

**2009**

**M.Sc.**

**2nd Semester Examination**

**BOTANY**

**PAPER—VII**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

***(Write the answers Question of each Unit in separate books)***

**Answer all questions.**

**1. Answer any ten of the following :** 1×10

(a) What is the full form of NBPGR and where is it situated?

(b) What are 'sementides'? Give examples.

*(Turn Over)*

- (c) What are macro- and micro-molecules? Give examples.
- (d) What are the full form of TEM and SEM?
- (e) Define heterobathmy.
- (f) What is 'sporopollenin'?
- (g) What is 'Core Eudicots'?
- (h) What does it mean by 'ANITA' grade?
- (i) Name one primitive angiosperm.
- (j) Define chemosystematics.
- (k) Who is the author of this book 'Origin and Disposal of Angiosperms'?
- (l) Who first proposed this term 'Cradle of angiosperms'?
- (m) Define nomenclatural type.
- (n) Define Taxon.

2. Write short notes on (any two) of the following : 2×5

- (a) Salient features of Magnoliidae and its evolutionary trends amongst the orders (represent with line diagram).
- (b) Basic differences between phylocode and ICBN.
- (c) Branches of Ethnobotany and uses.
- (d) Categories of Biosystematics.

3. Answer any two of the following : 10×2

- (a) Define taxonomic hierarchy. Who first proposed the taxonomic hierarchy? Mention the ranks in descending orders with suitable examples upto species category (one from Magnoliopsida and another from Liliopsida). What does it mean by delimitation of taxa?

2+1+(3+2)+2

- (b) What are the basic differences between biodiversity and megadiversity? Mention the importance of biodiversity. Define 'hotspot'. How many hotspots are in India? With the help of line drawing point out the hotspots position in India.

3+2+2+1+2

- (c) What is meant by recent system of classification? Name the proponent of this classification system. Represent a sketch of APG-I system of classification. What is basal angiosperms? 2+2+4+2
- (d) What is 'NPC' system? Who first proposed this system? Give in details with the help of diagrams of the NPC system. What are the merits and demerits of this system? 1+1+6+(1+1)
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