

Questionbank Biology

Unit -I**Chapter-1. Classification of Living Organisms****IMPORTANT POINTS**

Nature is formed by nonliving and living organisms. One who has life and performs biological processes and manifests to environment is called living organism. Living organism possess certain characters like-reproduction, growth, development, reaction with environment adaptation and death. Besides these it has characteristics like metabolism, entropy, efficiency to maintain heredity. It produces new generation through reproduction. Energy is required during metabolism. Growth is a out put of metabolism. Quantity increases due to growth. Tissues and organs are formed due to differentiation and organogenesis occurs during development living organism shows efficiency of manifestations of feeling towards environment. It obtains adaptations to sustain in an environment and creates variations for adaptation. New species is created due to variation, hence biodiversity forms. It has efficiency to maintain heredity before its death.

There is an aggregation of different layers in living organisms. Membranes are formed of large molecules and molecules are formed from atoms. Cell is formed by membranous organelles. Tissue is constituted by group of cells which are present in organ and organ system. Body is composed by such organ systems. Such living organism is known as species. Population is structured by group of species. Such combined population of a same habitat form a biotic community. By interaction between biotic community and environment is constituted an ecosystem. By composition of ecosystems biosphere is constituted.

The study of living organisms can be done by nomenclature and identification characters. Living organisms are classified in to groups. Meaningfully called classification which has species, genus, order, family, class, phylum and kingdom. There are certain rules and regulations. Many scientist's have contributed in this field. There are various sources for study.

From the given options select the correct option (a, b, c, d) Each carries one mark.

1. In taxonomic classification the correct sequence is (CBSC-92)
(A) class-family-tribe-order-genus-species
(B) class-order-family-tribe-genus-species
(C) tribe-order-family-genus-species
(D) class-tribe-order-family-genus-species
2. The smallest taxon amongst following is(PMT-94)
(A) class (B) order (C) species (D) genus
3. Taxonomically a species is (PMT-94)
(A) A group of evolutionary related population
(B) A fundamental unit in the phylogeny of organisms
(C) Classical evolutionary taxonomy
(D) A community taken into consideration as an evolutionary base

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4. Species is (CBSC-94)
(A) not related to evolution
(B) specific class of evolution
(C) specific unit of evolution
(D) fertile specific unit in the evolutionary history of a race
5. Two words comprising the binomial nomenclature are (DPMT-96)
(A) Family & genus (B) order & family (C) genus & species (D) species & variety
6. A group of plants or animals with similar traits of any rank is kept under (PMT-96)
(A) species (B) genus (C) order (D) taxon
7. Which of the following is the correct sequence in the increasing order of complexity ? (PMT-97)
(A) molecules, tissues, community, population (B) cell, tissues, community, population
(C) tissues, organisms, population, community (D) molecules, tissues, community, cells
8. The correct sequence of taxonomic categories is
(A) class-phylum-tribe-order-family-genus-species
(B) phylum-order-class-tribe-family-genus-species
(C) division-class-order-family-tribe-genus-species
(D) division-class-family-tribe-order-genus-species
9. The total words in binomial nomenclature are (PMT-97)
(A) 5 (B) 3 (C) 2 (D) 4
10. New systematic and the concept of life was given by (BHU-98)
(A) Huxley (B) Odom (C) Elton (D) Linnaeus
11. Two organisms of same class but different families will be kept under the same (CET-98)
(A) genera (B) species (C) order (D) family
12. Which of the following will form a new species ? (PMT-98)
(A) inter breeding (B) variations
(C) differential reproduction (D) none of the above
13. A community includes (CET-98)
(A) a group of same genera
(B) a group of same population
(C) a group of individuals from same species
(D) different populations interacting with each other
14. One of the following cannot be called a taxon (PMT-98)
(A) order (B) family (C) genus (D) none of the above
15. Binomial nomenclature was given by (BHU-97)
(A) Huxley (B) Ray (C) Darwin (D) Linnaeus
16. In classification the category below the level of family is (CET-98)
(A) class (B) species (C) phylum (D) genus

