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(May)

BOTANY

(Major)

Course : 401

(Morphology and Taxonomy of Angiosperms)

Full Marks : 48

Pass Marks : 19

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. (a) Choose the correct answer / Fill in the
blank : 1×5=5

(i) The calyx is reduced to pappus in
some members of the family
Acanthaceae / Asteraceae /
Magnoliaceae / Rubiaceae.

(ii) *Camellia sinensis* belongs to the
family —.

(2)

(iii) In Brassicaceae, arrangement of stamens is monadelphous / bidynamous / tetradynamous / syngenesious.

(iv) India's largest and oldest Botanical Garden is Lalbagh / Lloyd Botanic Garden / Indian Botanic Garden, Kolkata / None of the above.

(v) Obliquely situated carpels found in Solanaceae / Cyperaceae / Liliaceae / Malvaceae.

(b) Answer/Write short accounts on the following : $2 \times 5 = 10$

(i) Explain the view 'Asteraceae is the highest evolved family among dicotyledons'.

(ii) Cytotaxonomical approach

(iii) Floral characters of Poaceae

(iv) Binomial Nomenclature and ICBN

(v) Biosystematics

2. What is inflorescence? With the help of suitable diagrams, write the theories you have studied regarding the evolution of inflorescence. $2+8=10$

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(Continued)

(3)

Or

Write a note on the role of morphology in classification of plants. 10

3. Discuss in detail the plant classification system proposed by Bentham and Hooker. Why was this system widely accepted in the world? Write its demerits. $7+2+2=11$

Or

Write short accounts of the following : $5+6=11$

(a) Citation and authority in nomenclature

(b) Role of chemistry in plant classification

4. Write the distinguishing characters with their floral formulae and floral diagrams of the following families (any three) : $(2+1+1) \times 3 = 12$

(a) Malvaceae

(b) Apiaceae

(c) Orchidaceae

(d) Cyperaceae

(e) Cucurbitaceae

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