

CREDIT BASED THIRD SEMESTER B.Sc. DEGREE EXAMINATION APRIL 2012

BOTANY
PLANT DIVERSITY -II

Time: 3 Hrs

Max. Marks: 80

Instructions:

1. Answer both Part A & Part B.
2. Answer SIX full questions from Part B, selecting at least two full questions from each unit.
3. All questions in Part B carry equal marks.
4. Draw diagrams wherever necessary.

PART – A

1. Answer any TEN of the following. 2x10=20
- a) What are assimilatory roots? Give one example.
 - b) What is a simple cyme?.
 - c) What is Phyllotaxy? Mention any two types..
 - d) What is a follicle. Give one example.
 - e) Mention the types of fruit seen in family Anacardiaceae.
 - f) Name any two National Herbaria.
 - g) Give the scientific name of any two plants of family Cucurbitaceae.
 - h) What is phylogenetic system of classification? Who proposed it?
 - i) Give the scientific name and family of sugarcane.
 - j) Explain the type of inflorescence in family Arecaceae
 - k) Explain gynoecium of family Solanaceae.
 - l) Write the uses of Nutmeg.

PART – B
UNIT – IAnswer any TWO of the following. 2x10=20

2.
 - a) Give an account of any two types of fleshy fruits with examples. 05
 - b) Mention the types of leaf modification with examples. 03
 - c) Write the features of roots in Vanda. 02
3.
 - a) Write briefly the types of aerial stem modifications with examples. 05
 - b) Write a note on Cohesion of stamens 03
 - c) Mention the different types of placentation seen in Angiosperms. 02
4.
 - a) Explain any 5 types of Racemose inflorescences. 05
 - b) What is Sorosis? Give two examples. 03
 - c) Draw the diagram of imbricate aestivation. 02

UNIT – II

Answer any **TWO** of the following.

10x2=20

- | | | | |
|----|----|--|-----------|
| 5. | a) | Differentiate between the sub families Ceasalpinoideae and Papillionoideae | 05 |
| | b) | Write down any three salient features of Bentham & Hooker's system of classification | 03 |
| | c) | Describe androecium in cucurbitaceae. | 02 |
| 6. | a) | Write down the techniques of Herbarium preparation. | 05 |
| | b) | Write a brief note on Chemotaxonomy. | 03 |
| | c) | Give any four identifying features of family Myrtaceae | 02 |
| 7. | a) | Give the important diagnostic features of family Rosaceae | 05 |
| | b) | Write the principles of ICBN | 03 |
| | c) | What is digital flora? Mention any two uses. | 02 |

UNIT – III

Answer any **TWO** of the following.

10x2=20

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|-----|----|---|-----------|
| 8. | a) | Describe the flower of family Orchidaceae. | 05 |
| | b) | Give the botanical name, family and economic importance of Turmeric | 03 |
| | c) | What is Palea & Lemma? Where is it seen? | 02 |
| 9. | a) | Explain the inflorescence seen in genus Euphorbia | 05 |
| | b) | Write the scientific and family names of Tea and Cocoa. | 03 |
| | c) | Write the uses of Hevea. | 02 |
| 10. | a) | Give the important diagnostic features of family Acanthaceae | 05 |
| | b) | Write scientific names of maize, Ragi and wheat. | 03 |
| | c) | Name the part used for oil extraction in coconut, sunflower, groundnut, Eucalyptus. | 02 |

CREDIT BASED THIRD SEMESTER B.Sc. DEGREE EXAMINATION OCTOBER 2013

BOTANY
PLANT DIVERSITY-II

Time: 3 Hrs

Max. Marks: 80

Instructions:

1. Answer both Part A & Part B.
2. Answer two full questions from each unit.
3. All questions in Part B carry equal marks.
4. Draw diagrams wherever necessary.

