

SYLLABUS XII
SUBJECT

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	PRACTICAL/PROJECT
PT -1(APR-MAY)	Chapter 1(Reproduction in Organisms) Chapter 2(Sexual Reproduction in Flowering Plants) Chapter 3(Human Reproduction) Chapter 4(Reproductive Health) Chapter 5(Principles of Inheritance and variation)	Chapter 1(Reproduction in Organisms) Chapter 2(Sexual Reproduction in Flowering Plants) Chapter 3(Human Reproduction) Chapter 4(Reproductive Health)	<ul style="list-style-type: none"> • Study of Pollen germination on slide • Prepare a temporary mount of Onion root tip to study mitosis. • Study of soil (Texture, moisture content, pH and Water Holding Capacity) • Flowers adapted to pollination by different agencies (wind, insects, birds). • Pollen germination on stigma through a permanent slide. • Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice). • Meiosis in onion bud cell or grasshopper testis through permanent slides. • T.S. of blastula through permanent slides (Mammalian). • Mendelian inheritance using seeds of different colour/sizes of any plant. • Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness. • Controlled pollination - emasculation, tagging and bagging.

I TERM (JULY)	Chapter 6 (Molecular Basis of Inheritance) Chapter 7(Evolution) Chapter 11(Biotechnology: Principles and Processes)	Chapter 1(Reproduction in Organisms) Chapter 2(Sexual Reproduction in Flowering Plants) Chapter 3(Human Reproduction) Chapter 4(Reproductive Health) Chapter 5(Principles of Inheritance and variation) Chapter 6(Molecular Basis of Inheritance) Chapter 7(Evolution) Chapter 11(Biotechnology: Principles and Processes)	<ul style="list-style-type: none"> • Study the effect of different temperatures and three different pH on the activity of salivary amylase on starch. <p>Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.</p>
HALF YEARLY (SEP)	Chapter 9(Strategies for enhancement in food production) Chapter 10(Microbes in Human Welfare) Chapter 13 (Organisms and Population)	Chapter 1(Reproduction in Organisms) Chapter 2(Sexual Reproduction in Flowering Plants) Chapter 3(Human Reproduction) Chapter 4(Reproductive Health) Chapter 5(Principles of Inheritance and variation) Chapter 6(Molecular Basis of Inheritance) Chapter 7(Evolution) Chapter 8(Human Health and Disease) Chapter 9(Strategies for enhancement in food production) Chapter 10(Microbes in Human Welfare) Chapter 11(Biotechnology: Principles and Processes) Chapter 12 (Biotechnology and its Applications)	
PT –II (JULY- AUG)	Chapter 12 (Biotechnology and its Applications) Chapter 8(Human Health and Disease)	Chapter 12 (Biotechnology and its Applications) Chapter 8(Human Health and Disease)	

<p>II TERM (DEC)</p>	<p>Chapter 13 (Organisms and Population) Chapter 14(Ecosystem) Chapter 15(Biodiversity and Conservation) Chapter 16(Environmental Issues)</p>	<p>Chapter 1(Reproduction in Organisms) Chapter 2(Sexual Reproduction in Flowering Plants) Chapter 3(Human Reproduction) Chapter 4(Reproductive Health) Chapter 5(Principles of Inheritance and variation) Chapter 6(Molecular Basis of Inheritance) Chapter 7(Evolution) Chapter 8(Human Health and Disease) Chapter 9(Strategies for enhancement in food production) Chapter 10(Microbes in Human Welfare) Chapter 11(Biotechnology: Principles and Processes) Chapter 12 (Biotechnology and its Applications) Chapter 13 (Organisms and Population) Chapter 14(Ecosystem) Chapter 15(Biodiversity and Conservation) Chapter 16(Environmental Issues)</p>	
<p>PREBOARD (JAN)</p>			