NEET Questions on The Living World

1. In majority of higher animals and plants,_____ and _____ are mutually exclusive events.
A. growth; nutrition
B. nutrition; consciousness
C. growth; reproduction
D. reproduction; consciousness

2. In multicellular organisms _____refers to the production of progeny possessing features more or less similar to those of parents.
A. growth
B. reproduction
C. metabolism
D. consciousness

3. Families are characterized on which of the following features of plant species?
A. External morphology
B. Anatomy of parts
C. Vegetative and reproductive parts
D. Seasonal similarities and variations

4. The sum total of all the chemical reactions occurring in our body is known as
A. metabolism
B. growth
C. regeneration
D. reproduction

5. Cell division occurs _____in plants and _____in animals.
A. continuously, only up to a certain age
B. only up to a certain age, continuously
C. continuously, never
D. once, twice

6. The fungi, the filamentous algae, the protonema of mosses, all easily multiply by _____.
A. budding
B. fission
C. regeneration
D. fragmentation

7. Which of the following factors exclusively affects reproduction in seasonal breeders, both plants and animals?
A. Water
B. Temperature
C. Photoperiod
D. All of these

8. The keys are based on contrasting characters generally in a pair called _____.
A. flora
B. couplet
C. both (a) and (b)
D. manuals

9. The order generally ends with
A. ales
B. aceae
C. eae
D. none of these

10. Which of the following are unique features of living organisms?
A. Growth and reproduction
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B. Reproduction and ability to sense environment
C. Metabolism and interaction
D. All of the above

11. Which of the following aspects is an exclusive characteristic of living things?
A. Isolated metabolic reactions occur in vitro.
B. Increase in mass from inside only.
C. Perception of events happening in the environment and their memory.
D. Increase in mass by accumulation of material both on surface as well as internally.

12. Which of the following term is used to refer the number of varieties of plants and animals on earth ?
A. Taxonomy
B. Identification
C. Biodiversity
D. Classification

13. ICBN stands for
A. International Code of Botanical Nomenclature
B. International Congress of Biological Names
C. Indian Code of Botanical Nomenclature
D. Indian Congress of Biological Names

14. Binomial nomenclature means
A. one name given by two scientists.
B. one scientific name consisting of a generic and specific epithet.
C. two names, one latinized, other of a person.
D. two names of same plant.

15. Herbarium is a
A. garden where medicinal plants are grown.

B. garden where herbaceous plants are grown.
C. dry garden.
D. chemical to kill plants.

16. The famous botanical garden 'Kew' is located in
A. England
B. Lucknow
C. Berlin
D. Australia

17. Which ofthe following taxonomic aid provides information for the identification of names of species found in an area?
A. Monograph
B. Manual
C. Flora
D. Periodical

18. Which one of the taxonomic aids can give comprehensive account of complete compiled information of any one genus or family at a particular time?
A. Taxonomic key
B. Flora
C. Herbarium
D. Monograph

19. Which one of the following taxonomical aid is used for identification of plants and animals based on similarities and dissimilarities?
A. Flora
B. Keys
C. Monographs
D. Catalogues

20. The practical purpose of classification of living organisms is to
A. explain the origin of living organsims.
B. trace the evolution of living organsims.
C. name the living organisms.
D. facilitate identification of unknown organisms.

21. Taxon is a
A. unit of classification.
B. species.
C. highest rank of classification.
D. group of closely related organisms.

22. Systematics refers to the
A. identification and classification of plants and animals.
B. nomenclature and identification of plants and animals.

