

Total No. of Printed Pages:2

SUBJECT CODE NO:- B-2027
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. S.Y. (Sem-III) Examination Oct/Nov 2019
Botany Paper-VII
Taxonomy of Angiosperms

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- i) Attempt all questions.
- ii) Illustrate your answer with suitable well labelled diagram.

- Q.1 Comment on origin and evolution of Angiosperms. 20
 Describe in details Embryology and Anatomy used in taxonomy.
 OR
- Q.2 Explain in detail family solanaceae upto floral formula and floral diagram. Add a note on economic importance of few plants. 20
 Write Short notes on any four:
 a) Palynology
 b) Species concept
 c) Floral Structure of Liliaceae
 d) Economic importance of Poaceae
 e) Verticillaster inflorescence
 OR
- Q.3 Multiple Choice Questions. 10
1. Ocimum sanctum belongs to family _____.
 a) Liliaceae b) Acanthaceae c) Lamiaceae d) None of these
 2. Which of the following family does not belongs to polypetalac.
 a) Malvaceae b) Fabaceae c) Caesalpinaceae d) Solanaceae
 3. Bilabiate type of corolla belongs to _____.
 a) Acanthaceae b) Solanaceae c) Liliaceae d) None of these
 4. Attachment of Ovule with ovary wall is called as _____.
 a) Aestivation b) Placentation c) Cohesion d) None of these
 5. Pulses crop belongs to family _____.
 a) Acanthaceae b) Mimosaceae c) Fabaceae d) Malvaceae
 6. Mono delphous stamens belongs to family _____.
 a) Malvaceae b) Fabaceae c) Mimosaceae d) All of these
 7. _____ is known as father of Botany.
 a) Aristotle b) Linnaeus c) Theophrastus d) None of these

8. *Saccharum officinarum* is called as _____
a) Cotton b) Sugarcane c) Jowar d) Maize
9. Bicarpellary ovary is commonly seen in _____.
a) Solanaceae b) Malvaceae c) Fabaceae d) None of these
10. *Cajanus cajan* belongs to family.
a) Fabaceae b) Caesalpinaceae c) Mimosaceae d) Annonaceae

Time: One Hour

Max. Marks: 25

instruction

- solve any 25 questions.

- Artificial system of classification is-
(A)based on one or few easily observable characters (B)based on large number of characters (C)based on evolutionary characters (D)All of the above
- The system of classification given by Linnaeus is
(A)Natural system (B)Artificial system (C)Phylogenetic system (D)All of the above
- The book 'Species plantarum' was written by
(A)Engler & Prantl (B)Bessey (C)Linnaeus (D)Hutchinson.
- Naming of plants is called
(A)Classification (B)Nomenclature (C)Taxonomy (D)Cytology
- Cytotaxonomy is
(A)Use of cytological data in Taxonomy (B)Use of chemical data in Taxonomy (C)Use of large number of characters in Taxonomy (D)All the above
- Specific epithet should be written as
(A)First letter capital and double word (B)First letter small and double word (C)First letter capital and single word (D)First letter small and single word
- Botanical name should be in
(A)English (B)Roman (C)Latin (D)Hindi
- What is used for drying plant specimens
(A)Filter paper (B)Blotting paper (C)Parchment paper (D)Cellophane paper
- Quick referral systems in taxonomic studies are
(A)Botanical garden (B)Herbarium (C)Monograph (D)Manual
- According to binomial nomenclature, two words used for naming of plants are
(A)family and genus (B)species and family (C)class and family (D)genus and species
- What is used for poisoning of herbarium?
(A)HCl (B)H₂SO₄ (C)HgCl₂ (D)NaCl
- Which of the following embryological character can be used as character of taxonomic value
(A)Anther (B)Development and structure of the ovule (C)Megasporogenesis and development of the embryo sac (D)All of the above
- When two or more authors publish a new species, their names are linked using the epithet
(A)in (B)at (C)et (D)and
- The Acharya J. C. Bose Indian Botanic Garden is situated in
(A)Bengaluru (B)Lucknow (C)Mumbai (D)Kolkata
- Banham and Hooker's system includes----- no. of genera
(A)6975 (B)6579 (C)7569 (D)5679
- Fruit Etaerio of berries is found in
(A)Apocynaceae (B)Malvaceae (C)Annonaceae (D)Fabaceae
- Nerium indicum belongs to family.
(A)Fabaceae (B)Rubiaceae (C)Apocynaceae (D)Euphorbiaceae.
- Latex is present in the family.
(A)Fabaceae (B)Apocynaceae (C)Annonaceae (D)Acanthaceae.
- Trimerous flower is found in
(A)Annonaceae (B)Apocynaceae (C)Malvaceae (D)Acanthaceae.
- Epicalyx is characteristic of
(A)Annonaceae (B)Apocynaceae (C)Malvaceae (D)Acanthaceae
- Pulses belongs to
(A)Fabaceae (B)Liliaceae (C)Apocynaceae (D)Malvaceae
- Which of the following sub-family has zygomorphic corolla
(A)Fabaceae (B)Cesalpiniaceae (C)Mimosaceae (D)Solanaceae
- Monocarpellary superior ovary is found in
(A)Fabaceae (B)Cesalpiniaceae (C)Mimosaceae (D)All of the above
- Free ovaries are found in
(A)Fabaceae (B)Cesalpiniaceae (C)Mimosaceae (D)Apocynaceae
- Obliquely placed ovary is found in
(A)Lamiaceae (B)Solanaceae (C)Annonaceae (D)Apocynaceae

