- (b) Give the botanical names of:
  - (i) Rubber.
  - (ii) Coffee.
  - (iii) Tobacco.
  - (iv) Teak.
  - (v) Coriander.
  - (vi) Potato.
  - (vii) Ground nut.
  - (viii) Pepper.
  - (ix) Ginger.
  - (x) Sunflower.
- 14. (a) Explain the concepts of evolution.

(OR)

(b) Discuss different types of speciations.

Register Number:

Name of the Candidate:

1707

## M.Sc. DEGREE EXAMINATION, 2008

(BOTANY)

(SECOND YEAR)

(PAPER - IX)

## 610. TAXONOMY OF ANGIOSPERMS, ECONOMIC BOTANY AND EVOLUTIONARY BIOLOGY

(New Regulations)

(Including Lateral Entry)

May ] [ Time : 3 Hours

Maximum: 100 Marks

Answer sections A, B and C.

Draw diagrams wherever necessary.

**SECTION – A**  $(8 \times 3 = 24)$ 

Answer ALL questions.

Each answer should not exceed 50 words.

All questions carry equal marks.

Turn over

Explain the following:

- 1. Para type.
- 2. Binomial system of nomenclature.
- 3. Typification.
- 4. Nomen nudum.
- 5. Floral formula of Apocynaceae.
- 6. Sympatric speciation.
- 7. Genetic variation.
- 8. Phenoplasticity.

**SECTION – B** 
$$(6 \times 6 = 36)$$

Answer ALL questions.

Each answer should not exceed 300 words.

All questions carry equal marks.

9. (a) Write short notes on Taxonomic ranks.

(OR)

(b) Briefly write on Biosystematics.

10. (a) Evaluate effective and valid publication.

(OR)

- (b) What are the methods involved in the Floristic study?
- 11. (a) Explain Apiaceae with field identification, description and its importance.

(OR)

- (b) Give an account of systematics and phylogeny of Asteraceae.
- 12. (a) Discuss the merits and demerits of Bentham and Hooker's classification.

(OR)

- (b) How the cytological characters are helpful in solving taxonomical problems?
- 13. (a) Give an account on the genetic resources and their importance.

(OR)

## **SECTION – C** $(2 \times 20 = 40)$

Answer ALL questions.

All questions carry equal marks.

- 15. (a) Describe the salient features and inter relationships of :
  - (i) Acanthaceae.
  - (ii) Verbenaceae.
  - (iii) Lamiaceae.

(OR)

- (b) Write a detailed account on Numerical taxonomy.
- 16. (a) Write on the economic importance of pulses.

(OR)

(b) Write an essay on the aspects of prebiotic environment and molecular evolution.

**SECTION – C**  $(2 \times 20 = 40)$ 

Answer ALL questions.

All questions carry equal marks.

- 15. (a) Describe the salient features and inter relationships of :
  - (i) Acanthaceae.
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  - (iii) Lamiaceae.

(OR)

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(OR)

(b) Write an essay on the aspects of prebiotic environment and molecular evolution.