



BOKARO PUBLIC SCHOOL

Affiliated to CBSE, New Delhi Upto +2 Level

SEC-3/C, Bokaro Steel City - 827003

SYLLABUS 2025-2026

CLASS: XII

SUBJECT: BIOLOGY (Code No. 044)

SUBJECT TEACHER: AKSHAY SRIVASTAVA

SL. NO	MONTH	WORKING DAY	LESSON STRUCTURE	STATUS
1	APRIL	22	Chapter-2: Sexual Reproduction in Flowering Plants Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; out breeding devices; pollen-pistil interaction; double fertilization; post fertilization events - development of endosperm and embryo, development of seed and formation of fruit; special modes- apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.	
2	MAY	`07	Chapter-3: Human Reproduction Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis - spermatogenesis and oogenesis; menstrual cycle; fertilisation, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).	
3	JUNE	15	Chapter-4: Reproductive Health Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control - need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness). code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting	

4	JULY	23	<p>Chapter-7: Evolution Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution - variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy-Weinberg's principle; adaptive radiation; human evolution.</p> <p>Chapter-8: Human Health and Diseases Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse</p>	
5	AUGUST	22	<p>Chapter-10: Microbes in Human Welfare Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use</p> <p>Chapter-11: Biotechnology - Principles and Processes Genetic Engineering (Recombinant DNA Technology).</p>	
6	SEPTEMBER	09	<p>Chapter-12: Biotechnology and its Applications Application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms - Bt crops; transgenic animals; biosafety issues, biopiracy and patents.</p> <p>Chapter-13: Organisms and Populations Population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate,</p>	

7	OCTOBER	12	<p>Chapter-13: age distribution. (Topics excluded: Organism and its Environment, Major Abiotic Factors, Responses to Abiotic Factors, Adaptations)</p> <p>Chapter-14: Ecosystem Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy (Topics excluded: Ecological Succession and Nutrient Cycles).</p>	
8	NOVEMBER	20	<p>Chapter-15: Biodiversity and its Conservation Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites</p>	
9	DECEMEBER	19	SAMPLE PAPER SOLVE	
10	JANUARY	17	SAMPLE PAPER SOLVE + pre-board	