C. diversity of kinds of organisms and the irrelationship.
D. different kinds of organisms and their classification.

23. Keys are generally _____in nature.
A. physical
B. chemical
C. analytical
D. qualitative

24. Each statement in the key is called _____.
A. lead
B. catalogues
C. manuals
D. monographs

25. Which of the following is not a characteristic of life?
A. Reproduction
B. Complex chemical organization
C. Adaptation to environmental changes
D. Differentiation from cells to tissues

26. In printed scientific names, only the _____is capitalized.
A. class
B. species
C. genus
D. family

27. Each category of taxonomic hierarchy refers to as a unit of_____.
A. systematic
B. identification
C. nomenclature
D. classification

28. Which of the following statement(s) is/are correct?
A. Only living organisms grow.
B. Plants grow only up to a certain age.
C. The growth in living organisms is from inside.
D. All of the above

29. Which one of the following is not a correct statement?
A. Botanical gardens have collection of living plants for reference.
B. A museum has collection of photographs of plants and animals.
C. Key is a taxonomic aid for identification of specimens.
D. Herbarium is a store house that contains dried, pressed and preserved plant specimens.

30. Which two points are known as the twin characteristics of growth?
(i) Increase in mass
(ii) Differentiation
(iii) Increase in number of individuals
(iv) Response to stimuli
A. (i) and (ii)
B. (i) and (iv)
C. (ii) and (iii)
D. (i) and (iii)

31. Statement 1 : Taxon and category are different things.
Statement 2 : Category shows hierarchical classification.
A. Statement- 1 and statement-2 are true and statement-2 is a correct explanation for statement -1
B. Statement -1 and Statement -2 are true;statement-2 is not a correct explanation for statement - 1
C. Statement - 1 is true and statement- 2 is false
D. Both the statements are false.

32. Which of the following statements regarding nomenclature is correct?
A. Generic name always begins with capital letter whereas specific name with small letter.
B. Scientific name should be printed in italics.
C. Scientific name when typed or handwritten should be underlined.
D. All of the above

33. Which of the following statements are correct about herbarium?
A. It is a store house of collected plant specimens that are dried and preserved on sheets.
B. Herbarium sheets contain information about date and place of collection, names, family, collector's name, etc.
C. It serves as quick referral systems in taxonomical studies.
D. All of the above

34. Which of the following statements regarding growth is in correct?
A. In plants, growth by cell division is seen only up to a certain stage.
B. Growth exhibited by non-living objects is by accumulation of material on the surface.
C. A multicellular organism grows by cell division.
D. Growth in in vitro culture of unicellular organisms can be observed by counting the number of cells.

35. Which of the following statement(s) is/are correct for Metabolsim ?
A. It is the sum total of all physical reactions taking place inside a living system.
B. All plants, animals, fungi and microbes exhibit metabolism.
C. Isolated metabolic reactions in-vitro are not living but are living reactions.
D. All of the above

36. Which one of the following statements is correct about biodiversity ?
A. It is the occurrence of varied type of organisms on earth.
B. Each different kind of plant, animal or organism represents a species.
C. The number of species that are known and described range between 1.7–1.8million.

D. All of the above

37. Which of the following statements(i - vi) are correct ?
(i) Growth cannot be taken as a defining property of living organism.
(ii) Dead organism does not grow.
(iii) Reproduction cannot be an all inclusive defining characteristic of living organisms.
(iv) No non-living object is capable of replicating itself.
(v) Metabolism in a test tube is non-living.
(vi) Metabolism is a defining feature of all living organisms.

A. (i) and (iii)
B. All except (v)
C. All except (iii)
D. All of these

38. Which of the following statements are not correct ?
(i) Lower the taxon, more are the characteristics that the members within the taxon share.
(ii) Order is the assemblage of genera which exhibit a few similar characters.
(iii) Cat and dog are included in the same family Felidae.
(iv) Binomial nomenclature was introduced by Carolus Linnaeus.

A. (i), (ii) and (iii)
B. (ii), (iii) and (iv)
C. (i) and (iv)
D. (ii) and (iii)

39. Which of the following statements are correct?
(i) Genus comprises a group of related species.
(ii) Taxon represents a taxonomic group of individual organisms.
(iii) Family comprises a group of related genera.
(iv) Taxonomic category class includes related orders.

