

**HSC 12th Standard**

**BIOLOGY**

**Model Question Paper – 2**

**Bio-Botany**

**Section- I**

**Time : 2.30 Hrs**

**Marks : 70**

**I Answer all the questions**

**8x1 = 8**

**Choose the most suitable answer:**

1	Inflouescence is a branched spadix in a) sterlizia                      b) Tridax c) Musa                              d) Ravenala
	a) Generic and specific epithet are different b) Generic name alone present c) Generic and specific epithet are same d) Only specific epithet present
3	The unicellular or multicellular appendages that origiuate from the epedumal cells are called a) Subsidiary                      b) trichoblasts c) Trichomes                      d) Guard cells
4	The gene which acts as unit of function is called a) Muton                      b)recon    c) Cistron                      d) Operon
5	The terminal part of Chromosome is called a) Centromere                      b) kinetochore c) telomere                      d) Chromomere
6	Each restriction enzyme cleaves a molecule only at a) The ends of genes                      b) methyl groups c) nucleotide sequence                      d) the time of DNA replication
7	Light sensitive seeds can germinate in complete darkness by the hormone a) Auxin                      b) Gibberlin

	c) Cytokinin      d) Ethylene
8	Emetine is obtained from a) Vinca   b) Cephalis   c) Solanum   d) Acalypha

**Section- II**

**4 X 2 = 8**

**Answer any four of the following**

9	Define type specimen
10	Differentiate lamellar and angular collencynia
11	Draw the structure of Chromosome and label its parts
12	What is totipotency
13	Define vernalisation
14	What is richmond lang effect?

**Section- III**

**Write any Three of the following in which question no. 18 is compulsory**

15	List out the various types of inflorescence of euphorbiaceae with suitable examples
16	Write a note on parenchyma
17	Explain the significance of ploidy
18	Differentiate photorespiration from Dark respiration
19	Write the aims of plant breeding

**Section- IV**

**2 X 5 = 10**

**Give the answer for the following questions**

20	Explain bentham and Hookers classification Or Describe the Different modes of nutrition in angiosperms.
21	Explain protoplasmic fusion Or Describe the primary structure of T.S of dicot root



12	What are the clinical manifestations of thalassemia?
13	Distinguish between life span and life expectancy
14	How will you identify <i>Catla catla</i> ?

### Section- III

**Write any Three of the following in which question no. 18 is compulsory**

**3x3=9**

15	Terrestrial animals are generally either ureotelic or uricotelic, not ammonotelic why?
16	Write the reasons for conductive hearing loss
17	Which type of malaria is fatal? Why?
18	Distinguish between isograft and allograft.
19	Write the uses of karyotyping.

20	<p>What are the alternative options for the couples who are unable to achieve fertilization in the normal way? Explain</p> <p>Or</p> <p>Describe the mechanism of urine formation.</p>
21	<p>Describe about various kinds of first line defence in most animals</p> <p>Or</p> <p>Suggest the ways to protect Earth from global warming and ozone depletion</p>