Question Bank Of F.Y.B.S.C

Plant taxonomy.

1. The substitute for the newly collected specimen when the original type material is missing in a herbarium is entitled as

- (a) Holotype
- (b) Neotype
- (c) Lectotype
- (d) Isotype

2. This is considered as a demerit of the 'Engler and Prantl' in the system of classification

(a) Gymnosperms are placed between monocotyledons and dicotyledons

(b) Dicotyledons are placed after monocotyledons

- (c) Dicotyledons are placed before monocotyledons
- (d) Gymnosperms are placed among Dicotyledons

3. Difference between the natural system of plant classification and artificial system of classification is

(a) Considers only one vegetative character

(b) Considers all the similarities between plants

- (c) Considers only one floral character
- (d) All of the above

4. This system of classification was used by Linnaeus

- (a) Phylogenetic system
- (b) Natural system
- (c) Artificial system
- (d) Asexual system

5. Pick the right sequence of taxonomic categories

- (a) division-class-family-tribe-order-genus-species
- (b) division-class-family-order-tribe-genus-species

(c) division-class-order-family-tribe-genus-species

(d) division-order-class-family-genus-tribe-species

6. The organization of taxonomic information in logical classification is known as

- (a) Phenetic
- (b) Systematics
- (c) Dendogram
- (d) Phylogenetic

7. The primary advantage of Bentham and Hookers classification is

- (a) It is a system whose basis is on evolutionary concepts
- (b) It is a natural system of classification of all plant groups
- (c) Deemed to be the phylogenetic aspect as well

(d) The taxa description is based on the actual examination of the specimens

8. Linnaeus is credited with the following

(a) Law of Limiting factor

(b) Binomial nomenclature

- (c) Concept of inheritance
- (d) Theory of heredity

10. The reason why the system of plant classification proposed by Carolus Linnaeus was artificial is

(a) Because it considered the physiological facts along with the morphological traits

(b) Because it was based on the similarities and differences in floral and other morphological characters only

- (c) Because it was on the basis of evolutionary relationships of plants
- (d) None of these

11. Linnaeus used which kingdom of classification?

a. Artificial system

- b. Natural system
- c. Phylogenetic system
- d. Asexual system

12. Smallest taxon of classification is _____.

- a. Kingdom
- b. Family
- c. Variety
- d. Species

13. Bentham and Hooker gave which system of classification?

- a. Numerical
- b. Phylogenetic
- c. Artificial
- d. Natural

14. Linnaeus evolved a system of nomenclature called _____.

- a. Vernacular
- b. Monomial
- c. Polynomial
- d. Binomial

15. What is a taxon?

- a. A group of related families
- b. A type of living organisms
- c. A group of related species
- d. A group of any ranking

16. Phylogenetic classification is based on _____.

- a. Overall similarities
- b. Habit of plants
- c. Common evolutionary descendants
- d. All of these

17. ICBN stands for _____.

- a. International Code of Botanical Nomenclature
- b. Indian Code of Botanical Nomenclature
- c. Indian Congress of Biological names
- d. Indian Congress of Botanical Nomenclature

18. Question 1 : Systematics is

- a) Identification
- b) Nomenclature
- c) Relationships and classification
- d) All the above

19. Taxonomy is connected with

- a) Collection of plants and animals
- b) Classification of organisms
- c) Identification, nomenclature and classification of organisms
- d) All the above

20. Classification deals with

A) Identification of organisms

B) Arranging organisms into groups

C) Arranging organisms in herbaria and museums

D) Naming, identification and grouping of organism

21. The term taxonomy was coined by

A) De Candolle

B) Theophrastus

C) Pliny

D) Linnaeus

22. Taxonomy is important in agriculture because it helps in

- A) Identification of plant pests
- B) Identification of weeds
- C) Identification of pathogens
- D) All the above

23. — are the non-essential parts of a flower

- a. Androecium and gynoecium
- b. Sepals and carpels
- c. Sepals and petals
- d. Sepals and gynoecium

24. A fruit developed from a condensed inflorescence is

a. Composite fruit

- b. Simple fruit
- c. Aggregate fruit
- d. Etaerio

25. Water is absorbed by

- a. Root cap
- b. Root apex
- c. Root hairs
- d. Root

26. Roots that develop from plant parts other than the radicle are

- a. Epicaulous
- b. Fibrous
- c. Adventitious
- d. Epiphyllous

27. Phyllotaxy is

- a. Folding leaf in the bud
- b. Arrangement of leaves on the stem
- c. Both (1) and (2)
- d. None

