

**RANIGANJ GIRLS' COLLEGE**  
**BSC HONOURS IN MATHEMATICS**  
**&**  
**BSC PROGRAM IN MATHEMATICS**  
**PROGRAM OUTCOMES**

1. The learning outcomes of each paper are designed so that these may help learners to understand the main objectives of studying the course.
2. This will enable learners to select elective papers depending on the individual inclinations and contemporary requirements.
3. The objectives of LOCF are to mentally prepare the students to learn Mathematics leading to graduate degree with Honours in Mathematics or with Mathematics as a subject.
4. These syllabi in Mathematics under CBCS are recommended keeping in view of the wide applications of Mathematics in science, engineering, social science, business and a host of other areas.
5. The study of the syllabi will enable the students to be equipped with the state of the art of the subject and will empower them to get jobs in technological and engineering fields as well as in business, education and healthcare sectors.
6. The LOCF committee in Mathematics has prepared this draft paying suitable attention to objectives and learning outcomes of the papers. These syllabi may be implemented with minor modifications with appropriate justifications keeping in view regional, national and international context and needs.
7. The outcomes of each paper may be modified as per the local requirements.
8. The text books mentioned in references are denotative/demonstrative. The divisions of each paper in units are specified to the context mentioned in courses. These units will help the learners to complete the study of concerned paper in certain periods and prepare them for examinations.
9. The papers are organized considering the credit load in a particular semester. The core papers of general interest are suggested for semesters I to IV. The elective courses and advanced courses are proposed for the B.A./B.Sc. (Hons.) students of semesters V & VI and the elective courses for the students of B.A./B.Sc. semesters V & VI having Mathematics as a subject.
10. The mathematics is a vast subject with immense diversity. Hence it is very difficult for every student to learn each branch of mathematics, even though each paper has its unique importance. ii Under these circumstances, LOCF in Mathematics suggests a number of elective papers along with compulsory papers. A student can select elective papers as per her/his needs and interests.
11. The committee expects that the papers may be taught using various Computer Algebra Systems (CAS) softwares such as Mathematica, MATLAB, Maxima and R to strengthen the conceptual understanding and to widen up the horizon of students' self-experience.
12. The committee of the LOCF in Mathematics expects that the concerned departments /colleges /institutes /universities will encourage their faculty members to include necessary topics in addition to courses suggested by LOCF committee. It is hoped that the needs of all round development in the careers of learners