

NOVEMBER 2023  
EBS 311  
GENERAL BIOLOGY THEORY III  
30 MINUTES

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)  
THIRD YEAR, SECOND SEMESTER MID-SEMESTER QUIZ, NOVEMBER 2023

23<sup>RD</sup> NOVEMBER 2023      GENERAL BIOLOGY THEORY III      3:00 PM – 3:30 PM

Answer ALL the questions.  
(20 MARKS)

Items 1 to 20 are stems followed by four options lettered A to D. Read each item carefully and circle the letter of the correct or best option.

1. The geometrical device that helps to find out all the possible combinations of male and female gametes is called ..... square.  
A. Bateson  
B. Mendel's  
C. Morgan's  
D. Punnett's
2. An example of a genotype is .....  
A. a tall pea plant.  
B. haemophiliac.  
C. R and r.  
D. TtHh.
3. The inheritance of skin colour in humans is an example of .....  
A. co-dominance.  
B. epistasis.  
C. linkage.  
D. polygenic.
4. If the diploid number of chromosomes is 48, how many chromosomes will be found in its pollen grain?  
A. 12  
B. 24  
C. 48  
D. 96

5. Asexual reproduction in *Amoeba* sp. takes place through .....
  - A. binary fission.
  - B. budding.
  - C. fragmentation.
  - D. regeneration.
  
6. In which option is all parts of stamen and pistil fully shown?
  - A. anther filament pollen ----- ovary stigma style
  - B. anther petal sepal ----- style stigma sepal
  - C. anther petal pollen ----- style petal stigma
  - D. calyx corolla pollen----- calyx cprolla ovary
  
7. The egg in the carpel is known as .....
  - A. ovary.
  - B. ovule.
  - C. stigma.
  - D. style.
  
8. The male reproductive part of a flower, the stamens are collectively known as .....
  - A. androecium.
  - B. anther.
  - C. filament.
  - D. gynoecium.
  
9. Reproduction is essential for living organisms in order to .....
  - A. continue the species.
  - B. fulfil their energy requirements.
  - C. keep the organism.
  - D. maintain growth.
  
10. By what process do tadpoles develop into young frogs?
  - A. Budding
  - B. Embedding
  - C. Fertilization
  - D. Metamorphosis
  
11. The female reproductive system in humans contains ..... of ovaries.
  - A. a pair
  - B. only one
  - C. three pairs
  - D. two pairs
  
12. Which of the following is a hermaphrodite?
  - A. Cow
  - B. Dog
  - C. Earthworm
  - D. Elephant
  
13. Which of the following animals swallow their prey?
  - A. Ant
  - B. Human
  - C. Hummingbird
  - D. Snake

14. .... is a condition that results from eating a diet in which nutrients are not enough.
- A. Appetite
  - B. Malnutrition
  - C. Repletion
  - D. Starvation
15. Rickets is caused by deficiency of vitamin .....
- A. A
  - B. B
  - C. C
  - D. D
16. The food that gives **most** calories per unit mass is .....
- A. carbohydrates.
  - B. fats.
  - C. protein.
  - D. water.
17. Which of the following geographic areas is the largest source of CO<sub>2</sub> emissions from burning of fossil fuel?
- A. China
  - B. European Union
  - C. North America
  - D. Russia
18. Which of the following greenhouse gases is entirely anthropogenic in nature?
- A. CFCs
  - B. CO<sub>2</sub>
  - C. Methane
  - D. Water vapour
19. Organisms which depend on producers for nutrition are called .....
- A. autotrophs.
  - B. consumers.
  - C. saprophytes.
  - D. xerophytes.
20. Which one of the following would appear as the pioneer organisms on bare rocks?
- A. Green algae
  - B. Lichens
  - C. Liverworts
  - D. Mosses