

BIOLOGY

BOOKS - PREMIERS PUBLISHERS

TAXONOMY AND SYSTEMATIC BOTANY

Textbook Questions And Answers Mcq

1. Specimen derived from non-original collection serves as the nomenclatural type,

when original specimen is missing . It is known as.

- A. Holotype
- B. Neotype
- C. Isotype
- D. Paratype

Answer: b



2.	Phylog	enetic	classifi	cation	İS	the	most
fav	oured	classifi	cation	becaus	se	it ı	reflects
•••••	•••••	•					

- A. Comparative Anatomy
- B. Number of flowers produced
- C. Comparative cytology
- D. Evolutionary relationships

Answer: d



3. The taxonomy which involves the similarities and dissimilarities among the immune system of different taxa is termed as

- A. Chemotaxonomy
- B. Molecular systematics
- C. Serotaxonomy
- D. Numerical taxonomy

Answer: c



4. Which of the following is a flowering plant with nodules containing filamentous nitrogen fixing micro-organisms?

- A. Crotalaria juncea
- B. Cycas revoluta
- C. Cicer arietinum
- D. Casuarina equisetifolia

Answer: d



5.	Flowers are zygomorphic in	·
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- A. Ceropegia
- B. Thevetia
- C. Datura
- D. Solanum

Answer: d



Textbook Questions And Answers Answer The Following Questions

1. What is the role of national gardens in conserving biodiversity-discuss



2. Where will you place the plants which contain two cotyledons with cup shaped thalamus?



3. How do molecular markers work to unlock the evolutionary history of organisms?



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4. Give the floral characters of Clitoria ternatea.



5. How will you distinguish Solanaceae members from Liliaceae members?



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Other Important Questions And Answers Mcq

1. 18^{th} International Botanical congress was held at

A. London, UK

- B. Melbourne, Australia
- C. Newyork, U.S.A
- D. Sydney, Australia

Answer: B



- **2.** The lowest of classification is:
 - A. Genus
 - B. Kingdom

C. species

D.

Answer: C



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3. Flora is the term used for:

A. the document of all plant species

B. the document of single species in a

given geographic area.

C. the document of only endomic species of plants in a given area.

D. none of the above

Answer: A



4. The first botanical garden was established by Theophrastus at:

A. London

- B. Sydney
- C. Athens
- D. Singapore

Answer: C



- **5.** The largest botanical garden is in _____.
 - A. Indian Botanical Garden, Kolkata, India
 - B. Botanical Garden at Athens

C. National Botanical Garden, Lucknow,

India

D. Royal Botanical Garden Kew, England

Answer: D



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6. Who is the father of Taxonomy?

A. E.K. Janaki Ammal

B. Carolus Linnaeus

- C. Heywood
- D. Theophrastus

Answer: B



- **7.** Plants with one stamen are grouped under:
 - A. Tetrandria
 - B. Diandria
 - C. Monandria

D. Pentandria

Answer: C



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8. The family coniferae is included under the class:

- A. Dicotyledonae
- B. Monocotyledonae
- C. Gymnospermae

D. None of the above

Answer: C



- **9.** Chemotaxomony is mainly based on:
 - A. The chemical characters of the plant
 - B. the morphological
 - C. The phylogenetic characters of the plant
 - D. none of the above

Answer: A



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10. The classification based on the characters of ch ssification based on the characters of chromosome, such as number, size, morphology and behaviour during meiosis is known as:

- A. Serotaxonomy
- B. Chemotaxonomy

- C. karyotaxonomy
- D. none of the above

Answer: C



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11. RAPD (Random amplified polymorphic DNA) is a method:

A. to identify the morphomatic character of a plant

- B. to identify specific regions of DNA
- C. to identify genetic sequence of a plant
- D. to identify genetic markers using a randomly synthesised primer

Answer: D



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12. The genetic sequence used to identify a plant is knows as ____.

- A. DNA tags
- B. Polymorphic DNA
- C. Fragment of DNA
- D. Genome

Answer: A



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13. Metformin used for treatment of diabetes is exacted from:

B. Galega officinalis						
C. Arachis hypogea						
D. none of the above						
Answer: B Watch Video Solution						
14. Earlier classification emphasized on:						
A. Reproductive characters						

A. Hibiscus rosasinensis

- B. Vegetative characters
- C. both
- D. Anatomical characters

Answer: C



- **15.** Naming a plant is called:
 - A. systematic botany
 - B. Taxonomy

- C. nomenclature
- D. Cytology

Answer: C



- **16.** Bentham and Hooker's classification is:
 - A. Phylogenetic system of classification
 - B. artificial system of classification
 - C. natural system of classification

D. sexual system of classification

Answer: C



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17. Carolus Linnacus proposed classification based on:

A. Artificial system

B. natural system

C. phylogenetic system

D. modern system

Answer: A



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18. The largest group of plant kingdom is

- A. Cryptogams
- B. Angiosperms
- C. Gymnosperms
- D. phanerogams

Answer: B



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19. Number of volumes in genera plantorum

