

CSSR & SRRM DEGREE & PG COLLEGE

(AUTONOMOUS)

UG (CBCS) REGULAR EXAMINATIONS, DECEMBER-2024

BSc (Botany) Honours, SEMESTER-I

Course-I: Introduction to Classical Biology

(w.e.f. 2024-25 Admitted Batch)

Time: 2 hours

Max Marks: 70

A

(No additional sheet will be supplied)

Section-A

Answer all the multiple choice questions. Each question carries 1 mark. 30x1=30M

1. The term 'taxonomy' was coined by

- A) Linnaeus
- B) P de Candolle
- C) Turell
- D) Julian Huxley

2. System of classification used by Linnaeus was

- A) Natural system
- B) Artificial system
- C) Phylogenetic system
- D) None of these

3. Which is correct

- A) MANGIFERA INDICA
- B) Mangifera indica
- C) Mangifera indica
- D) Mangifera Indica

4. What kind of organisms are fungi?

- A) Saprophytes
- B) Carnivores
- C) Omnivores
- D) Herbivores

5. The optimum temperature for photosynthesis is

- A) 25-35°C
- B) 10-15°C
- C) 35-40°C
- D) 20-25°C

6. Which of the following can synthesize their food

- A) Fish
- B) Green plants
- C) Animals
- D) Mycoplasma

7. Loss of water from plants in the form of water vapor is called

- A) Surface tension
- B) Cohesion
- C) Ascent of sap
- D) Transpiration

8. Which of the following is not a part of the flower

- A) Sepal
- B) Petal
- C) Leaf
- D) Stamen

9. Which part of the flower develops into a fruit?

- A) Ovary
- B) Stamen
- C) Petal
- D) Sepal

10. Which of the following requires maximum energy

- A) Secondary consumer
- B) Decomposer
- C) Primary consumer
- D) Primary producer

11. Bio Chemistry is Connected with

- A) Biomolecules and Atom
- B) Organic and inorganic
- C) Inorganic and Physical
- D) Organic, Inorganic, Physical Chemistry

12. Ionic bonds are formed by the force attraction between

- A) Same ions
- B) Different atoms
- C) Opposite ions
- D) Various atoms

13. Analytical chemistry discuss about the

- A) Frequency of chemicals
- B) Presence of chemicals
- C) Amount of chemical substances
- D) Amount of chemicals

14. Who Proposed Green chemistry

- A) James and Paul
- B) Paul Anastas and James
- C) Paul Anastas and John C. Warner
- D) Antoine Lavoisier

15. Hydrophobic are the molecules which do not mix in

- A) Solutes
- B) Solvents
- C) Liquids and solute
- D) Water

16. Which is the strongest bond

- A) Covalent bond
- B) Ionic bond
- C) Hydrogen bond
- D) All of the above

17. Hypothalamus function is to maintain

- A) Thermostable
- B) Homeostasis of body
- C) Fluidstasis
- D) None of the above

18. Kingdom Animalia consists of

- A) Multicellular animals
- B) Eukaryotic animals
- C) Multicellular and Eukaryotic
- D) All of the above

19. Which of the following is the Primary function of the Endocrine system

- A) Sensory perception
- B) Muscle contraction
- C) Hormone production and secretion
- D) Nutrient absorption

20. The Main function of Liver is

- A) Blood filtration
- B) Detoxification
- C) Nutrient passage and storage
- D) All of the above

21. Which of the following organisms is classified as a prokaryote?

- A) Amoeba
- B) Human
- C) Bacteria
- D) Fungi

22. During DNA replication the leading strand is synthesized?

- A) Continuously
- B) Discontinuously in fragments
- C) In the 5' to 3' direction
- D) In the 3' to 5' direction

23. Which of the following is a potential energy source for early life forms in hydrothermal vent environments?

- A) Sunlight
- B) Oxygen
- C) Methane
- D) Carbon dioxide

24. During which phase of the cell cycle does DNA replication occur?

- A) G1 phase
- B) G2 phase
- C) S phase
- D) M phase

- 25. Which phase of mitosis involves the separation of sister chromatids**
 A) Prophase
 B) Metaphase
 C) Anaphase
 D) Telophase
- 26. What is the study of chemistry primarily connected with?**
 A) Biological processes
 B) Earth's geological formation
 C) Matter and its properties
 D) Celestial bodies
- 27. Which branch of chemistry deals with the study of carbon compounds?**
 A) Inorganic chemistry
 B) Organic chemistry
 C) Physical chemistry
 D) Analytical chemistry
- 28. What type of chemical bond involves the sharing of electron pairs between atoms?**
 A) Ionic bond
 B) Covalent bond
 C) Metallic bond
 D) Hydrogen bond
- 29. Green chemistry aims to minimize the use of**
 A) Renewable resources
 B) Non-renewable resources
 C) Both Renewable and Non
 D) Both raw materials and energy resources
- 30. Which of the following is not a principle of green chemistry?**
 A) Prevent waste
 B) Use renewable resources
 C) Design for degradation
 D) Maximize energy consumption

Section-B

Answer all fill in the blanks questions. Each question carries 1 mark. 10x1=10M

31. Taxonomy involves the _____ and _____ of plants
32. These are often colourful parts that attract pollinators. Together, they form the _____.
33. The two main products of photosynthesis are _____ and _____
34. Five Kingdom Classification Was Proposed By _____
35. The process of photosynthesis converts light energy into _____ energy.
36. The rearing of silkworms for obtaining silk is called _____.
37. Fish heart is _____ heart.
38. The Male Bee in a colony is called a _____.
39. Twelve principles are present in _____ chemistry.
40. Heart is divided into _____ and _____

Section-C

Answer all very short answer questions. Each question carries 1 mark. 10x1=10M

41. What is the primary purpose of a taxonomic key?
42. What is pollination?
43. What is the anther?
44. Write the equation for Photosynthesis?
45. Define species?
46. Write two three branches of chemistry?
47. What is Green Chemistry?
48. Explain about non-covalent bonds?
49. What is Circulation?
50. What is the function of Liver?

Section-D

Answer all match the following questions. Each question carries 1 mark. 10x1=10M

Group-A

51. Bisexual flower
52. Growth Promoters
53. Stamens
54. Cuscuta
55. Growth inhibitors
56. Jaw less fish
57. Vertebrate
58. Holoblastic
59. Vander Waals
60. Hydrophobic

Group-B

- A) Male part of flower
- B) Ethylene
- C) Androecium & Gynoecium
- D) Auxins
- E) Parasitic
- F) Moderate yolk
- G) Weak bonds
- H) Agnatha
- I) Non-Polar
- J) With backbone

Section-E

Answer all True or False questions. Each question carries 1 mark. 10x1=10M

61. Air pollution can cause respiratory problems in human.
62. Phytohormones can regulate many different processes in plant development.
63. Phytohormones are only synthesized in one part of the plant and act locally
64. Stomata are mostly found on the bark of trees.
65. Phytohormones only promote growth and do not inhibit it
66. Organic chemistry focuses on the study of carbon-containing compounds
67. Ionic bonds cause opposite charge.
68. Van der Waal forces are covalent bonds.
69. Fusion of Male and Female gametes is called gametogenesis.
70. Crocodile heart is four chambered.

