# **Higher Secondary Second Year**

# BIOLOGY

# Model Question Paper – 2

## **Bio-Botany**

Section- I

Time: 2.30 Hrs

Marks: 70

8x1 = 8

I Answer all the questions

Choose the most suitable answer:

1	Inflorescence is a branched spadix in
	a) sterlizia b) Tridax
	c) Musa d) Ravenala
2	Which of the following statement is correct for tautonym
	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

 $4 \times 2 = 8$ 

### Answer any four of the following

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

Section- III

3 X 3 = 9

#### Write any Three of the following in which question no. 18 is comppulsory

15	List out the various types of infloresence 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

 $2 \times 5 = 10$ 

#### 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

# **Bio Zoology**

#### Section- I

# I Answer all the questions

## Choose the most suitable answer from the given four alternatives

1	Women who have several pregnancies may be affected by
	b) Umblical hernia b) Inguinial hernia
	d) Femoral hernia d) Strangulated hernia
2	In the oesophagus one peristaltic wave takes about to reach stomach
	e) 3 seconds b) 5 seconds c ) 9 seconds d ) 8 seconds
3	During heart beat the lubb sound is due to
	b) Closure of mitral valve b) Closure of atrio ventricular valve
	c) Closure semilunar valve d) Closure of Tricuspid valve
4	Progressive loss of memory is associated with
	b) Meningitis b) Cerebral Thrombosis c) Myasthenia gravis d) Alzheimer's disease
5	Complex (or) uncertain symmetry is seen is
	b) adenovirus b) Pox virus
	c) blue tongued virus d) Polio virus
6	Many viruses, which are difficult or impossible to grow have been cultured in
	b) Primary culture b) Continuous cell line
	c) Pure culture d) Diploid cell strain
7	Certain plants such as were able to break down cyanide into non-toxic form
	b) Gibberella fusarium b) Thespesia populnea
	c) Gibberella fujikuroi d) Solanum melongena
8	Which of the following fowl is noted for its pugnacity?
	b) Chittagong b) Busra c) Aseel d) Karaknath

### Section- II

## Write any four of the following

9	What is silent infarction?
10	Which hormone is called antidiuretic hormone (ADH) why?
11	Who discovered antiseptic surgery? State its use.

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

#### 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.

#### Section- IV

### Give the answer for the following questions

#### 2X 5 = 10

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