A. (i), (ii), and (iv)
B. (ii) and (iv)
C. (i), (iii) and (iv)
D. (ii), (iii) and (iv)

40. Which of the following statement(s) is/are not correct ?
(i) Reproduction is the production of progeny possessing features dissimilar to their parents.
(ii) The fungi, the filamentous algae, the protonema of mosses, all multiply by budding.
(iii) Many organisms like mules, sterile worker bees do not reproduce.
(iv) Reproduction is not an all-inclusive defining characteristic of living organisms.
A. Only (i)
B. Both (i) and (ii)
C. Both (ii) and (iv)

D. All of these

41. Which of the following statement(s) is/are correct ?
(i) All living organisms have ability to respond the environment stimuli which could be physical, chemical or biological.
(ii) Plants respond to external factors like light, water, temperature, other organisms, pollutants, etc.
(iii) Photoperiod affects the process of reproduction.
(iv) Human being is the only organism who has self consciousness.

A. Only (i)
B. Both (ii) and (iii)
C. Both (i) and (iv)
D. All of these

42. Which of the following statement(s) is/are correct ?
(i) Classification is the providing of standardize names to the organisms such that a particular organism known by the same all over the world.
(ii) Taxonomy is the correct description of an organism and to recognition in its scientific name.
(iii) The system of naming with two components(binomial nomenclature) is proposed by Carolus Linneaus.
(iv) Zoological names are based on International Code for Zoological Nomenclature (ICZN).
A. Only (i)
B. Both (iii) and (iv)
C. Only (iv)
All of these

43. Which of the following taxonomic categories is being described by the given statements(i-iii) ?
(i) It is the basic unit of classification.
(ii) It is defined as the group of individuals which resemble in their morphological and reproductive characters and interbreed among themselves and produce fertile off springs.
(iii) Human beings belong to the species sapiens which is grouped in the genus Homo.
A. Species
B. Genus
C. Order
D. Family

44. Which of the following statement(s) is/are not correct ?
(i) Genus comprises a group of related species which has more characters in common in comparison to species of other genera.
(ii) Three different genera such as Solanum, Datura and Petunia are placed in the family malvaceae.
(iii) In case of plants, classes with a few similar characters are assigned to a higher category called phylum.
A. Both (i) and (ii)
B. Only (iii)
C. Both (ii) and (iii)

D. All of these

45. Which of the following taxonomical aids is being described by the given statements(i-iv) ?
(i) They generally established in educational institutes.
(ii) They have collections of preserved plant and animals specimens for study and reference.
(iii) Insects are preserved in boxes after collecting, killing and pinning.
(iv) They often have collections of skeletons of animals too.
A. Herbarium
B. Museum
C. Zoological parks
D. Botanical gardens

46. Statement 1 : The species is reproductively isolated natural population.
Statement 2 : Prokaryotes cannot be kept under differents species on the basis of reproductive isolation.
A. Statement-1 and Statement-2 are True and statement-2 is a correct explanation forstatement-1
B. Statement -1 and statement -2 are True and statement-2 is not a correct explanation forstatement-1
C. Statement-1 is true and statement-2 is false
D. Both the statements are false.

47. Which of the following statements regarding growth is incorrect?
A. In animals growth is seen up to a certain age.
B. Increase in body mass is considered as growth.
C. Growth by cell division occurs continuously throughout their life span in animals.
D. Increase in mass and number of individuals is the characteristic feature of animal growth.

48. Select the correct statements(i-v) regarding taxonomic categories.
(i) Each step or rank in hierarchy is called taxonomic category.
(ii) Species is a group of individual organisms with fundamental similarities capable of breeding among themselves.
(iii) Taxonomic studies of all unknown organisms have led to the development of common categories like kingdom, phylum or division, class, order, family, genus and species.
(iv) Lower the category, greater is the difficulty of determining the relationship to other taxa at the same level.
A. (i) & (ii) only
B. (ii) & (iv) only
C. (i), (ii) & (iii) only
D. All of the above

49. Which of the following statements is incorrect?
A. The scientific name for humans is Homo sapiens.
B. Organisms placed in the same genus are least closely related.
C. Moving from species to kingdom, more different species are included in each higher category.
D. Species that are in the same genus share very specific characteristics.