28. _____ is the characteristic of monocot plants

- a. Stilt roots
- b. Taproots
- c. Fibrous roots
- d. Annulated roots

29. Which root modification does not store food?

- a. Stilt
- b. Conical
- c. Napiform
- d. Tuberous

30. Arrangement of leaves on the stem branches is called

- a. Ptyxis
- b. Vernation
- c. Prefoliation
- d. Phyllotaxy

31. Opposite phyllotaxy is present in

- a. Banana
- b. Calotropis
- c. Grass
- d. China Rose

32. Main function of leaf is

- a. Transpiration
- b. Exchange of gases

c. Photosynthesis

d. Cooling

33. Venation in most dicot is

a. Reticulate.

b. Parallel.

c. Complex.

d. None.

34. Venation in most monocot is:

a. Reticulate.

- b. Parallel.
- c. Complex.

d. None.

35. What is inflorescence?

- a. Arrangement of leaflets on a stem axis.
- b. Arrangement of florets on a floral axix.
- c. Arrangement of flowers on a floral axis.
- d. None Answer Explanation

36. In racemose inflorescence, floral axis:

a. Terminate into flower.

b. Grows continuously and flowers appear laterally

- c. Convert into flower.
- d. None. Answer

37. In cymose inflorescence, floral axis:

a. Terminate into flower.

- b. Grows continuously and flowers appear laterally
- c. Convert into flower.
- d. None.

38. Hypogynous flower is c/a:

a. Superior.

b. Inferior.

- 39. In a herbarium, sheets are arranged according to
- (A) regionally accepted system of classification
- (B) Universally accepted system of classification
- (C) Nationally accepted system of classification
- (D) Locally accepted system of classification

40. Choose the correct expression

(A) a group of related genera – Family

- (B) a group of related species-order
- (C) a group of related families class
- (D) a group of related orders- genus
- 41. Botanical gardens have
- (A) living plants and animals for reference
- (B) collection of living plants
- (C) preserved plant specimens
- (D) Living and preserved plants
- 42. Herbaria are useful in
- (A) Understanding the distribution of plants
- (B) Observing the habitat of plants
- (C) Identification of plants
- (D) Indicating list of plants in a particular area

43. In a taxonomic hierarchy, from species to kingdom

(A) The number of common Characters decrease

- (B) complexity decreases
- (C) more common characters are shared between members of higher taxa
- (D) similarities between plants increase

44. Lowest and highest taxonomic categories are respectively

- (A) Division, species
- (B) species, Division
- (C) species kingdom
- (D) phylum genus

45. Taxonomy comprises

- (A) Identification
- (B) Classification
- (C) Nomenclature
- (D) all of these

46. Study of principles and procedures of classification of organisms is

- (A) Classification
- (B) Taxonomy
- (C) Nomenclature
- (D) Grouping

47. Scientific names to the plants are given based on the principles provided by

(A) ICZN
(B) BSI
(C) ICBN
(D) IUB

48. According to binomial nomenclature, two words used for naming a plant or animal are

- a. family and genus
- b. species and family
- c. class and family
- d. Genus and species

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50. Taxonomy means

- a. Arrangement
- b. Bryophytes
- c. Lawful arrangement
- d. Outline

51. -----forms dominant vegetation on earth

a. Algae

b. Bryophytes

c. Gymnosperms

d. Angiosperms

52. The similar species may be grouped under

- a. Taxon
- b. Genera
- c. Variety
- d. Family

53.Botanical nomenclature is to zoological nomenclature.

a.dependent b.similar c.not dependent d.**different**

54.A single specimen or other element use by author or designated by him as the nomenclatural type is known.....

a.lectotype b.**holotype** c.syntype

d.neotype

55.A specimen believed to be duplicate of holotype is known as.....

a.lectotype b.hototype c.isotype d.neotype

56.The name of family should normally have an ending...... a.oideae b.ales c.**ceae** d.ineae

57.When two or more authors publish a new species or propose a new name, their names are linked by...... a.ex b.et c.in d.emend

58. When the first author published a new species in a publication of another authors, the authors names are inked by.....

a.ex b**.in** c.et d.emend

59. The names of two authors are linked using when second author makes some changes in the diagnosis of taxon without altering the type.

