective**

To provide a strong foundation of basic concepts of Mathematics and Statistics.

#### **Course Outcomes**

 Students understand the fundamental concepts of mathematics and statistics and approach mathematical and statistical problems with confidence.

#### **Syllabus**

| Unit | Topics   | No. of<br>Classes |
|------|--|-------------------|
| 1    | Mathematical Fundamentals- Subtopics: - Arithmetic operations - Fractions, decimals, and percentages   | 02                |
| 2    | Algebra Review - Subtopics: - Solving linear equations and inequalities -Polynomials and factoring   | 02                |
| 3    | Geometry and Trigonometry - Subtopics: - Properties of geometric shapes - Area and perimeter calculations  | 02                |
| 4    | Statistical Foundations - Subtopics: - Descriptive statistics (mean, median, mode) - Probability basics  | 02                |
| 5    | Data Analysis and Interpretation- Subtopics: - Data visualization techniques - Interpretation of graphs and charts   | 02                |
| 6    | Problem-Solving and Applications- Subtopics: - Critical thinking skills - Problem-solving strategies. Review and Integration - Subtopics: - Recap of key concepts from the week - Simple problem-solving exercises | 02<br>NgheS       |

Villa Marie Degree College For Women 6-3-1089, Somajiguda, Hyderabad-82