

Dr. PANJABRAO DESHMUKH KRISHI VIDYAPEETH, AKOLA
SEMESTER END THEORY EXAMINATION

B.Sc. (Hons.) Horticulture

Semester : I	Term : I	Academic Year : 2021-22
Course No. : BIO-111	Title : Introductory Biology	
Credits : 2(1+1)		
Day & Date : Friday 26/11/2021	Time : 4.00-5.00	Total Marks : 40

Note : 1) Solve ANY FOUR questions from SECTION-A
 2) Solve ANY SIX questions from SECTION-B
 3) ALL questions from SECTION-C are compulsory
 4) Send the PDF file of answer sheet to the email id of respective course teacher

SECTION-A

(Write the answers in 4-5 sentences only. Each question carries 4 marks)

Q. 1	What seed? Explain types of seed germination.
Q. 2	Define respiration and explain the processes of glycolysis.
Q. 3	What is binomial nomenclature? Explain it with suitable example.
Q. 4	Describe the vegetative and reproductive plant parts with diagram and functions.
Q. 5	Define mitosis. Explain stages of mitosis with the help of diagram.

SECTION-B

(Write the answers in one sentence only. Each question carries 2 marks)

Q. 6	(Answer in one sentence. Do as directed. Define etc.)
a)	Give two types of inflorescence.
b)	Give types of roots.
c)	Define Cell.
d)	Define Growth.
e)	List out abiotic factors affecting seed germination.
f)	Define Allele.
g)	What is Species?

SECTION-C

(Choose the correct option. Each question carry 1 mark)

Q. 7	1) In RNA which of the following is absent?			
	a)	Thymine	b)	Cytosine
	c)	Uracil	d)	Guanine
	2) Which of the following cell organelles is related with genetic engineering?			
	a)	Mitochondria	b)	Plasmids
	c)	Golgi bodies	d)	Lysosomes

3) In plants _____ produces food

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|----|--------------|----|-------------|
| a) | Mitochondria | b) | Cytoplasm |
| c) | Ribosomes | d) | Chloroplast |

4) Which of the following plant kingdom is called amphibians?

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|----|--------------|----|--------------|
| a) | Pteridophyta | b) | Thallophyta |
| c) | Bryophyta | d) | Tracheophyta |

5) The genetic material found in viruses is _____

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|----|----------|----|------------|
| a) | DNA | b) | RNA |
| c) | Nucleoid | d) | Centrosome |

6) In which of the following stages, chromosomes are arranged at equatorial plate?

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|----|-----------|----|-----------|
| a) | Metaphase | b) | Telophase |
| c) | Anaphase | d) | Prophase |

7) End product of glycolysis is

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|----|---------------------|----|--------------|
| a) | Acetyl CoA | b) | Pyruvic acid |
| c) | Glucose 1 phosphate | d) | Fructose |

8) Fusion of male and female gametes is referred to as _____

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|----|-------------------|----|---------------|
| a) | Segregation | b) | Fertilization |
| c) | Somatic variation | d) | Recombination |

9) According to binomial nomenclature, two words used for naming a plant or animal are.

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|----|-------------------|----|--------------------|
| a) | Species and genus | b) | Genus and order |
| c) | Genus and family | d) | Species and family |

10) Maize is the member of _____ family.

- | | | | |
|----|----------|----|-------------|
| a) | Fabaceae | b) | Leguminosae |
| c) | Poaceae | d) | Malvaceae |

11) Ginger is an example of _____ types of stem modification.

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|----|---------|----|-------|
| a) | Rhizome | b) | Tuber |
| c) | Bulb | d) | Corm |

12) Binomial Nomenclature was given by _____.

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|----|--------------|----|---------------|
| a) | Robert Hooke | b) | Robert Brown |
| c) | Mendel G.J. | d) | Carl Linnaeus |