a.ex b.**emend** c.et

d.in

60.Those names which do not satisfy the rules of botanical nomenclature are termed as......a.a.illegitimate namesb.Ligitimatec.Both a and bd.None of the above

61.A name with no accompanying description is rejected and called as......a.nomen superflumb.**nomen nudum**c.nomen confusumd.nomen dubium

62.A name is termed as..... when it is based on type consisting of two entirely different elements. a.nomen nudum b.nomen dubium c**.nomen confusum** d.nomen superfluum

63.The system of classification proposed by Theophrastus is......a.Naturalb.Artificialc.Phylogeneticd.None of these

64.A natural system of classification is proposed by a.Engler and Prantle b.Aristotle c.**Bentham and Hooker** d.Takhtajan 65.Cronquist proposed.....system of classification. a.Artificial b.Natural c.**Phylogenetic** d.None of these

66.....introduce the binomial system.

a.Linnaeus

b.Theophrastus c.Takhtajan d.Bauhin

67..... system of classification is based on principle of evolution.
a.Artificial
b.Phylogenetic
c.Natural
d.All of these

68.Class Dicotyledons is characterized by presence ofa.seed with single cotyledonb.parrallel venationc.unbranched stemd.seed with two cotyledons

69.Class monocotyledon is characterized by presence ofa.seed with two cotyledonsb.pentamerous flowerc.reticulate venationd.seed with single cotyledon

70.Subclass pdypetelate is further divided into.....series
a.two
b.three
c.four
d.five
71.Subclass Gamopetalae is further divided into.....series.

a.two
b.three
c.four
d.five

72.Subclass monochlamydae is further divided into series. a.three b.six c.seven d.eight

73.Class monocotyledons is further divided into.....series. a.two b.**seven** c.eight d.nine

74.Thalamitliorae is series of subclass a**.Polypetalae** b.Gamopetalae c.Monochlamydae d.Monocotyledons

75.Microspermae is series ofa.Dicotledons b.Gamopetalae c.Monochlomydae d.**Monocotyledon**

76.Family Malvaceae is belonging to order......a.Malvalesb.Gentinalesc.Personalesd.Polemoniales

77.Family Euphorbiaceae is belonging to series......a.Daphnalesb.Microembryaec.Coronarieaed.Unisexuales

78...... Is belonging to family Solanaceae.
a.Nicotiana tobaccum.L
b.Hibiscus rosa-sinesis L
c..Cajanas cajan L
d.Mirabilis jalapa L

79.A herbarium isa.A garden of collection of medicinal plantb.A collection of herbs in dry formc.A centre of preservation of dried specimen of plantsd.A garden of varied collection of plants

80.Herbarium specimens should be stored in......a.refrigeratorb.climate controlled roomc.the atticd.none of the above

81.....is the largest and oldest botanical garden in India.
a.Lyod's Botanical Garden
b.Indian Botanical Garden
c.Hyderabad Botanical Garden
d.Malabar botanical Garden

82.Indian Botanical Garden is situated in a.Hyderabad b.Kozikode c.Mysore d**.Kolkota**

83.The total ara of Indian Botanical Garden Kolkota i a.100 Hectares| b.160 hectares c.**110 hectares** d.210 hectares

84.Great Banyan tree is present ina.Lyod's Botanical Gardenb.Hyderabad Botanical Gardenc.Malabar Botanical Gardend.Indian Botanical Garden

85.Royal Botanical garden is situated in a.Italy **b.England** c.Switzerland d.France

86.Botanical Capital of world is a.Singapore Botanical Garden,Singapore b.**Royal Botanical Garden,England** c.Montreal Botanical Garden, Canada d.Brooklyn Botanical Garden, New York

87.Classification based on Numerical taxonomy reflecta.Degrees of similarityb.Evolutionary relationshipc.heredityd.Similarity

88.Numerical taxonomy provide.....means of classificationa.Mathematical and Quantitativeb.Mathematical and Qualitativec.Phylogeneticd.Natural

89.Study of Pollen grains is known asa.Histologyb.Paleontologyc.Palynologyd.Anatomy

90. When one pore is situated at the distal portion of pollen grains, it is known as

a.Biaperturate b**.uniaperturate** c.triaperturate d.polyaperturate

91.Spinous exine is found in family a.Solanaceae b.Poaceae c.**Malvaceae** d.Plumbaginaceae