50. Study the following statements and select the correct description of botanical garden.

(i) Plant species are grown for identification purposes.
(ii) Labeling of each plant consists of its botanical name/scientific name and its family.
(iii) Specimens are preserved in the jars and containers.
(iv) It is a type of store house which contains dried, pressed and preserved plants specimens on sheet.
(v) Plant specimen contains a labeling of information about date and place of collection.
A. (i) and (ii) only
B. (i), (ii) and (iii) only
C. (ii) and (iv) only
D. All the five statements.

Answer Sheet

1. C
Growth and reproduction are mutually exclusive events in majority of the higher animals and plants. Growth may be defined as a positive change in size, often over a period of time. Growth can occur as a stage of maturation or a process toward fullness or fulfillment. Reproduction may be defined as the production of progeny possessing features more or less similar to those of parents.
2. B
Reproduction ensures the continuity of the species, generation after generation. Genetic variation is created and inherited during reproduction.
3. C
A family is a subdivision of an order consisting of a group of related genera which in turn are composed of groups of related species. Families are characterized on the basis of vegetative and reproductive parts of the plants species.
4. A
All living organisms are continuously making or breaking biomolecules, such conversions are due to chemical reactions, and sum total of all such chemical reactions, occurring in the body is called metabolism. Each metabolic pathway in the cell is tightly regulated by enzymes.
5. A
All cells arise from pre-existing cells by a process of cell division. Cell division is the phenomenon of production of daughter cell from parent cell. It occurs continuously in plants and only up to a certain age in animals.
6. D
Fragmentation is a sexual mode of reproduction in which an organism is split into fragments. Each of these fragments develops into mature, fully grown individuals that are clones of the original organism. The fungi, the filamentous algae and the protonema of mosses all easily multiply by fragmentation.
7. C
Photoperiod is the physiological reaction of organisms to the length of day or night. It occurs in plants and animals. It can also be defined as the developmental responses of plants to the relative lengths of light and dark periods. Photoperiod exclusively affects the reproduction in seasonal breeders, both

plants and animals.
8. B
The keys are based on contrasting characters generally in a pair called couplet. Flora contains the actual account of habitat and distribution of plants of a given area. It provides the index to the plant species found in a particular area. Manuals are useful in providing information for identification of names of species found in an area.
9. A
The order generally ends with ales. Order being a higher category is the assemblage of families which exhibit a few similar characters.
10. D
All living beings share certain unified and basic characteristics. These include organisation, energy utilization, regulation or homeostasis, growth, development, reproduction and adaptation.
11. C All living things have an ability to respond to their environment, that is also called stimulation.
12. C
The term biodiversity is used for the variety and variability among all forms of living organisms like plants, animals, and microorganisms present in a given region under natural conditions. Biodiversity can be defined as the totality of genes, species and ecosystem of a region. India is very rich in biodiversity.
13. A
ICBN (International Code of Botanical Nomenclature) is one of the code of nomenclature which is independent of zoological and bacteriological nomenclature. The foundations of ICBN was found in Philosophia Botanica, a bookwritten by C. Linnaeus.
14. B
Binomial nomenclature means that the scientific name of any organism consist of a generic epithet and a specific epithet. Binomial nomenclature was developed by Linnaeus.
15. C
Herbarium is the store house of dead, dried, pressed and preserved plant specimens on paper sheets, called herbarium sheets. The sheets, along with description of plant specimen, are arranged according to standard system of classification, and are stored for future use. All sheets carry labels having information about date and place of collection, English, local and botanical names, family and collector's name etc. The herbarium sheets can be used as a quick reference for taxonomic studies.
16. A
The famous botanical garden 'Kew' is located in England. Royal Botanic Garden, Kew is a non-departmental public body in the United Kingdom sponsored by the Department for Environment, Food and Rural Affairs. It is an internationally important botanical research and education institution, it employs 750 staff.
17. B
Manuals contain information for the identification of names of species found in an area. They also provide information about keys, description of family, genus and species.
18. D
Taxonomic keys are aids for rapid identification of unknown plants. Flora is an inventory of the plants of a defined geographical region. Herbarium is a safe place for storing specimens as well as provide suitable atmosphere for research. Monograph is a comprehensive taxonomy treatment of a taxonomic group, generally a genus or a family, providing all taxnomic data relating to the group.
19. B
Key is a taxonomical aid used for identification of plants and animals based on the similarities and dissimilarities.

