

**Dr. PANJABRAO DESHMUKH KRISHI VIDYAPEETH, AKOLA**  
**SEMESTER END THEORY EXAMINATION**  
**B.Sc. (Hons.) Horticulture**

Semester	: I(New)	Term	: I	Academic Year	: 2020-21
Course No.	: BIO-111	Title	: Introductory Biology		
Credits	: 2(1+1)				
Day & Date	: 13/07/2021, Tuesday	Time	: 12.00-1.00	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 are the different types of seed germination? Explain any one with suitable examples.
- Q. 2 Define respiration and explain the processes of glycolysis.
- Q. 3 What is binomial nomenclature? Explain it with suitable example.
- Q. 4 Define double fertilization and give its significance.
- Q. 5 Differentiate between Plant cell and Animal cell

**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.)

Define the following terms.

- a) Taxonomy
- b) Cell
- c) Growth
- d) Photosynthesis
- e) Allele
- f) Biotechnology
- g) Species

**SECTION-C**

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

- Q. 7 1) In RNA thymine is replaced by
- |            |             |
|------------|-------------|
| 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) Reticulate venation is the characteristics feature of
- |                |               |
|----------------|---------------|
| a) Dicot       | b) Bryophytes |
| c) Gymnosperms | d) Monocot    |
- 4) Which of the following plant kingdom is called amphibians?
- |                 |                 |
|-----------------|-----------------|
| a) Pteridophyta | b) Thallophyta  |
| c) Bryophyta    | d) Tracheophyta |

- 5) The genetic material of prokaryotic cells is called
- a) Nucleus
  - b) Nucleolus
  - c) Nucleoid
  - d) Centrosome
- 6) In which of the following stages, chromosomes are arranged at equatorial plate?
- a) Metaphase
  - b) Telophase
  - c) Anaphase
  - d) Prophase
- 7) End product of glycolysis is
- a) Acetyl CoA
  - b) Pyruvic acid
  - c) Glucose-1 phosphate
  - d) Fructose
- 8) Typical embryo sac of angiosperms is
- a) Tetranucleated
  - b) Eight nucleated and seven celled
  - c) Binucleated and seven celled
  - d) Tetranucleated and seven celled
- 9) According to binomial nomenclature, two words used for naming a plant or animal are.
- a) Species and genus
  - b) Genus and order
  - c) Genus and family
  - d) Species and family
- 10) In cereal grain single cotyledon is represented by
- a) Coleoptile
  - b) Coleorrhiza
  - c) Scutellum
  - d) Prophyll
- 11) First vascular land plant belongs to which group.
- a) Bryophyta
  - b) Thallophyta
  - c) Pteridophyta
  - d) Spermatophyta
- 12) From which of the following algae, agar is commercially extracted?
- a) Fucus
  - b) Sargassum
  - c) Chlorella
  - d) Gelidium

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