



BLOOM PUBLIC SCHOOL
C-8 Vasant Kunj New Delhi
SYLLABUS FOR THE SESSION 2021-22

Class: XII

Subject: Biology

MONTH	CHAPTERS (NCERT TEXT BOOK)	CONTENT (As per Rationalised Syllabus)
April	<p>Ch.1: - Reproduction in organism.</p> <p>Ch.2: - Sexual Reproduction in flowering Plants.</p>	<p>Ch.2: - Sexual Reproduction in flowering Plants.</p> <p>Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; outbreeding 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.</p>
June	<p>Ch.2: - Sexual Reproduction in flowering Plants(cont'd)</p>	<p>Ch.2: - Sexual Reproduction in flowering Plants.</p> <p>Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; outbreeding 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.</p>

	Ch. 3: - Human Reproduction	Ch. 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)
July	Ch. 4: - Reproductive health. Ch. 5: - Principles of inheritance and variation Unit test I	Ch. 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). Ch. 5: - Principles of inheritance and variation Heredity and variation: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination - in human being, birds and honey bee; linkage and crossing over; sex linked inheritance - haemophilia, colour blindness; Mendelian disorders in humans -thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and

		Klinefelter's syndrome
August	Ch. 5: - Principles of inheritance and variation (cont'd)	Ch. 5: - Principles of inheritance and variation Heredity and variation: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination - in human being, birds and honey bee; linkage and crossing over; sex linked inheritance - haemophilia, colour blindness; Mendelian disorders in humans -thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndrome

	Ch. 6: -Molecular Basis of Inheritance	Ch. 6: -Molecular Basis of Inheritance Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting.
September	Ch. 6: -Molecular Basis of Inheritance (cont'd) Unit test II	Ch. 6: -Molecular Basis of Inheritance Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting
October	Ch. 8:- Human health & Diseases Ch.10: Microbes in human welfare Preboard Term I Exam	Ch. 8:- Human health & 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. Ch.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>November</p>	<p>Ch.10: Microbes in human welfare (cont'd)</p> <p>Ch. 11: -Biotechnology: Principles & Processes</p> <p>Ch. 12: -Biotechnology & its Application</p>	<p>Ch.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>Ch. 11: -Biotechnology: Principles & Processes Genetic Engineering (Recombinant DNA Technology</p> <p>Ch. 12: -Biotechnology & its Application 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>December</p>	<p>Ch. 12: -Biotechnology & its Application (cont'd)</p> <p>Ch. 13: - Organisms and Population</p> <p>TERM-I EXAM</p>	<p>Ch. 12: -Biotechnology & its Application 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>Ch. 13: - Organisms and Population Organisms and environment: Habitat and niche, population and ecological adaptations; population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution</p>

January	<p>Ch. 13: - Organisms and Population (cont'd)</p> <p>Ch.15: - Biodiversity & conservation.</p> <p>Unit test III</p>	<p>Ch. 13: - Organisms and Population Organisms and environment: Habitat and niche, population and ecological adaptations; population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution</p> <p>Ch.15: - Biodiversity & 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>
February	<p>Revision</p> <p>Preboard Term II Exam</p>	
March	TERM-II EXAM	

ASSESSMENTS SYLLABUS

1. Unit Test I (July-August)

Ch 2: - Sexual Reproduction in flowering Plants

Ch 3: - Human Reproduction

Ch 4: - Reproductive health.

2. Unit Test II (September)

Ch. 5: - Principles of inheritance and variation (cont'd)

Ch. 6: -Molecular Basis of Inheritance

3, PreBoard Exam (October)

Ch 2: - Sexual Reproduction in flowering Plants

Ch 3: - Human Reproduction

Ch 4: - Reproductive health.

Ch. 5: - Principles of inheritance and variation (cont'd)

Ch. 6: -Molecular Basis of Inheritance

4.Term I Exam (Nov-Dec.)

Ch 2: - Sexual Reproduction in flowering Plants

Ch 3: - Human Reproduction

Ch 4: - Reproductive health.

Ch. 5: - Principles of inheritance and variation (cont'd)

Ch. 6: -Molecular Basis of Inheritance

5. Unit Test III (January)

Ch. 8:- Human health & Diseases

Ch.10: Microbes in human welfare

Ch. 11: -Biotechnology: Principles & Processes

6. Preboard Term I Exam (February)

Ch. 8:- Human health & Diseases

Ch.10: Microbes in human welfare

Ch. 11: -Biotechnology: Principles & Processes

Ch. 12: -Biotechnology & its Application

Ch. 13: - Organisms and Population

Ch.15: - Biodiversity & conservation.

7. Term II Exam (March-April)

Ch. 8:- Human health & Diseases

Ch.10: Microbes in human welfare

Ch. 11: -Biotechnology: Principles & Processes

Ch. 12: -Biotechnology & its Application

Ch. 13: - Organisms and Population

Ch.15: - Biodiversity & conservation.

Filename: BIOLOGY.docx
Directory: C:\Users\lenovo i3\Desktop\photo
Template: C:\Users\lenovo
i3\AppData\Roaming\Microsoft\Templates\Normal.dotm
Title:
Subject:
Author: niladri bose
Keywords:
Comments:
Creation Date: 7/12/2020 2:21:00 PM
Change Number: 27
Last Saved On: 8/1/2021 4:22:00 PM
Last Saved By: sushilafulara2021@hotmail.com
Total Editing Time: 3,075 Minutes
Last Printed On: 8/17/2021 11:41:00 AM
As of Last Complete Printing
Number of Pages: 7
Number of Words: 1,306 (approx.)
Number of Characters: 7,447 (approx.)