

(6 Pages)

Reg. No. :

Code No. : 20545 E Sub. Code : CAMI 21

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023.

Second Semester

Microbiology — Allied - I

GENERAL BIOLOGY

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The slimy outer covering of bacteria which protects them from phagocytosis is known as _____
(a) Capsule (b) Cell wall
(c) Flagellum (d) Peptidoglycan
2. Prokaryotic cell do not possess _____
(a) Nuclear envelope (b) Ribosome
(c) Mesosome (d) Plasmamembrane

3. Which organelles are not membrane bound in eukaryotic cells?
(a) Mitochondria (b) Ribosomes
(c) Plastid (d) Golgibody
4. Function of golgi apparatus is _____
(a) Packaging and secretion of materials
(b) Lysosome formation
(c) Mesosome formation
(d) Carboxysome formation
5. The process of mitosis occurs _____
(a) only in bacteria
(b) in viruses as well as bacteria
(c) in eukaryotic organisms
(d) only in chemically defined media
6. The generation time for all microorganisms _____
(a) varies (b) is 30 minutes
(c) is 3 hours (d) is 12 hours
7. The structure of the plant cell is non living _____
(a) nucleus (b) cell wall
(c) cytoplasm (d) mitochondria

8. _____ is the study of the cell, its types, structure, functions and its organelles.
(a) Biology (b) cell biology
(c) Mitochondria (d) Biotechnology
9. Aquaculture is the farming of _____
(a) Fishes and crustaceans
(b) Mollusks
(c) Aquatic plants
(d) All of the above
10. Animals do not have enzyme systems which enable them to make use of the energy from _____
(a) fat (b) cellulose
(c) protein (d) carbohydrate

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Describe the function of the bacterial capsule.
Or
(b) What is mesosome and its functions?

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12. (a) Illustrate the general characters and functions of mitochondria.
Or
(b) How are flagella differ in prokaryotes and eukaryotes?

13. (a) Explain the process of binary fission in bacteria.

Or

- (b) What is fragmentation with examples?

14. (a) Describe the methods of propagation in horticulture.

Or

- (b) Focus the general characters of thallophyta with examples.

15. (a) Express your views about sericulture.

Or

- (b) Report the facts about earthworm.

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[P.T.O.]

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 600 words.

16. (a) Explain in detail about nuclear materials of eubacteria.

Or

- (b) Write a detail notes on extra mural layer in bacteria.

17. (a) Illustrate the structure and importance of eukaryotic cell wall.

Or

- (b) Record the structure and functions of ribosomes.

18. (a) Explain in detail about mitosis.

Or

- (b) Discuss in detail about meiosis.

19. (a) Focus the general characters of halophytes.

Or

- (b) Illustrate the economic importance of biodiesel.

20. (a) Write a detail notes on human digestive system.

Or

- (b) Describe in detail about general characteristics of invertebrates.
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