

Code No. : 30556 E Sub. Code : CAMI 21

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

Second Semester

Microbiology — Allied — I

GENERAL BIOLOGY

(For those who joined in July 2021-2022)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

- If the substance is organized and is firmly attached to the cell wall, the glycocalyx is described as _____.
(a) Capsule
(b) Slime Layer
(c) Biofilm
(d) Newston

- Gram positive cells have _____.
(a) Thick, homogenous cell wall
(b) Large amounts of teichoic acids
(c) No outer membrane
(d) All of these
- Mitochondria is the site for _____.
(a) Protein synthesis
(b) Lipid synthesis
(c) ATP synthesis
(d) Carbohydrate synthesis
- Subunits for FOS prokarotic ribosomes are _____.
(a) 50 S and 30 S subunit
(b) 40 S and 30 S subunit
(c) 50 S and 20 S subunit
(d) 50 S and 40 S subunit
- Fragmentation occurs in _____.
(a) Nocardia sp. (b) Streptomyces sp.
(c) Bacillus sp. (d) Stella sp.

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- Period of growth phase where generation time reaches a constant minimum _____.
(a) Lag phase (b) Log phase
(c) Death phase (d) Stationary phase
- Which of the following is a functional unit of a body?
(a) Lymphocytes (b) Spleen
(c) Peyer of patches (d) Cell
- RNA is present in which of the following cell organells
(a) Cell wall (b) Ribosomes
(c) Nucelus (d) Golgi complex
- In animal, cardiac muscle tissue is a contractile tissue present only in the _____.
(a) Liver (b) Brain
(c) Heart (d) Lungs
- In animal _____ tissue exerts the greatest control over the body's responsiveness to changing conditions.
(a) Neural (b) Nephritic
(c) Oesophagus (d) Brochiyal

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PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

- (a) Describe the reserve materials found in Eubacteria?
Or
(b) Explain the nuclear material of Eubacteria.
- (a) What is chloroplast and its structure?
Or
(b) Focus on eukaryotic cell nucleus and its functions.
- (a) Describe the events take place during interphase.
Or
(b) Why is mitosis called equational division.
- (a) Tell the general characters of Bryophyta?
Or
(b) Illustrate the economic importance of Sunflower.

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15. (a) Report the general characteristics of vertebrates.

Or

(b) Explain briefly about Apiculture.

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 cell membranes of eubacteria.

Or

(b) Write a detail notes on cytoplasmic inclusions in eubacteria.

17. (a) Describe about Endoplasmic reticulum structure and its functions.

Or

(b) Record the important characters and functions of golgi complex.

18. (a) Differentiate Mitosis and Meiosis.

Or

(b) Name the reproduction types in microbes and write the characters of each reproduction type.

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19. (a) Employ the economic importance of coffee.

Or

(b) Explain in detail about the general characters of Gymnosperms.

20. (a) Summarize the significance of Human Respiratory System.

Or

(b) Give a brief account of Aquaculture.

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