

B. Sc. DEGREE EXAMINATION, NOVEMBER 2017
BRANCH V (a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
THIRD SEMESTER

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

SECTION – A

ANSWER ALL QUESTIONS

(18 marks)

I. Choose the correct answer

(5x1=5)

- Linnaean system of classification is
(a) artificial (b) phylogenetic (c) Eicher's (d) natural
- The ----- is the one specimen chosen by the author as the nomenclatural type.
(a) isotype (b) lectotype (c) paratype (d) holotype
- Rauvolfia serpentina* belongs to the family
(a) apocynaceae (b) asclepiadaceae (c) acanthaceae (d) lamiaceae
- _____ is the citrus family.
(a) Annonaceae (b) Apiaceae (c) Rutaceae (d) Caesalpinaceae
- Cotton is an important textile fibre included in the category
(a) Soft fibres (b) natural fibres (c) surface fibres (d) hard fibres

II. Fill in the Blanks

(5x1=5)

- Bentham and Hooker published their system of classification in _____.
- The greatest herbarium of the world is at the _____.
- Petals are ascendingly imbricate in _____.
- The characteristic inflorescence of Lamiaceae family is _____.
- In *Cuminum cyminum* _____ are used as spice and condiment.

III. Write True or False

(4x1=4)

- Usually herbarium specimens are arranged according to APG III system of classification.
- Most of the Acanthaceae members have a hook – like projection, known as ejaculator in their seeds.
- Cannabis sativa* leaves are the source of a resin charas.
- The specific name must differentiate a plant from all allied species.

V. Match the following

(4x1=4)

- Acacia catechu - Apiaceae
- Sims park - Kattha
- Coriander - Hesperidium
- Orange - Coonoor

VI Answer any six in 50 words. Each answer should not exceed 50 words.

(6x3=18)

19. Draw a floral diagram of a typical actinomorphic flower.
20. Drupe
21. Rapinat herbarium, Trichy, TN
22. Author citation
23. Stamen of Annonaceae
24. Draw a solanaceae flower and its parts.
25. Draw an orchid flower and its parts.
26. Write the botanical names of Fenugreek, Bay leaves and Nutmeg.
27. Uses of Olibanum.

SECTION – B

ANSWER ANY FOUR QUESTIONS IN 200 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY:

(4X6=24)

28. Write the outline classification of APG III system of classification.
29. Briefly discuss about International rules of Botanical Nomenclature.
30. Write about the floral characters of Rubiaceae.
31. List out the economic importance of Cucurbitaceae.
32. Briefly discuss about inflorescence of Poaceae.
33. Explain about gums.

SECTION – C

ANSWER ANY TWO QUESTIONS IN 1000 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY:

(2X20=40)

34. Describe the Herbarium techniques.
35. Write a comparative account on the floral characters of Apocynaceae, Acanthaceae and Lamiaceae.
36. Write the Bentham and Hooker's classification. Add a note on its merits and demerits
37. Write an essay on Fumitories and Masticatories.