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17. Which is the lowest level of organization in the living kingdoms ? (CET-98)
(A) molecular level (B) cellular level (C) population (D) tissue level
18. Growth in plant is (pmt-99)
(A) limited (B) life long (C) diffusable (D) unlocalized
19. First botanist to give binomial nomenclature was (WARDHA-2000)
(A) Baubin (B) Aristotle (C) Linnaeus (D) Hutchinson
20. Taxon is (CET-2000)
(A) species (B) unit of classification
(C) highest rank in classification (D) group of closely related
21. One of the following includes most closely linked organisms (PMT-2001)
(A) species (B) genus (C) family (D) class
22. Which of the following taxons cover a greater number of organisms ? (PMT-2001)
(A) order (B) family (C) genus (D) phylum
23. Inbreeding is possible between two members of (AMU-2005)
(A) order (B) family (C) genus (D) species
24. Which of these is correct order of hierarchy ? (WARDHA-2002)
(A) kingdom, division, phylum genus & species
(B) phylum, division, genus & class
(C) kingdom, genus, class, phylum & division
(D) phylum, kingdom, genus, species & class
25. Which is not a unit of taxonomic category ? (BVP-2002)
(A) series (B) glumaceae (C) class (D) phylum
26. Which is the first step of taxonomy ? (MGIMS-2002)
(A) nomenclature (B) classification
(C) identification (D) hierarchical arrangement
27. The five kingdom classification was given by (BYP-2002)
(A) Whittaker (B) Linnaeus (C) Copeland (D) Haeckel
28. In taxonomy, class comes in between (CET-2002)
(A) kingdom and order (B) phylum and order
(C) kingdom and family (D) family and genus
29. Taxon includes (PMT-2002)
(A) Genus and species (B) kingdom and division
(C) all ranks of hierarchy (D) none of the above
30. Binomial nomenclature refers to (CET-2000)
(A) Two names of a species
(B) one specific and one local name of a species
(C) two words for the name of a species
(D) two life cycles of an organism

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31. Carl Linnaeus is famous for (GGSPU-2002)
(A) coining the term 'systematics' (B) introducing binomial nomenclature
(C) giving all natural system of classification (D) all of these
32. True species are (CBSE-2002)
(A) interbreeding (B) sharing the same niche
(C) feeding on the same food (D) reproductively isolated
33. The smallest unit of classification is (GGSPU-2002)
(A) species (B) sub-species (C) class (D) genus
34. Who coined the term 'taxonomy' ? (BVP-2003)
(A) Candolle (B) Waksman (C) Leuwenhoek (D) Louis Pasteur
35. Basic unit of classification of organisms is (CET-2003)
(A) species (B) population (C) class (D) family
36. The unit of classification containing concrete biological entities is (WARDHA-2003)
(A) taxon (B) species (C) category (D) order
37. Species are considered as (CBSE-2003)
(A) real basic units of classification (B) the lowest units of classification
(C) artificial concept of human mind which cannot be defined in absolute terms
(D) real units of classification devised by taxonomists
38. The living organisms can be unexceptionally distinguished from the non-living things on the basis of their ability for (CBSE-2007).
(A) interaction with the environment and progressive evolution
(B) reproduction
(C) growth and movement
(D) responsiveness to touch
39. Two plants can be conclusively said to belong to the same species if they(CBSE-2007)
(A) have more than 90% similar genes
(B) look similar and possess identical secondary metabolites
(C) have same number of chromosomes
(D) can reproduce freely with each other and form seeds
40. Natural system of classification given by (UP-PMT-2009)
(A) Linnaeus (B) Hutchinson (C) Bentham & Hooker(D) Haeckel
41. Huxley is a father of which systematic ? (HARYANA-2009)
(A) new systematic (B) artificial systematic
(C) evolutionary systematic (D) natural systematic
42. The smallest unit of living organism is (AIPMT-2003)
(A) DNA (B) RNA (C) cell (D) protein
43. How many obligate categories are there? (BHU-06)
(A) 3 (B) 5 (C) 7 (D) 9