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26 *Adhatoda vasica* belongs to

- (A) Acanthaceae (B) Solanaceae (C) Annonaceae (D) Apocynaceae

27 Gynobasic style is characteristic of

- (A) Acanthaceae (B) Solanaceae (C) Lamiaceae (D) Apocynaceae

28 Perianth not differentiated into calyx and corolla is characteristic of

- (A) Lamiaceae (B) Nyctaginaceae (C) Apocynaceae (D) Malvaceae

29 *Allium cepa* belongs to

- (A) Acanthaceae (B) Liliaceae (C) Annonaceae (D) Apocynaceae

30 The Acharya J. C. Bose Indian Botanic Garden is situated in

- (A) Bengaluru (B) Lucknow (C) Mumbai (D) Kolkata

Total No. of Printed Pages: 02

SUBJECT CODE NO: - 2048
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. S.Y (Sem. III)
Examination March/April-2022 (To Be Held In June/July-2022)
Botany Paper-VII
Taxonomy of Angiosperms

[Time: 1:53 Hours]

[Max. Marks:50]

Please check whether you have got the right question paper.

- N. B
- i. Attempt all questions.
 - ii. Draw neat & well labeled diagrams wherever necessary.

Q.1 Explain principles of Binomial nomenclature. Add a note on some important rules of nomenclature 20

OR

Explain in detail procedure of making herbarium and add a note on any two herbaria in India.

Q.2 Explain in detail family Apocyanaceae with floral formula, floral diagram, systematic position and add a note on two economic important plants. 20

OR

Write short notes (any four)

- a) Salient features of Angiosperm's
- b) Axile and parietal placentation
- c) Economic importance of malvaceae
- d) Floral structure of Solanaceae
- e) Legume and follicle fruit

Q.3 Multiple choice questions 10

- 1) Botanical name of plant consists of -----
 - a) One words
 - b) Two words
 - c) Three words
 - d) All of these
- 2) The Angiosperm's include those plants which have
 - a) Naked seed
 - b) Covered seed
 - c) No seed
 - d) No flowers
- 3) The type of fruit of Annona is termed as
 - a) An Etaerio of Berries
 - b) Berry
 - c) Pome
 - d) None of these
- 4) Most of the herbaria in India follows ----- system of classification.
 - a) Bentham & Hooker's
 - b) Linnaeus

