(6 pages)

Reg. No. :

Code No.: 7894

Sub. Code: PBOM 31

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2019.

Third Semester

Botany - Core

TAXONOMY OF ANGIOSPERMS AND ECONOMIC BOTANY

(For those who joined in July 2017 onwards)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- Binomials with identical genus name and specific epithet are called
 - (a) Homonym
- (b) Tautonym
- (c) Basionym
- (d) Synonym

- The newly collected specimen which is used as a substitute, when the original type material is missing in a herbarium, is designated as
 - (a) Lectotype
- (b) Holotype
- (c) Neotype
- (d) Isotype
- 3. The central National Herbarium is located at
 - (a) Mumbai
- (b) Calcutta
- (c) Chennai
- (d) Delhi
- Tectona grandis L. placed under the family
 - (a) Acanthaceae
- (b) Convolvulaceae
- (c) Verbenaceae
- (d) Bignoniaceae
- Labellum in Orchidaceae comes to anterior side by the twisting of the ovary through 180 degree. This process is called
 - (a) adnation
- (b) articulation
- (c) resupination
- (d) attenuation
- 6. Gomphrena globosa L. is a member of
 - (a) Acanthaceae
- (b) Amaranthaceae
- (c) Verbenaceae
- (d) Bignoniaceae

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- DNA barcoding is a plant taxonomic method that uses a short genetic marker
 - (a) AFLP

(b) ISSR

(c) RFLP

- (d) plastid matK gene
- This technique is also called as southern hybridization technique.
 - (a) SSR

(b) RAPD

(c) RFLP

- (d) ISSR
- 9. Gum Arabic is obtained from
 - (a) Acacia nilotica
- (b) Acacia concina
- (c) Acacia senegal
- (d) Acacia catechu
- 10. Red sanders is the common name given to
 - (a) Santalum album L.
 - (b) Pterocarpus santalinus L.
 - (c) Delonix regia [Hook] Raf.
 - (d) Azadirachta indica A.Juss.

PART B —
$$(5 \times 5 = 25 \text{ marks})$$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

 (a) Give an outline of Linnaean classification of plants.

Or

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- (b) What are the principles involved in Retention and Rejection of names?
- (a) Outline the floral characters of Apocynaceae and give suitable diagrams.

Or

- (b) Describe the floral characters of Convolvulaceae and give suitable diagrams.
- (a) Bring out the salient features of Amaranthaceae and give suitable diagrams.

Or

- (b) Describe the diagnostic features of Commelinaceae and give suitable diagrams.
- 14. (a) Write short notes on Virtual herbaria.

Or

- (b) Explain how chemical evidences solved taxonomic problems with suitable examples.
- 15. (a) Write short notes on and Processing of Coffee.

Or

(b) Write short notes on Processing of Cardamom.

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[P.T.O.]

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b) Each answer should not exceed 600 words.

16. (a) Describe the preparation of herbarium.

Or

- (b) Write an essay on Typification with suitable example.
- (a) Write an essay on the general characters of Combretaceae.

Or

- (b) Write an essay on the general characters of Bignoniaceae.
- (a) Describe the floral variation of Euphorbiaceae family.

Or

(b) Write an essay on the general characters of poaceae.

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 (a) Explain how Anatomical evidences solved taxonomic problems with suitable examples.

Or

- (b) Write an essay on BAR coding in plants.
- 20. (a) Give an account of two timber yielding plants.

Or

(b) Name any two fibre yielding plants. Describe the methods of fibre extraction from them and their commercial uses.

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