Hindi Vidya Prachar Samiti's

RAMNIRANJAN JHUNJHUNWALA COLLEGE (AUTONOMOUS)

(Also known as R. J. College of Arts, Science & Commerce as per UGC Notification)

**Affiliated to UNIVERSITY OF MUMBAI II Recognized by UGC under 2f & 12B
NAAC Accredited 'A GRADE' with CGPA 3.50**

Knowledge is all Ambrosia

CERTIFICATE COURSE IN

BIOINFORMATICS

ABOUT US

Hindi Vidya Prachar Samiti was incepted on the auspicious day of Shri Krishna Janmashtami, 15th August 1938. A brain child of a visionary Late Shri Nandkishore Singh Jairamji, samiti was established with the objectives of catering to the educational needs of the Hindi speaking community. Ramniranjan Jhunjhunwala College came into existence in 1963, enabling a larger section of the society to take advantage of the facilities provided for higher education.

From 1999-2000 the College has added a number of self-financing courses like B.M.S., B.B.I., B.Sc. in Computer Science, Information Technology, Biotechnology, M.Sc. in Computer Science, Biotechnology and Information Technology as well as add on courses, which further hone the special skills of the students.

The college has been reaccredited with 'A' Grade by NAAC in 2014 with a CGPA 3.50 and received the Best College Award (2007-2008) of the University of Mumbai. The College has been bestowed with IMC "Ramkrishna Bajaj Performance Excellence Trophy", 2010.

The Former Principal of the college was awarded "Best Teacher" by Government of Maharashtra in 2011.

Government of Maharashtra conferred the college with "JAAGAR JAANIVANCHA" (First in Mumbai Suburban- in 2013 and Second in Mumbai Suburban- in 2014) for safety of girls.

Course Code: RJBTC04

Duration: 30 hours

Credits : 02

LEARNING OUTCOME

After completion of the course student will be able to:

- Gain an understanding of the basic concepts of Bioinformatics.

- Understand the tools used in Bioinformatics for Biological data retrieval.

- Use online tools for Pairwise alignment, Multiple sequence alignments and Generating phylogenetic tree.

COURSE CONTENT

Unit I	Introduction to Bioinformatics, Concept of central dogma of Molecular Biology, Biological data generation.
Unit II	Biological Databases- Primary, Secondary, Derived & Composite, Data Retrieval
Unit III	Pairwise Alignment (BLAST)- Orthologs & Paralogs
Unit IV	Multiple sequence alignment (CLUSTAL W), Molecular Phylogeny (Phylogenetic tree generation)

ASSESSMENT

Continuous: After every session there will be assignment or quiz
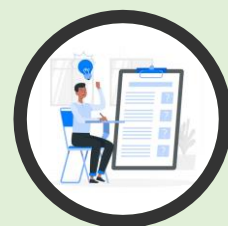
MEDIUM OF INSTRUCTION English

PASSING PERCENTAGE 40

WHO SHOULD DO IT?

Any UG and or PG student of Biological Sciences