

**B. Sc. DEGREE EXAMINATION, NOVEMBER 2014**  
**BRANCH V (a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY**  
**THIRD SEMESTER**

**COURSE : MAJOR – CORE**  
**PAPER : TAXONOMY OF ANGIOSPERMS & ECONOMIC BOTANY**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL QUESTIONS**

**(18 marks)**

**I. CHOOSE THE RIGHT ANSWER:**

- 1) Phylogenetic system of classification was proposed by-----.  
a) Engler & Prantl      b) Hutchinson      c) Bauhin      d) a & b
- 2) Assigning the definite names to plants is -----.  
a) Taxonomy      b) Systematics      c) Nomenclature      d) None of them
- 3) The art of herbarium was initiated by -----.  
a) Luca Ghini      b) G.Cibo      c) Linnaeus      d) All of them
- 4) Gamopetalous corolla with inferior ovary is seen in -----.  
a) Rubiaceae      b) Convolvulaceae      c) Apocynaceae      d) b & c
- 5) Narcotic substances used for chewing purposes are -----.  
a) Masticatories      b) Fumitories      c) a & b      d) None of them

**II. FILL IN THE BLANKS:**

- 6) Each statement in a couplet of a key is a -----.
- 7) A duplicate specimen of the holotype is a -----.
- 8) National Botanical Garden Herbarium is at -----.
- 9) Pollen in Orchidaceae is as -----.
- 10) Saffron and turmeric are -----.

**III. SAY WHETHER TRUE OR FALSE:**

- 11) A name is rejected when it gives different meaning & is a source of confusion.
- 12) Monocots include 8 series in Bentham & Hooker's classification.
- 13) Resupination is twisting of ovary.
- 14) Tannins are insoluble astringent, bitter & complex phenolic substances of plant origin.

**IV. MATCH THE FOLLOWING:**

- |                |   |                           |
|----------------|---|---------------------------|
| 15) Apiaceae   | – | Father of Taxonomy        |
| 16) Annonaceae | – | Artificial classification |
| 17) Linnaeus   | – | Asafoetida                |
| 18) 24 classes | – | Hemicyclic                |

**V. ANSWER ANY SIX QUESTIONS IN 50 WORDS EACH: (6X3=18)**

- 19) Importance of taxonomy.
- 20) Author citation.
- 21) Poisoning & mounting techniques for a herbarium.
- 22) Special type of inflorescence in Euphorbiaceae.
- 23) Spikelet of Poaceae.
- 24) Economic importance of Gums & Resins.
- 25) Tendril of Cucurbitaceae
- 26) Gynostegium
- 27) Gynoecium of Apocynaceae

**SECTION – B****ANSWER ANY FOUR QUESTIONS IN 200 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY: (4X6=24)**

- 28) What are taxonomic keys? Discuss the construction and uses of dichotomous keys.
- 29) Write a brief account of Effective & Valid publications.
- 30) Write a brief account of botanical gardens and the importance of herbaria.
- 31) Compare the floral characters of Acanthaceae and Lamiaceae and add a note on their economic importance.
- 32) Give the botanical names, common name, family, uses & morphology of the useful part of any one of each – Tannin & Dyes.
- 33) Explain the diagnostic features of Apiaceae and give its economic importance.

**SECTION – C****ANSWER ANY TWO QUESTIONS IN 1000 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY: (2X20=40)**

- 34) Describe the procedure involved in preparing a herbarium.
- 35) Give a detailed account of Bentham & Hooker's classification with their merits & demerits.
- 36) Describe the floral variations seen in the family Fabaceae and its economic importance.
- 37) Write an essay on any 2 of the economic products studied by you:
  - a) Fibre and Fibre yielding plants.
  - b) Gums & Resins.
  - c) Fumitories & Masticatories.

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