- c) Both of these
5) In the plants of family Malvaceae the stamens are always.
a) Mohadelphous
c) Polyadelphous
- d) None of these
b) Diadelphous
d) Monandrous
- 6) In a flower, when calyx and corolla and stamens arise from base of ovary the position of ovary is termed as
a) Semi-interior
c) Superior
- b) Inferior
d) None of these
- 7) In Acaria the stipule is modified to
a) Tendril
c) Spine
- b) Trichome
d) None of these
- 8) In family Lamiaceae (Labiatae) the inflorescence is
a) Cyathium
c) Verticellaster
- b) Hypanthodium
d) Head
- 9) In some flowers sepals and petals do not differ in shape and petals do not differ in shape and colour, it forms a single part is termed as
a) Calyx
c) Perianth
- b) Corolla
d) None
- 10) Botanical name of Tulsi is
a) *Ocimum tenuiflorum* L.
c) *Capsicum annum* L.
- b) *Solanum tuberosum* L.
d) *Abutilon indicum* sweet

Total No. of Printed Pages: 02

SUBJECT CODE NO:-B-2048
FACULTY OF SCIENCE & TECHNOLOGY
B.Sc. S.Y (Sem-III)
Examination November/December- 2022
Botany Paper-VII
Taxonomy of Angiosperms

[Time: 1:30 Hours]

[Max. Marks:50]

N.B “Please check whether you have got the right question paper”

- 1) Attempt all questions.
- 2) Draw neat & well-labeled diagram wherever necessary.

Q.1 Explain in detail salient features of Angiosperms. 20

OR

Explain in detail Taxonomy in relation to Embryology and cytology.

Q.2 Describe in detail family Lamiaceae up to floral formula, floral diagram. Add a note on few plants of economic importance? 20

OR

Write short notes on:

- a) Botanical Gardens of India
- b) Merits and demerits of Bentham and Hooker’s system of classification.
- c) Economic importance of Annonaceae.
- d) Racemose inflorescence.
- e) Papilionaceous corolla.

Q.3 Multiple choice questions: 10

1. Bentham and hooker’s system of classification
 (a) Natural (b) Artificial (c) Phylogenetic (d) All of these
2. Botanical name of chilli is
 (a) Solanum melongena L.
 (b) Capsicum annum L.
 (c) Polyalthia longifolia sonn
 (d) Alizada lebbek L.
3. Oryza sativa L. belongs to family
 (a) Liliaceae (b) Poaceae (c) Malvaceae (d) Brassicaceae
4. Double fertilization is characteristics feature of –
 (a) Angiosperms (b) Gymnosperms (c) Pteridophytes (d) Bryophytes

5. The father of Taxonomy is-
(a) Carolus Linnaeus (b) A.P. de candolle (c) G. Bentham (d) R. Smith
6. The vinca rosea is a
(a) Under shrub (b) Perennial herb (c) Biennial herb (d) None of these
7. The plants of family Poaceae Possesses.
(a) Tap root (b) Branched tap root (c) Adventitious root (d) None of these
8. The leaf extract of-----used to prepare syrup against cough.
(a) Vinca rosea (b) Adhatoda vesica (c) Solanum nigrum (d) None of these
9. Pulses belongs to the family
(a) Fabaceae (b) Poaceae (c) Liliaceae (d) Apocynaceae
10. Botanical name of Potato is-
(a) Solanum nigrum (b) Solanum tuberosum
(c) Lycopersicon esculentum (d) None of these

Total No. of Printed Pages: 2

SUBJECT CODE NO: - Y-2048
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. S.Y (Sem-III)
Examination March / April - 2023
Botany Paper-VII Taxonomy of Angiosperms

[Time: 1:30 Hours]**[Max. Marks: 50]**

Please check whether you have got the right question paper.

N. B

- 1) Attempt all questions
- 2) Draw neat & well labelled diagram wherever necessary

Q1 Describe in detail family Liliaceae up to formula floral diagram Add a note on few plant of economic importance? 20

OR

Write salient features of angiosperms and add note on evolution of it. 20

Q2 Explain in detail taxonomy in relation to anatomy embryology and ecology. 20

OR

Write short notes on 20

- a) Concept of genus and species
- b) Floral structure of Acanthaceae
- c) Economic importance of Poaceae
- d) Racemose inflorescence
- e) Floral structure of solanaceae

