

## Information Technology for plant Science.

### F. (COMPUTER APPLICATION IN BOTANY)

**UNIT. I.** Computers – definition, history, types and uses. Organization of digital computers, input devices, processing units, memory, output devices, other parts.

**UNIT II.** Interpreters, compilers, operating system (MS-DOS)(MS-WINDOWS).

**UNIT III.** Algorithms, flow chart, representation of numbers and characters.

**UNIT IV** Programming languages, low and high level languages.

Basics of programming in BASIC and FORTRAN with special reference to biological applications.

**UNIT V.** Computer programmes for the nucleic acid, protein synthesis, biomolecular structure, disease fore-casting, Mathematical modeling, Ecology, Taxonomy and related problems.

### References and Books for computer applications in Botany

Dummies- Windows 98

Dummies- Internet

e-mail for Dummies

Rapidex computer course- Pushtak mahal, New Delhi

Rick Altman- Corel Draw ~~2~~, Fourth edition, BPB Publications, New Delhi

Training guide to Microsoft Office- 98- BPB Publications, New Delhi

Training guide to Microsoft Excel

ABCs of DOS

Mastering local area networks

Nucleic acids and protein sequence analysis a practical approach, Edited by Bishop and Rawlings, IRL Press, Oxford.

Micro Computers in Biology, IRL Press, Oxford.

Rod Green-shields, Resources and applications of Biotechnology., The Macmillan Press Ltd., London.

Roger L. Miesfield, Applied Molecular Genetics, Wiley - Liss, A John Wiley & Sons, Inc., Publications, New York.

B.K.Chaturvedi- Basic Computer Knowledge, Diamond Pocket Books Pvt.Ltd., New Delhi.

Utpal Mallik- Computers in the Biology Classroom, NCERT Publications, New Delhi.

Bly, R.W.- The Puffin Dictionary of Computer Words- Penguin Books Australia Ltd., Ringwood, Victoria, Australia.

Tapan Bhattacharya- His Master's Slave, Publications & Information Directorate, Dr. K. S., Krishnan Marg, New Delhi.

John Cookson and Lain Richmand- Programmng in Basic, John Wiley & Sons, N.Y.

IBM PC DOS and Microsoft Windows User's Guide(1995).