PART – A

1. Answer any **TEN** of the following. 10x2=20
- a) What are adventitious roots? Give one example.
 - b) What is a cladode? Mention its significance.
 - c) Differentiate corymb from umbel.
 - d) Draw a diagram of quincuncial aestivation of corolla.
 - e) What is binomial nomenclature? Give one example.
 - f) What is meant by pulvinate leaf base? Mention the family in which it is present?
 - g) Write the names of any two floras that are commonly used.
 - h) "Peeling bark" is a characteristic feature of which family? Give one example.
 - i) What is Pappus? What is its importance?
 - j) List the types of inflorescences in the family *Euphorbiaceae*.
 - k) What is Resupination? In which family is it characteristically seen?
 - l) Write the botanical name and family of cardamom.

PART – B**UNIT – I**Answer any **TWO** of the following. 10x2=20

2.
 - a) Describe the underground stem modifications with suitable examples. 5
 - b) What is Calyx? Mention any two types with suitable examples. 3
 - c) What is Pistil? Mention its parts. 2
3.
 - a) Describe the staminal variations with suitable examples and diagrams. 5
 - b) Explain the terms phylloclade, offset and sucker. 3
 - c) Mention any two tap root modifications with examples. 2
4.
 - a) What are fruits? Explain the different types of simple fleshy fruits with suitable examples. 5
 - b) Write a note on hypanthodium type of inflorescence with a diagram. 3
 - c) What are stipules? List any two modifications. 2

UNIT – II

Answer any TWO of the following.

10x2=20

5. a) Explain the salient features of Bentham and Hooker's system of classification with merits and demerits. 5
b) What is herbarium? List any two uses. 3
c) Write a note on fruits in *Ancardiaceae* with suitable examples. 2
6. a) Give the diagnostic characters of family *Malvaceae* with botanical names and uses of any two plants. 5
b) Describe the androecium in the subfamilies of *Fabaceae*. 3
c) Mention any two National herbaria. 2
7. a) Give the diagnostic characters of family *Rosaceae* with botanical names and uses of any two plants. 5
b) Write a note on chemotaxonomy. 3
c) Expand ICBN. When did it come into force? 2

UNIT – III

Answer any TWO of the following.

10x2=20

8. a) Write the common name and botanical names of any five pulses you have studied. 5
b) Write a note on spikelet with a diagram. 3
c) Comment on the carpels of *Solanaceae*. 2
9. a) Give the diagnostic characters of *Liliaceae* with the botanical names and uses of any two plants. 5
b) Explain the terms - gynobasic style, Rostellum, Jaculator 3
c) Write the botanical name and uses of *Adathoda*. 2
10. a) Give the diagnostic characters of *Amaranthaceae* with the botanical names and uses of any two plants. 5
b) Write a note on pollinium with an example. 3
c) Write the botanical names of any two fibre yielding plants with the part used. 2

BOT 301.1

Reg. No.

CREDIT BASED THIRD SEMESTER B.Sc. DEGREE EXAMINATION OCTOBER 2014

BOTANY
PLANT DIVERSITY-II

Time: 3 Hrs

Max. Marks: 80

Instructions:

1. Answer both Part A & Part B.
2. Answer two full questions from each unit.
3. All questions in Part B carry equal marks.
4. Draw diagrams wherever necessary.

PART – A

1. Answer any TEN of the following. 10x2=20
- a) What is phyllotaxy? Mention any two types.
 - b) Differentiate hypogyny and epigyny.
 - c) What is Pappus? Mention its function.
 - d) What is meant by cruciform corolla? Give one example.
 - e) Define the terms species and genus.
 - f) What is digital flora?
 - g) Differentiate legume and lomentum.
 - h) What is phylogenetic system? who proposed it?
 - i) What are Lemma and Palae?
 - j) Write the botanical name, part used and uses of pepper.
 - k) Mention any two types of inflorescences found in the family *Lamiaceae*
 - l) Name any two beverages with their botanical names.