Q3 Multiple choice questions 10

- 1) Family Poaceae is characterized by -----
a) Berry fruit b) Pentamerous flower c) Didynamous stamens d) Glumes
- 2) Infundibuliform corolla is feature of -----
a) Solanaceae b) Asteraceae c) Annonaceae d) Lamiaceae
- 3) Epicalyx growing above the calyx are found in -----family
a) Liliaceae b) Malvaceae c) Annonaceae d) none of the above
- 4) Which of the following plant belong to family Anonaceae
a) Justice adhatoda L. b) Ocimum tenuiflorum L.
c) Annona squamosa L. d) Hibiscus rosa -sinensis L

- 5) Which of the following families are monocotyledons?
a) Acanthacus and Liliaceae b) Poaceae and Liliaceae
c) Apocynaceae and solanaceae d) Solanaceae and Acanthaceae
- 6) Bicarpellary ovary are present in which of the following families?
a) Solanceae and Apocynaceae b) Fabaceae and Nyctaginaceae
c) Anonaceae and malvaceae d) Anonaceae and fabaceae
- 7) Which of the following genera represent family Lamiaceae ?
a) Hibiscus and Nerium b) Bacopa and ocimum
c) Allium And Hibiscus d) catharanthus and Nerium
- 8) Triticum aestivum is botanical name of -----
a) Wheat b) maize c) Rice d) Jawar
- 9) Papilionaceous corolla is feature of----- flower.
a) Acanthaceae b) Poaceae c) Fabaceae d) Anonaceae
- 10) Which of the following plant belongs to family mimosaceae
a) Ocimum tenuiflorum b) Adhatoda vasica
c) Annona Squamosa d) Acacia Arabic

Total No. of Printed Pages : 2

SUBJECT CODE NO: - BB-2381
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. (CBCGS)(Pattern 2022) S.Y SEM III
Examination November/December-2023
Botany-VII Taxonomy of Angiosperms

[Time: 1:30 Hours]

[Max. Marks: 40]

Please check whether you have got the right question paper.

N. B i) Attempt all questions.

ii) Illustrate your answer with suitable well labelled diagram.

iii) All questions carry equal marks.

Q1 What is binomial nomenclature. Comment on principles and rules of nomenclature. **10**

OR

Describe in brief:

(a) Botanical garden

(b) Salient features of angiosperms

Q2 Explain in details family Liliaceous. Add a note on plants of economic importance of Liliaceous. **10**

OR

Describe in brief.

(a) key characters and floral characters of Rubiaceae

(b) economic importance of family Solanaceae

Q3 Write short notes on (Any two) **10**

(a) Herbarium

(b) Floral structure of Mimosaceae

(c) Key characters and floral structure of Acanthaceae.

Q4 MCQ (10 Questions 1 marks each) **10**

(1) Botanical name of Tomato belongs to family

(a) solanum tuberosum

(b) Solanum melongiana

(c) solanum lycopersium

(d) solanum nigrum

(2) Verticilaster inflorescence is character of family

(a) Nictagenaceae

(b) Lamiaceae

(c) Fabaceae

(d) Annonaceae

- (3) Monadelphous stamen is characteristic of family -----
(a) Annonaceae (b) fabaceae
(c) Malvaceae (d) Solanaceae
- (4) Infundibuliform corolla is present in family -----
(a) Solanaceae (b) fabaceae
(c) Annonaceae (d) Malvaceae
- (5) Bentham and Hooker's system of classification is an example of ----- system.
(a) Artificial (b) Natural
(c) Phylogenetic (d) None of the above
- (6) The aestivation in fabaceae family is ----- type.
(a) Contorted (b) Valvate
(c) Quincuncial (d) Vexillary
- (7) Flower possesses involucre bract in the family -----
(a) nyctaginaceae (b) annonaceae
(c) Rubiaceae (d) Apocynaceae
- (8) Bilabiate corolla belongs to family -----
(a) Annonaceae (b) Liliaceae
(c) Malvaceae (d) Lamiaceae
- (9) Pulse crops belong to ----- family.
(a) fabiaceae (b) Caesalpinaceae
(c) mimosaceae (d) All of these
- (10) Father of modern Taxonomy is called -----.
(a) George Bentham (b) John Hutchinson
(c) Charles Darwin (d) Carl Linnaeus