

(6 pages)

Reg. No. : .....

Code No. : 30504 E Sub. Code : CAMI 21

B.Sc. (CBCS) DEGREE EXAMINATION,  
NOVEMBER 2022.

Second Semester

Microbiology – Allied

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. Which is true for bacteria?
  - (a) Bacteria lack DNA
  - (b) Mitochondria and nuclear membrane is present
  - (c) Nucleoid is the region which contain DNA
  - (d) RNA acts as genetic material

6. In the meiosis type cell division, chromatids segregates during \_\_\_\_\_.
  - (a) Never divides
  - (b) Anaphase I
  - (c) Interkinesis
  - (d) Anaphase II
7. In chloroplast, photosynthetic reaction occur in \_\_\_\_\_.
  - (a) Thylakoid membrane
  - (b) Thylakoid lumer
  - (c) Stroma
  - (d) Inner chloroplast membrane
8. A plant cell, wall is mainly composed of \_\_\_\_\_.
  - (a) Protein
  - (b) Cellulose
  - (c) Lipid
  - (d) Starch
9. The honey bee is a greatest use to mankind as \_\_\_\_\_.
  - (a) It is of medicinal benefits
  - (b) Helps in cross pollination
  - (c) We get honey from them
  - (d) None of these

2. Which of the following is essential for living cell?
  - (a) Flagella
  - (b) Capsule
  - (c) Cell wall
  - (d) Cytoplasmic membrane
3. Most abundant lipid in plasma membrane is \_\_\_\_\_.
  - (a) Cholesterol
  - (b) Sterol
  - (c) Glycolipid
  - (d) Phospholipid
4. Golgi complex plays a major role in \_\_\_\_\_.
  - (a) Protein synthesis
  - (b) Glycosylation of lipids and proteins
  - (c) Removal of Sulfate from the Carbohydrate moiety of glycolipids
  - (d) Formation of secondary lysosomes
5. The best definition for the generation time of a bacterial population is the \_\_\_\_\_.
  - (a) Time it takes for a bacterial population to double
  - (b) Time it takes for the lag phase
  - (c) Length of the exponential phase
  - (d) Maximum rate of doubling

Page 2 Code No. : 30504 E

10. Mulberry Silkworm is \_\_\_\_\_.
  - (a) Bombyx Mori
  - (b) Anthraea mylitta
  - (c) Anthraea assamensis
  - (d) Attacus atlas

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) What is mesosome and write about its function?

Or

(b) Discuss about bacterial pigments.
12. (a) Write about the major characteristic of the Golgi complex.

Or

(b) What is cukarotic Ribosome and write about its function?
13. (a) What is binary fission and write down the type of binary fission?

Or

(b) Write about sexual reproduction in bacteria.

14. (a) Draw a plant cell and write about plant cell organelles.

Or

(b) Discuss about General character of Thallophyta.

15. (a) Explain about sericulture and its importance.

Or

(b) Write about General characteristics of vertebrates.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Discuss in detail about cell membrane of an Eubacteria.

Or

(b) Explain in detail about 'Nuclear material' of an eubacteria.

17. (a) What is mitochondria? Write about its important characters.

Or

(b) Write a detail notes on 'Nucleus'.

Page 5 Code No. : 30504 E

18. (a) Elaborate notes on Mitosis.

Or

(b) Explain in details about the stages of meiosis.

19. (a) Describe about the adaptation in Hydrophytes.

Or

(b) Write in detail about the general characters of pteridophyta.

20. (a) Discuss in detail about Human digestive system.

Or

(b) What is the apiculture and elaborate notes on its uses?

---

Page 6 Code No. : 30504 E