20. D
Biological classification is the scientific arrangement of organisms in a hierarchial series of groups and subgroups on the basis of similarities and differences in their traits. It helps in building evolutionary pathways and in identifying new organisms.
21. D
Taxon is a grouping of organisms of any level in hierarchial classification which is based on some common characteristics. It represents real biological objects placed in any category while category itself is an abstract term.
22. C
Systematics, often used interchangeably with taxonomy, is the study of diversity of organisms, their comparative and evolutionary relationships on the basis of findings from various fields of biology.
23. C
Key is a type of taxonomical aid used for the identification of plants and animals based on their similarities and dissimilarities. Keys are generally analytical in nature.
24. A
Each statement in the key is called a lead. Catalogue is a list or record, systematically arranged and often including descriptive material. Monographs contain information on any one taxon. Manuals are useful in providing information for identification of names of species found in an area.
25. D
The characteristics of life include: responsiveness to the environment; growth and change; ability to reproduce; have a metabolism and breathe; maintain homeostasis; being made of cells; passing traits onto offspring.
Differentiation from cellsto tissuesis not a characteristic of life.
26. C
In printed scientific names, only the genus is capitalized. Genus is an assembly of related species which evolved from a common ancestor and have certain common characters. Eg, Solanum tuberosum and Solanum melongena are two species which belongs to the same genus of Solanum.
27. D
Taxonomic hierarchy is the sequence of arrangements of taxonomic categories in a descending order during the classification of organisms. Each category of taxonomic hierarchy refers to as a unit of classification. Classification is the process by which anything is grouped into convenient categories based on some easily observable characters. Systematics(term coined by Linnaeus) is the study of historical relationships of groups of biological organisms. Nomenclature is giving distinct scientific names to various structures including living organisms for their identification.
28. C
Growth isthe act or process, or a manner of growing; development; gradual increase. It is an exclusive event in majority of the higher animals and plants. In plants, growth occurs continuously throughout their life span and in animal, growth is seen only up to a certain age. In living organisms, growth isfrom inside. Therefore, it cannot be taken as a defining property of living organisms.
29. B
Biological museums have the collection of preserved animals and plants specimens for study and references. Biological museums are generally set up in educational institutes, i.e. schools and colleges. The specimens may be preserved dry or in preservative solution in jars or containers. The insects are preserved in insect boxes after collecting, killing and pinning. The larger animals, like mammals and birds are stuffed and are chemically treated for long term preservation. Museums also have collection of animal skeletons.

