

Unit	Topic / Portion deleted for 2020-2021 academic session
I	1.Reproduction in organisms 1.2. Reproduction 1.3. Characteristic features of Asexual Reproduction (Fission, Budding, Sporulation, Fragmentation, Vegetative Propagation)
II	Genetics and Evolution Chapter 7: Evolution 7.1. Origin of the Earth 7.2. Theories on the Origin of life ( Origin of life by special creation, spontaneous generation of life, Cosmic origin of life) 7.3. Evidence for evolution 7.4. Examples of evolution by natural selection 7.5. Adaptive Radiations 7.7. Important concepts 7.8. Geological time scale 7.10 Origin and evolution of Man
VIII	Biology and Human Welfare Chapter 9: Strategies for Enhancement in food production 9.1. Animal Husbandry 9.2. Plant Breeding 9.5. Single Cell Protein (SCP) 9.6. Plant Tissue Culture
X	Ecology and Environment Chapter 14: Ecosystem 14.2. Productivity 14.3. Decomposition 14.4. Energy flow 14.5. Ecological Pyramids 14.6. Ecological Succession  Chapter 16: Environmental Issues 16.5. Solid Wastes 16.7. 3. Control of Radioactive Pollution 16.8 1. The Greenhouse Effect 2. Global Warming 3. Depletion of Ozone 16.9. Ozone depletion in the Stratosphere 16.11. Deforestation

Weightage to content area of selected portion :

Unit	Topic / Portion Selected for 2020-2021 academic session	Mark
I	<p>Reproduction</p> <p>Chapter 1: Reproduction in organisms</p> <p>1.1 Life Span</p> <p>1.4 Vegetative Propagation</p> <p>1.5 Sexual Reproduction</p> <p>1.6 Events in Sexual Reproduction</p> <p>1.7 Parthenogenesis</p> <p>Chapter 2: Sexual Reproduction in flowering Plants – whole chapter</p> <p>Chapter 3: Human Reproduction – whole chapter</p> <p>Chapter 4: Reproductive Health- Problems and Strategies– whole chapter</p>	14
II	<p>Chapter 7: Evolution</p> <p>7.2 (4) Chemical Evolution of life – Scientific Hypothesis</p> <p>(B) Oparin Haldane Theory</p> <p>(C) Miller and Urey’s Experiment</p> <p>7.6 Biological Evolution 1) Lamark’s Theory of Evolution</p> <p>2) Darwin’s theory of evolution by natural selection</p> <p>7.9 Concept of Species</p>	16
VIII	<p>Biology and Human Welfare</p> <p>Chapter 9: Strategies for enhancement in food production</p> <p>9.3 Main steps in Breeding – A new genetic variety</p> <p>9.4 Crop improvement</p> <p>9.7 Somatic Hybridization and Protoplast culture</p>	12
X	<p>Ecology and Environment</p> <p>Chapter 14: Ecosystem</p> <p>14.1 Ecosystem – Structure and Function</p> <p>14.7 Nutrient Cycling</p> <p>14.8 Biogeochemical Cycles – 1. Carbon Cycle</p> <p>2. Phosphorus Cycle</p> <p>Chapter 16: Environmental Issues</p> <p>16.1 Pollution</p> <p>16.2 Air Pollution</p> <p>16.3 Noise Pollution</p> <p>16.4 Water Pollution</p> <p>16.5 Soil Pollution</p> <p>16.10 Soil Erosion and Conservation</p>	14

Weightage to form of questions:

Sl No.	Type of questions	No. of questions	Mark for each question	Total
1	Objective type	14	1	14
2	Short Answer I	7	2	14
3	Short Answer II	9	3	27
4	Long Answer	3	5	15
	Total			70



**Sample Blue Print : Biology XII**

Forms of Question/ Topic	Knowledge			Understanding			Application			HOTS			Evaluation			
	Obj	SAI	SA II LA	Obj	SAI	SA II LA	Obj	SAI	SA II LA	Obj	SAI	SA II LA	Obj	SAI	SA II LA	Total
Reproduction	2(2)		5(1)	1(1)			1(1)		3(1)				2(1)			14(7)
Genetics and Evolution	2(2)		3(1)		2(1)		1(1)				3(1)					5(1) 16(7)
Biology and Human Welfare	1(1)	2(1)			2(1)		1(1)		3(1)							12(6)
Biotechnology and its applications	1(1)		3(1)		2(1)	5(1)			3(1)							14(5)
Ecology and Environment	2(2)			1(1)	2(1)	6(2)			2(1)			1(1)				14(8)
<b>Sub - total</b>	<b>8(8)</b>	<b>2(1)</b>	<b>6(2)</b>	<b>5(1)</b>	<b>8(4)</b>	<b>6(2)</b>	<b>3(3)</b>	<b>2(1)</b>	<b>9(3)</b>	<b>1(1)</b>	<b>6(2)</b>	<b>7(3)</b>	<b>2(1)</b>	<b>5(1)</b>	<b>70(33)</b>	
<b>Total</b>	<b>21(12)</b>			<b>21(9)</b>			<b>14(7)</b>			<b>7(3)</b>			<b>7(2)</b>			

**Note :** 1) The figures in the bracket denotes the number of questions

2) This is only a sample Blue Print. The question setter may develop his/her own Blue Print as per the question design

## DELETED PORTIONS CLASS XII: PRACTICAL

**A: List of Experiments**

1. Study the presence of suspended particulate matter in air at two widely different sites.
2. Study the Plant population density by quadrat method.
3. Study the Plant population frequency by quadrat method.

**B. Study/Observe of the following (spotting)**

1. Pollen germination on stigma through a permanent slide or scanning electron micrograph
2. Mendelian inheritance using seeds of different colour/sizes of any plant.
3. Controlled pollination – emasculation, tagging and bagging.

Weightage to content area of selected portion :

Unit	Topic / Portion Selected for 2020-2021 academic session
I	A. Soil analysis – i) pH ii) Water holding capacity iii) Moisture content  B. Water analysis- i) pH ii) Clarity iii) Presence of living organism
II	i) Prepare a temporary amount of onion root tip to study mitosis ii) Effect of different temperatures and different pH on the activity of Salivary amylase on starch.
III	i) T.S of ovary and T.S of testis  ii) Meiosis in grasshopper testis through permanent slides  iii) T.S of blastula through permanent slides  iv) Prepared pedigree charts of genetic traits such as rolling of tongue, blood groups, widow's peak, colour blindness  v) Identification of common disease causing organisms like Ascaris, Entamoeba, Plasmodium, ringworm through permanent slides or specimens. Comment on symptoms of diseases that they cause  vi) Plants and animals found in aquatic conditions. Comment upon their morphological adaptations