PART – B

UNIT – I

Answer any TWO of the following. 10x2=20

2. a) Explain the structure of a typical leaf with a diagram. Describe the modification in *Nepenthes*, *Bryophyllum*, *Pisum* 5
 - b) Write the functions of the following with one example each 3
 - i) Prop roots
 - ii) Napiform roots
 - iii) Pneumatophores
 - c) What are multiple fruits? Give two examples. 2
3. a) Define the following terms:
 - i) Aestivation
 - ii) Accrescent
 - iii) Perigyny

- iv) Glabrous
 - v) Sessile
 - b) Differentiate between rhizome and corm.
 - c) Differentiate helicoid and scorpioid cymes with examples.
4. a) What is placentation? Explain any four types with diagrams and examples. 5
- b) Write a note on any three types of dry dehiscent fruits. 3
- c) What is Synandry? Give an example. 2

UNIT – II

Answer any TWO of the following. 10x2=20

5. a) Explain the herbarium techniques. Name any two National herbaria. 5
- b) Write a note on papilionaceous corolla. 3
- c) What is Pepo? In which family is it characteristically seen? 2
6. a) Explain the salient features of family *Anacardiaceae*. 5
- b) Write a note on androecium and gynoecium of family *Malvaceae* 3
- c) Name any two types of fruits of *Rosaceae* with suitable examples. 2
7. a) Give the diagnostic characters of family *Myrtaceae* with botanical names and uses of any two plants. 5
- b) Differentiate sub families *Caesalpinioideae* and *Mimosoideae* 3
- c) Write a note on Chemotaxonomy. 2

UNIT – III

Answer any TWO of the following. 10x2=20

8. a) Give the diagnostic characters of the family *Apocynaceae*. 5
- b) Give the scientific name and economic uses of the following
- i) Ground Nut ii) All spice iii) Jute. 3
- c) Write a note on *Rostellum* and *Labellum*. 2
9. a) Write the common and scientific names and uses of any five medicinal plants you have studied. 5
- b) Write a note on characteristic inflorescence of family *Euphorbiaceae*. 3
- c) Write the botanical names of any two economically important plants of family *Poaceae*. 2
10. a) Give the diagnostic characters of the family *Arecaceae* 5
- b) Write a note on leaves in family *Liliaceae*. 3
- c) Write a note on Androecium in family *Acanthaceae*. 2

30 20/10

BOT 3012

Reg. No.

CREDIT BASED THIRD SEMESTER B.Sc. DEGREE EXAMINATION OCTOBER 2015

BOTANY
PLANT DIVERSITY-II

Time: 3 Hrs

Max. Marks: 80

Instructions:

1. Answer both Part A & Part B.
2. Answer two full questions from each unit.
3. All questions in Part B carry equal marks.
4. Draw diagrams wherever necessary.

PART - A

1. Answer any **TEN** of the following. 10x2=20
- a) Differentiate between runner and stolon.
 - b) What is phyllotaxy? Mention any two types.
 - c) What is anomalous secondary growth? Give an example.
 - d) Define apocarpous and syncarpous condition.
 - e) Write the merits of Natural system of classification.
 - f) Mention the botanical names of any four pulses.
 - g) Mention four diagnostic features of family Myrtaceae.
 - h) Write any four distinguishing characters of Malvaceae.
 - i) Write a note on inflorescence in Arecaceae
 - j) Give the botanical names and uses of the following:
a) Sarpagandha b) Coffee
 - k) Name the type of inflorescence in *Ocimum* and *Leucas*.
 - l) Draw a labeled diagram of hypanthodium.

PART - B

UNIT - I

- Answer any **TWO** of the following. 2x10=20
2. a) Describe the T.S. of *Cycas* leaflet with a labelled diagram. 6
b) What are insectivorous plants? Explain any two types. 4
 3. a) Describe the male cone of *Pinus*. 6
b) Explain the types of underground root modifications. 4
 4. a) Explain any three types of aerial stem modifications. 6
b) Explain three types of dry fruits. 4

UNIT – II

Answer any TWO of the following.

