

O. P. JINDAL SCHOOL, SAVITRINAGAR, TAMNAR

Annual Syllabus Break-up for the session 2023-2024

Subject: Biology Class: XII

Sl.	Month	No. of Instructional days	No. of periods	Chapters to be taught	Subject enrichment activities	Values to be imparted	Extra content to be taught
1	April	21	20	Chapter2:Reproduction in flowering plants Chapter3:Reproduction in human Chapter-4 Reproductive health	To study pollen germination. To study T,S of testis ,T.S of ovary To study T.S of blastula	2.Reproduction, a characteristic feature of Flower structure; development of male and female gametophytes; pollination – types. 3.Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis - spermatogenesis and oogenesis etc 4.Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs)	Assignment/Worksheet of Reproduction in flowering plant ,MCQs Assignment/Worksheet of Reproduction in human ,MCQs Assignment/Worksheet of Reproductive health plant, MCQs

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2	June	11	15	<p>Chapter-11: Biotechnology - Principles and processes</p> <p>Chapter-12: Biotechnology and its Application</p>	To isolate DNA from plant material	<p>11. Genetic Engineering (Recombinant DNA Technology) etc.</p> <p>12. Application of biotechnology in health and agriculture: Human insulin and vaccine production etc.</p>	<p>Assignment of Biotechnology ,MCQs</p> <p>Assignment of Biotechnology and its application, MCQs</p>

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3	July	23	20	<p>Chapter-8: Human Health and Diseases</p> <p>Chapter-10: Microbes in human welfare</p>	<p>To study disease causing organism- ascaris ,plasmodium</p> <p>To prepare temporary mount of root tip to study mitosis</p>	<p>8. Pathogens; parasites causing human diseases (malaria, dengue, chickengunia etc.</p> <p>10. In household food processing, industrial production, sewage treatment</p>	<p>Assignment/Worksheet of Human health, MCQ</p> <p>Assignment/Worksheet of microbes in human welfare, MCQ</p>

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4	August	23	25	<p>Chapter-5: Principles of Inheritance and Variation</p> <p>Chapter-6: Molecular Basis of Inheritance</p> <p>Chapter-7: Evolution</p>	<p>To study pedigree chart-blood group, ear lobes</p> <p>To study mendelian inheritance</p> <p>To study pollen germination on stigma.</p>	<p>5.Heredity and variation: Mendelian inheritance; deviations from Mendelism etc.</p> <p>6.Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central dogma; transcription, genetic code etc.</p> <p>7.Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences) etc.</p>	<p>Assignment/Worksheet of principle of inheritance, MCQ</p> <p>Assignment/Worksheet of molecular basis of inheritance, MCQ</p> <p>Assignment/Worksheet of evolution, MCQ</p>

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5	September	12	12	Revision and Assessment			

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6	October	20	18	Chapter-13: Organisms and Populations Chapter-14: Ecosystem	To study plant population density by quadrat method To study symbiotic association in root nodules of leguminous plant	13.Organisms and environment: Habitat and niche, population and ecological adaptations etc. 14.Ecosystems: Patterns, components; productivity and decomposition; energy flow etc.	Assignment/Worksheet of organisms and populations ,MCQs Assignment/Worksheet of ecosystem ,MCQ

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7	November	13	11	Chapter-15: Biodiversity and its Conservation	To study controlled pollination-emasculatation,bagging	15.Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation etc.	Assignment/Worksheet of biodiversity ,MCQ

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8	December	19		Revision & Assessment			

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9	January	22		Revision & Assessment			

Sl.	Month	No. of Instructional days	No. of periods	Chapters to be taught	Subject enrichment activities	Values to be imparted	Extra content to be taught
10	February	15		Revision & Board Examinations			

SYLLABUS FOR EXAMINATION

SN	EXAMINATION	EXAMINATION'S MONTHS	MAX MARKS	Max Time	SYLLABUS FOR EXAMINATION
1	TEST – 1	July	20	1 Hr	Chapter-2 Sexual Reproduction in flowering plants Chapter-3 Human Reproduction
2	Half Yearly Examination	September	70	3 Hrs	Chapter-2,3,4,8,5,10,11,12
3	Pre Board	December-January	70	3 Hrs	Complete Syllabus
4	Board Examination	March	70	3 Hrs	Complete Syllabus