

MARCH 2021
EBS 114
GENERAL BIOLOGY THEORY 1
2 HOURS

Candidate's Index Number
Signature:

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
SCHOOL OF EDUCATIONAL DEVELOPMENT AND OUTREACH
INSTITUTE OF EDUCATION

COLLEGES OF EDUCATION
FOUR-YEAR BACHELOR OF EDUCATION (B.ED)
FIRST YEAR, END-OF-FIRST-SEMESTER EXAMINATION, MARCH 2021

MARCH 22, 2021

GENERAL BIOLOGY THEORY 1

9:00 AM – 9:30 AM

This paper consists of two sections, A and B. Answer all the questions in Section A and TWO questions in Section B. Section A will be collected after the first 30 minutes.

SECTION A

Answer all the questions in this section

For items 1 to 20, each stem is followed by four options lettered A to D. Read each item carefully and circle the letter that corresponds to the correct or best option.

1. Which one of these is the correct way of writing the scientific name of flamboyant?
 - A. *Delonix regiae*.
 - B. *Delonix regiae*.
 - C. *Delonix Regiae*.
 - D. *delonix regiae*.
2. Which of the following consists of prokaryotic cells?
 - A. Archaea and fungi.
 - B. Archaea and bacteria.
 - C. Bacteria and fungi.
 - D. Protists and animals.
3. A disease that is constantly present in a population is described as...
 - A. endemic.
 - B. epidemic.
 - C. pandemic.
 - D. re-emerging.

4. Why are fungi important decomposers? They...
 - A. can grow in many different environments.
 - B. produce many spores.
 - C. produce mycelia.
 - D. re-cycle carbon and inorganic minerals by the process of decomposition.

5. Frogs belong to what Order?
 - A. Anura.
 - B. Apoda.
 - C. Caudata.
 - D. Urodela.

6. The stalk of a leaf is known as the...
 - A. lamina.
 - B. petiole.
 - C. rachis.
 - D. stipule.

7. Cells of the ----- contain chloroplasts.
 - A. epidermis
 - B. mesophyll
 - C. stomata
 - D. vascular tissue

8. Plant regions of continuous growth are made up of-----tissue
 - A. dermal
 - B. meristematic
 - C. permanent
 - D. vascular

9. The energy currency used by cells is....
 - A. ADP
 - B. Adenosine
 - C. AMP
 - D. ATP

10. What occurs during the second half of glycolysis?
 - A. ATP is made.
 - B. ATP is used up.
 - C. Fructose is split in two.
 - D. Glucose becomes fructose.

1. What is removed from pyruvate during its conversion into an acetyl group?
 - A. ATP
 - B. B vitamin
 - C. Carbon dioxide
 - D. Oxygen

2. Which of the following fermentation methods can occur in animal skeletal muscles?
 - A. Alcohol.
 - B. Lactic acid.
 - C. Mixed acid.
 - D. Propionic acid.

3. Water moves via osmosis-----
 - A. from an area with a high concentration of other solutes to a lower one.
 - B. from an area with a high concentration of water to one of lower concentration.
 - C. from an area of low concentration of water to one of higher concentration.
 - D. throughout the cytoplasm.

14. The principal force driving movement in diffusion is the...
 - A. concentration gradient.
 - B. membrane surface area.
 - C. particle size.
 - D. Temperature.

15. What problem is faced by organisms that live in freshwater?
 - A. Only salt water poses problems for animals that live in it.
 - B. Their bodies tend to lose too much water to their environment.
 - C. Their bodies tend to take in too much water.
 - D. They have no way of controlling their toxicity.

16. The fertilized ovule gives rise to the
 - A. embryo.
 - B. endosperm.
 - C. fruit.
 - D. seed.

17. Plant species that complete their life-cycle in one season are known as...
 - A. annuals.
 - B. biennials.
 - C. perennials.
 - D. polycarpic.

18. Which female organ has an endometrial lining that will support a developing baby?
- A. Breast.
 - B. Labia minora.
 - C. Ovaries.
 - D. Uterus.
19. What is the sex cell of the male mammal?
- A. Oocyte.
 - B. Ovule.
 - C. Ovum.
 - D. Sperm.
20. What is the sex cell of the female mammal?
- A. Sperm.
 - B. Spermatocyte.
 - C. Spermatozoon.
 - D. Ovum.