A. two

B. three

C. four

D. five

Answer: B

20. The family gnetaceae is included under

A. monochlamydae

B. monotyledons

C. dicotyledons

D. Gymnosperms

Answer: D



21. Bentham and Hooker are associated with

- A. Indian botanical garden
- B. Royal botanical garden
- C. American botanical garden
- D. French botanical garden

Answer: B



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A. floral characters

B. anatomy

C. physiology

D. ecology

Answer: A



23. Classification of plants into different groups is known as:

- A. Morphology
- B. Physiology
- C. Pathology
- D. plant taxonomy

Answer: D



24. Syngenesious anthers and epipetalous stamens are fouind in:

- A. Liliaceae
- B. malvaceae
- C. Solanaceae
- D. compositae

Answer: D



25. Synandrous condition is common in the family:

A. Lumbelliferae

B. Rosaceae

C. malvaceae

D. cucurbitaceae

Answer: D



- A. Leguninaceae
- B. rutaceae
- C. compositae
- D. Liliaceae

Answer: B



27. Indefinite	stamens	are	characteristic	of the
family:				

A. malvaceae

B. graniceae

C. labiatac

D. cruciferae.

Answer: A



28. Clasical taxonomy is also termed

A. B taxonomy

B. systematics

C. description and taxonomy

D. experimental taxonomy

Answer: C



- A. Cluster bean
- B. Arachis hypogea
- C. Cowpea
- D. Mucunapruriens

Answer: C



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30. Medicinal plants

A. Cluster bean

- B. Arachis hypogea
- C. Cowpea
- D. Mucunapruriens

Answer: D



- **31.** Food and plants
 - A. Cluster bean
 - B. Arachis hypogea

- C. Cowpea
- D. Mucunapruriens

Answer: A



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32. Oil plants

- A. Cluster bean
- B. Arachis hypogea
- C. Cowpea

D. Mucunapruriens

Answer: B



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33. FAO declared the year for pulses as:

- A. 2017
- B. 2015
- C. 2018
- D. 2016

Answer: D



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Other Important Questions And Answers Short Answers

1. Define Taxonomy.



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2. Define genus



3. What are the types of species?



4. Distinguish between anamorph and telomorph.



5. Write common name and scienctific name of10 different plants around your home.



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6. What is holotype?



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7. What is Flora? Explain the types.



8. Give examples of International Botanical Gardens.



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9. What is chemotaxonomy?



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10. What are the aims of chemotaxonomy?



11. What is serotaxonomy?



12. What is meant by DNA barcodes?



13. What is cladistics?



14. What is meant by monadelphous stamens?



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15. Mention any two oil plants with their scientific name.



16. Mention any two medicinal plants with their useful parts of the plant



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17. What is meant by scapigerous Inflorescence?



18. List out the economic importance of plants & their uses of Liliaceae.



19. Write three binomial names of ornamental plants in Fabaceae family.



20. What is meant by root nodule?



Other Important Questions And Answers Answer In Brief

1. List the differences between taxonomy and systematics.



2. What is Botanical nomenclature? Explain the international code of botanical

nomenclature. **Watch Video Solution** 3. Mention any three roles of Botanical gardens. **Watch Video Solution** 4. What are the uses of herbarium. **Watch Video Solution**

5. Explain Bentham and Hooker system of classification?



6. Define karyotaxonomy.



7. What is RFI P?



8. Write the significance of molecular taxonomy.



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9. Write the diagonostic features of Solanaceae family.



10. Draw the Floral diagram and write the Floral formula of Datura Metel.



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11. Write down the floral formula of the following plants.

(ii) Solanum nigrum



12. Descrine the Floral characters of Allium cepa with a neat floral diagram.



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Other Important Questions And Answers Answer
In Detail

1. Write short notes on concept of species



- **2.** Describe the method of preparation of herbarium specimen.
- (i) Plant Collection:



- **3.** Describe the method of preparation of herbarium specimen.
- (ii) Documentation of field site data:



4. Describe the method of preparation of herbarium specimen.

(iii) Preparation of plant specimen:



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5. Describe the method of preparation of herbarium specimen.

(iv) Mounting herbarium specimen:



- **6.** Describe the method of preparation of herbarium specimen.
- (v) Herbarium label:



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- **7.** Describe the method of preparation of herbarium specimen.
- (vi) Protection of herbarium sheets against mold and insects:



8. What are the uses of molecular taxonomy?

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9. Write short notes on cladistic analysis.



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10. Explain the general characters of the family solanaceae.

(i) Distribution:

11. Write about the habit of Solanaceae.



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12. Explain the general characters of the family solanaceae.

(iii) Root:



(iv) Stem:



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14. Explain the general characters of the family solanaceae.

(v)Leaves:



15. Describe the general characters of solanaceae.



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16. Explain the general characters of the family solanaceae.

(i) Distribution:



Calyx:



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18. Explain the general characters of the family solanaceae.

Corolla:



(x)Androecium:



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20. Explain the general characters of the family solanaceae.

(xi) Gynoecium:



(iii) Root:



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22. Explain the general characters of the family solanaceae.

(iii) Root:



23. Write the floral formula of Pisum sativum.

