



LESSON PLAN BIOLOGY

CLASS - XIIth OCTOBER, 2015

CLASSES REQUIRED	15 LECTURES (Class Duration of 1 hour)
TOPIC	Biotechnology I) Principles and process II) Applications of biotechnology
CONCEPT & SKILLS	Definition and history of biotechnology, tools, process, principles, techniques used in biotechnology Biotechnological application in medicine, agriculture and Important issues related to genetic engineering like IPR, bio-piracy, bio-wars and ELSI(Ethical, legal and social issues)
LEARNING OUTCOMES	Learning Outcomes of this lesson include the following: I) To develop the ability to appreciate biological phenomenon in nature and the contribution of biotechnology to human welfare. II) Role played by biotechnology in improving health care for human beings and application in industries. III) Applications in forensic sciences, formation of GMO's or Transgenic organisms IV) Exploitation of animal rights, release of GMO's, biosafety, etc.
INSTRUCTIONAL TOOLS & REFERENCES	I) Text book for both the topics. II) Board and laptop III) References from various books.
PEDAGOGY	i) Reflective discussion ii) Random questioning iii) HOTS iv) Text-book questions v) Sample board papers.
ACTIVITY / ASSIGNMENT / RESEARCH	i) Class assignments based on topics from the text book. ii) In-text books questions
ASSESSMENT	i) random questioning. ii) Discussion of questions from previous years board papers iii) Group discussions

**SYLLABUS FOR
FORMATIVE &
SUMMATIVE
ASSESSMENT**

To be tested in the pre-boards and class tests.