



## D.A.V. PUBLIC SCHOOL, NEW PANVEL

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### SYLLABUS PLANNING (2019-20)

#### STD. XII

#### SUBJECT: BIOLOGY

Month	No. of Teaching Days	Topics	No. of Periods	Weightage
MARCH	08	<b><u>UNIT VI:Reproduction</u></b> <b>Chapter-1:</b> Reproduction in organisms. <b>Chapter-2:</b> Sexual Reproduction in flowering plants.	07 04	14
APRIL	22	<b><u>UNIT VI:Reproduction</u></b> <b>Chapter-2: (Contd.)</b> Sexual Reproduction in flowering plants. <b>Chapter-3:</b> Human reproduction <b>Chapter-4:</b> Reproductive Health	08 12 05	
JUNE	24	<b><u>UNIT VII :</u></b> <b><u>GENETICS &amp; EVOLUTION</u></b> <b>Chapter-1:</b> Principles of Inheritance and Variation Revision for I Unit Test	11 05	18
JULY	26	I Unit Test <b><u>UNIT VII :</u></b> <b><u>GENETICS &amp; EVOLUTION</u></b> <b>Chapter-2 :</b> Molecular Basis of Inheritance <b>Chapter-3:</b> Evolution	06 16 06	
AUGUST	21	<b><u>UNIT VIII:</u></b> <b><u>Biology and Human Welfare</u></b> <b>Chapter-1:</b> Human health and diseases. <b>Chapter -2:</b> Strategies for Enhancement in Food Production. <b>Chapter-3:</b> Microbes in human welfare. <b><u>UNIT IX:</u></b> <b><u>Biotechnology &amp; its applications</u></b> <b>Chapter-1:</b> Biotechnology: Principles and Processes	08 08 05 08	14 10

Month	No. of Teaching Days	Topics	No. of Periods	Weightage
SEPTEMBER	16	Revision of I Term Exam I Term Examination & I Term Exam	18	
OCTOBER	18	<b><u>UNIT IX:</u></b> <b><u>Biotechnology &amp; its applications(Contd.)</u></b> <b>Chapter-2:</b> Biotechnology and its Applications <b><u>UNIT X: Ecology</u></b> <b>Chapter -1:</b> Organisms and Populations <b>Chapter-</b> <b>2:</b> Ecosystem <b>Chapter -3:</b> Biodiversity and Conservation	05   07  05  03	14
NOVEMBER	23	<b><u>UNIT X:Ecology(Contd.)</u></b> <b>Chapter -3:</b> Biodiversity and Conservation (contd.) <b>Chapter-4:</b> Environmental Issues Revision & Preparatory Exam	04  05  06  13	
DECEMBER	18	Preparatory Exam & Practical Exam  Revision for Preliminary Exam.	10  08	
JANUARY	24	Revision for Preliminary Exam, Preliminary Exam & Board Practical Exam	24	
FEBRUARY	12	Revision for Board Exam	12	
<b>TOTAL</b>	<b>212</b>		<b>229</b>	70



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## SYLLABUS PLANNING (2019-20)

### PRACTICAL

SUB: BIOLOGY

STD: XII

Month	No. of Periods For Practical	Experiments
MARCH	-	--
APRIL	--	--
JUNE	06	<b>SPOTTING:</b> <u>Experiment 1:</u> Flowers adapted to pollination by different agencies (wind, insect). <u>Experiment 2:</u> Pollen germination on stigma through a permanent slide. <u>Experiment 3:</u> T.S. of blastula through permanent slides. <u>Experiment 4:</u> Identification of stages of gamete development i.e. T.S. testis and T.S. ovary through permanent slides (from any mammal). <u>Experiment 5:</u> Meiosis in onion bud cell or grass hopper testis through permanent slides. <u>Experiment 6:</u> Exercise on controlled pollination - Emasculation, tagging and bagging. <u>Experiment 7:</u> Identification of common disease causing organisms like Ascaris, Entamoeba, Plasmodium, ringworm through permanent slides or specimens. Comment on symptoms of disease that they cause. <u>Experiment 8:</u> Plants and animals found in aquatic conditions. Comment upon their morphological adaptations <u>Experiment 9:</u> Two plants and two animals found in xerophytic conditions. Comment upon their morphological adaptations. <u>Experiment 10:</u> Mendelian inheritance using seeds of different colour/sizes of any plant. <u>Experiment 10:</u> Prepared pedigree charts of genetic traits such as rolling of tongue, blood groups, widow's peak, colour blindness.

Month	No. of Periods For Practical	Experiments
JULY	08	<p><b>CORE EXPERIMENTS</b>  <u>Slide Preparation:</u>  <u>Experiment 1:</u> Study pollen germination on a slide/ Pollen germination on stigma .  <u>Experiment 2:</u> Prepare a temporary mount of onion root tip to study mitosis.</p> <p><b>CORE EXPERIMENTS</b>  <u>Minor Experiments:</u>  <u>Experiment 3:(i)</u> Collect and study soil from at least two different sites and study them for texture &amp;pH .Correlate with the kinds of plants found in them.  <u>Experiment 3: (ii)</u>Collect and study soil from at least two different sites and study them for moisture content.</p>
AUGUST	08	<p><u>Experiment 3: (iii)</u>Collect and study soil from at least two different sites and study them for water holding capacity  <u>Experiment 4: (i)</u>Collect and study water samples from at least two different sites and study them for pH ,clarity (particulate matter) and presence of any living organism.  <u>Experiment 5:</u> Study the presence of suspended particulate matter in air at two widely different sites.</p>
SEPTEMBER	--	I Term Practical Examination
OCTOBER	08	<p><b>Major Experiments:</b>  <u>Experiment 6:</u> Study of plant population density by quadrat method.  <u>Experiment 7:</u> Study of plant population frequency by quadrat method.  <u>Experiment 8:</u> To study the effect of the different temperatures and three different pH on the activity of salivary amylase on starch.</p>
NOVEMBER	04	<u>Experiment 9:</u> Isolate DNA from available plant material such as spinach,green pea seeds ,papaya etc
DECEMBER	06	Revision &Preparatory Practical Examination
JANUARY	04	Revision& Preliminary Practical Exam Revision for Board Practical Exam
<b>TOTAL</b>	<b>44</b>	