2x10=20

- | | | | |
|----|----|--|---|
| 5. | a) | Describe any six types of gamopetalous corolla. | 6 |
| | b) | What is placentation? Explain the types. | 4 |
| 6. | a) | Explain cohesion of stamens with examples | 6 |
| | b) | Write a note on APG III System. | 4 |
| 7. | a) | Distinguish between Papilionoidea and caesalpinoidea with example. | 6 |
| | b) | Write a note on fruits in Rosaceae | 4 |

UNIT – III

Answer any TWO of the following.

2x10=20

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|-----|----|--|---|
| 8. | a) | Distinguish between family Solanaceae and Acanthaceae. | 6 |
| | b) | Write a note on a) Stipules in Rubiaceae
b) Inflorescence in Asteraceae | 4 |
| 9. | a) | Bring out the salient features of Poaceae with 2 plants of economic importance. | 6 |
| | b) | Write a brief note on a) Fruit in cucurbitaceae
b) Leaves in liliaceae. | 4 |
| 10. | a) | Write a note on a) Inflorescence of Euphorbiaceae
b) Salient features of Amaranthaceae. | 6 |
| | b) | Describe the flower of orchid. | 4 |

**CREDIT BASED THIRD SEMESTER B.Sc. DEGREE EXAMINATION
OCTOBER 2016**

**BOTANY
PLANT DIVERSITY-II**

Time: 3 Hrs

Max. Marks: 80

Instructions:

1. Answer both Part A & Part B.
2. Answer two full questions from each unit.
3. All questions in Part B carry equal marks.
4. Draw diagrams wherever necessary.

PART – A

1. Answer any TEN of the following. 10x2=20
- a) What is a phyllode? Give an example.
 - b) What is cleavage polyembryony? Name the genus in which it is found.
 - c) What are multiple fruits? Give two examples.
 - d) Define capsule. Mention the types.
 - e) Differentiate synandrous and syngenesious condition.
 - f) Mention the merits of phylogenetic system of classification.
 - g) Give the botanical names and family of tamarind and horsegram.
 - h) What is pappus? Give an example.
 - i) Write a note on the type of fruit of Cucurbitaceae.
 - j) What is Corollary Corona?
 - k) Mention the salient features of leaves of Myrtaceae.
 - l) Assign the following plants to their respective families
a) *Ricinus communis* b) *Aloe vera* c) *Zea mays* d) *Gomphrena globosa*.

PART – B

UNIT – I

- Answer any TWO of the following. 2x10=20
2. a) Describe the structure of male cone in *Cycas*. 6
b) Explain any two underground stem modifications. 4
 3. a) Describe the female reproductive structures in *Gnetum*. Mention four angiospermic affinities. 6
b) Explain pneumatophore and haustoria with examples. 4
 4. a) Explain the various types of racemose inflorescence. 6
b) Write a note on types of pinnately compound leaves. 4

UNIT – II

Answer any TWO of the following.

2x10=20

5. a) Write a note on
a) placentation b) Salient features of Malvaceae 6
b) Explain any four types of aestivation. 4
6. a) Give the broad outline of Bentham and Hookers system of classification. 6
b) Describe fruits in Anacardiaceae. 4
7. a) Write distinguishing characters of Rosaceae with botanical names of two examples. 6
b) Write a note on ICBN. 4

UNIT – III

Answer any TWO of the following.

2x10=20

8. a) Give the diagnostic features of family Asteraceae with two botanical names and uses of any two plants. 6
b) Write common name, botanical name and economic importance of any four plants of Arecaceae. 4
9. a) Give a comparative account of family Acanthaceae and Lamiaceae. 6
b) What is adnation? Explain it with suitable examples. 4
10. a) Explain the characteristics of family Orchidaceae. 6
b) List four important characters found in Euphorbiaceae. 4
