



**EXAMINATION MATERIAL ZUEB - 2022**

**BOTANY XII (PRE-MEDICAL)**

**SECTION "C" Extended Response Questions (ERQ)**

<b>CHAPTER 1 HOMEOSTASIS</b>	<b><u>Question no.01:</u></b> What is Osmoregulation? Classify various type of plants on the basis of Osmoregulation.
<b>CHAPTER 2 SUPPORT AND MOVEMENT</b>	<b><u>Question no.01:</u></b> Describe movement in Plants? Explain various types of Paratonic movements in plants.
<b>CHAPTER 3 CONTROL AND COORDINATION</b>	<b><u>Question no.01:</u></b> What are phytohormones? Name various Phytohormones and define any 2  <b><u>Question no.02:</u></b> How plant respond to environmental stress? describe it's any 3 types
<b>CHAPTER 4 REPRODUCTION</b>	<b><u>Question no.01:</u></b> Describe natural methods of asexual reproduction in Plants.
<b>CHAPTER 5 CHROMOSOME AND DNA</b>	<b><u>Question no.01:</u></b> Explain the process of protein synthesis with its steps.  <b><u>Question no.02:</u></b> Describe Watson and Crick model of DNA. How does the model explain semi-conservative replication of DNA?  <b><u>Question no.03:</u></b> How do ionization radiation, ultraviolet radiation and chemical mutagens damage DNA duplex?
<b>CHAPTER 6 CELL CYCLE</b>	<b><u>Question no.01:</u></b> Explain Meiotic errors. Describe the defects caused due to abnormal number of chromosomes in human beings.  <b><u>Question no.02:</u></b> Describe Prophase I of Meiosis with diagrams.
<b>CHAPTER 7 VARIATION AND GENE</b>	<b><u>Question no.01:</u></b> Describe Sex-linked inheritance. Explain with reference to Hemophilia in man.  <b><u>Question no.02:</u></b> Describe the Law of Independent Assortment with the help of checker board.

	<b><u>Question no.03:</u></b> State the Law of Segregation. Prove it with the help of Monohybrid Cross.
<b>CHAPTER 8 ECOSYSTEM</b>	<b><u>Question no.01:</u></b> What do you know about the term Ecosystem? Name the various abiotic components of an ecosystem. Describe climatic factors only.
<b>CHAPTER 9 SOME MAJOR ECOSYSTEM</b>	<b><u>Question no.01:</u></b> Describe any type of Forest Ecosystem OR Grassland Ecosystem with reference of Pakistan.