30. D
Increase in mass and increase in number of individuals are twin characteristics of growth. Growth is defined as increase in size and mass during the development of an organism over a period of time. It is measured as an increase in biomass and is associated with cell division by mitosis, subsequent increases in cell size, and with the differentiation of cells to perform particular functions.
31. A
A category is a rank or level in the hierarchial classification of organisms. Taxon is a unit in classification which may represent any level of grouping of organisms based on certain common characteristics. There is some confusion in the use of taxon and category, for example Bryophyta is a taxon while division is a category.
32. D
All the statements regarding nomenclature are correct. Nomenclature is giving distinct scientific names to various structures including living organisms for their identification. It is a set of rules used for forming the names or terms in a particular field of arts or sciences. Nomenclature is only possible when the organism is described correctly and we know to what organisms the name is attached to.
33. D
Herbarium is a collection of plant parts that usually have been dried, pressed, preserved on sheets. The herbarium sheets also carry a label that provides information about date and place of collection.
34. A In plants, growth by cell division occurs continuously throughout their life span.
35. B
Metabolism is defined as the sum total of all the chemical reactions occurring in our body. All plants, animals, fungi and microbes exhibit metabolism. Isolated metabolic reactions in vitro are not living things but are living reactions.
36. D
Biodiversity is the term used to describe the variety of life found on Earth and all of the natural processes. This includes ecosystem, genetic and cultural diversity, and the connections between these and all species. The different aspects of biodiversity all have a very strong influence on each other.
37. B
An isolated metabolic reaction(s) outside the body of an organism, performed in a test tube is neither living nor non living. Metabolism is the sum total of all chemical reactions occuring in our body.
38. D
Order being higher category isthe assemblage of families which exhibit a few similar characteristic. Dog (Canis familaris) and Cat (Felis domesticus) belong to two different families—Cancideae and Felidae respectively.
39. C The term ‘taxon’ is used to refer to any rank or level or category of the classification.
40. B
Reproduction refers to the production of progeny possessing features more or less similar to those of parents. The fungi, the filamentous algae, the protonema of mosses, all easily multiply by fragmentation.
41. D
All the given statements are correct. All living organisms have the ability to respond the environment stimuli which could be physical, chemical or biological. Plant responds to external factors like light, water, temperature etc. Photoperiod is defined as the developmental responses of plants to the relative lengths of light and dark periods. It exclusively affects the reproduction in seasonal breeders, both plants and animals .Human being is the only organism who has self - consciousness.
42 B

Nomencleture is the providing of standardize names to the organisms such that a particular organism known by the same name all over the world. Identification is the correct descripton of an organism and its recognition in its scientific name.

43. A

All the given descriptions are related to taxonomic category called species. Species, the lowest category in the taxonomic hierarchy, is the basic unit of taxonomy. It is the group of individual organisms with fundamental similarities.

44. C

Three different genera such as Solanum, Datura and Petunia are placed in the family solanaceae. In case of plants, classes with a few similar characters are assigned to a higher category called division. Phylum is used in case of animals.

45. B

All the given descriptions are related to museum. Museum is one of the taxonomic aids which may be defined as a place where large collection of specimens of plants and animals are preserved for its further study and references. Museums are generally set up in educational institutes such as schools and colleges. Museums often have collections of skeletons of animals too. Specimens of plants and animals are preserved in the containers or jars in preservative solutions. These specimens may also be preserved as dry specimens.

46. B

The species is genetically distinct and reproductively isolated natural population. Sexual reproduction is absent in prokaryotes and some protists. In such cases morphological differences, cytotaxonomy and chemo-taxonomy are resorted to.

47. C

Growth may be defined as a positive change in size, often over a period oftime. It can occur as a stage of maturation or a process toward fullness or fulfillment. Growth by cell division occurs continuously throughout their life span in plants.

48. A

Taxonomic studies of all known organisms have led to the development of common categories like kingdom, phylum or division, class, order, family, genus and species. Higher the category, greater is the difficulty of determining the relationship to other taxa at the same level.

49. B

Genus comprises a group of related species which has more characters in common in comparison to species of other genera. Organisms placed in the same genus are most closely related.

50. A

Statement (i) and (ii) are correct regarding botanical garden. A botanical garden (or botanic garden) is a garden dedicated to the collection, cultivation and display of a wide range of plants labeled with their botanical names. Botanic garden holds the documented collections of living plants for the purposes of scientific research.