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44. True name is (MANIPAL-2001)
(A) APIS Indica (B) mangifera Indica
(C) MANGIFERA INDICA (D) Mangifera indica
45. Maize is a (CBSE-09)
(A) taxon (B) category (C) series (D) species
46. Taxonomic category arrange in descending order (MH-01)
(A) key (B) hierarchy (C) taxon (D) taxonomic category
47. Common name and genus are same in (PMT-07)
(A) Mangifera (B) Zia (C) Rana (D) Gorilla
48. Assertion (A) To give a scientific name of a plant there is ICBN Reason.
(R) they have articles, photographs and recommendation to name a plant (PMT-2000)
(A) A and R both is correct and R is correct explanation to A
(B) A is true but R is false
(C) A and R both correct but R is not correct explanation to A
(D) both are false
49. Hierarchical classification means _____ .
(A) To divide division into classes (B) To divide classes into orders
(C) To divide orders into families (D) To rank things one above the other
50. Assertion (A) Taxon and category are same.
Reason (R) Category shows hierarchical classification.
(A) A and R both are correct and R is a correct explanation of A
(B) A and R both are correct and R is not a correct explanation of A
(C) A is true and R is false
(D) A is false but R is true
51. Assertion (A) The hierarchy includes seven obligate categories.
Reason (R) Intermediate categories are used to make taxonomic positions more informative
(A) A and R both are correct and R is a correct explanation of A
(B) A and R both are correct but R is not a correct explanation of A
(C) A is true and R is false
(D) If both are false
(e) A is false but R is true
52. Assertion (A) Death is a meaningful event.
Reason (R) The number of living individuals of each species remains limited through death and components of body further turn to environment
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true but R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true

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53. Assertion (A) If the ratio of anabolic process is more than catabolic process, growth occurs
Reason (R) Growth is an out-put of metabolism.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true but R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
54. Assertion (A) Members of the same species can't do copulation.
Reason (R) Zygote is produced as a result of fertilization.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
55. Assertion (A) Energy transformation also takes place in metabolism in living organism.
Reason (R) Organism have to perform many biological activities.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
56. Assertion (A) Group of genera which are closely related is called family.
Reason (R) Blattidae is a family which contain pigeons and doves having different genera and species.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
57. Assertion (A) Binomial nomenclature method is given by Linnaeus.
Reason (R) Linnaeus is known as father of taxonomy.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
58. Assertion (A) Organogenesis and Differentiation takes place during growth.
Reason (R) Number of cells increase during growth.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true

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59. Assertion (A) Organism must be given two names.
Reason(R) Species name must be written in small letter.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
60. Assertion (A) Every organism posses reproduction,growth,development,adaptation and death as unique characters.
Reason (R) Energy transformation is essential for every organism.
(A) A and R both are true and R is a correct explanation of A
(B) A and R both are true and R is not a correct explanation of A
(C) A is true and R is wrong
(D) A is wrong and R is true
61. A group of interconnected genera is called
- (A) Family (B) order (C) Phylum (D) Class
62. Branch connected with nomenclature,identification and classification is called _____.
- (A) Ecology (B) Taxonomy (C) Morphology (D) Physiology
63. The suffix- Phyta indicates _____ .
- (A) Family (B) Order (C) class (D) Division
64. Binomial system of nomenclature for plants is effective from _____ .
- (A) 5/8/1771 (B) 1/5/1753 (C) 1/8/1758 (D) 6/7/1736

ANSWER KEY

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|---------|---------|---------|---------|
| 1. (B) | 2. (C) | 3. (B) | 4. (D) |
| 5. (C) | 6. (D) | 7. (C) | 8. (C) |
| 9. (C) | 10. (A) | 11. (C) | 12. (B) |
| 13. (D) | 14. (D) | 15. (D) | 16. (D) |
| 17. (A) | 18. (B) | 19. (C) | 20. (B) |
| 21. (A) | 22. (D) | 23. (D) | 24. (A) |
| 25. (B) | 26. (C) | 27. (A) | 28. (B) |
| 29. (C) | 30. (C) | 31. (B) | 32. (D) |
| 33. (A) | 34. (A) | 35. (A) | 36. (A) |
| 37. (A) | 38. (B) | 39. (D) | 40. (C) |
| 41. (A) | 42. (C) | 43. (C) | 44. (D) |
| 45. (D) | 46. (D) | 47. (D) | 48. (A) |
| 49. (D) | 50. (D) | 51. (C) | 52. (A) |
| 53. (B) | 54. (D) | 55. (A) | 56. (C) |
| 57. (B) | 58. (D) | 59. (A) | 60. (B) |
| 61. (A) | 62. (B) | 63. (D) | 64. (B) |