SARDAR PATEL UNIVERSITY
Programme: MSC (Integrated Biotechnology)
Semester: I
Syllabus with effect from: June 2010

Paper Code: PS01CIGB03	**Total Credits: 3**
Title Of Paper: Introduction To Computers	

Unit	Description in detail	Weightage (%)
1	**INTRODUCTION** Overview of computer organization and historical perspective computer applications in various fields of science and management. **Data representation** : Number systems, character representation codes, Binary, hex, octal codes and their inter conversions. Binary arithmetic, floating point arithmetic, signed and unsigned numbers.	
2	**DATA STORAGE** Primary and secondary storage. Introduction to various computer devices such as keyboard, mouse, printers, disk files, floppies etc. Concept of computing, contemporary, operating system such as DOS, Windows 95, UNIX etc. (only brief user level description). Introduction to organization and architecture of mainframe, mini and micro systems. Introduction to E-mail, ftp, login and other network services, worldwide web.	
3	**MS-OFFICE & HTML** Applications of Word processors and Spread sheets. **MS Word** : Working with Paragraphs, Working with Documents, Using Tables, Working with Pictures and Charts and using Mail Merge, Advanced Features to create and modify forms, form control (drop-down list), Use advanced text alignment features with graphics, Customize toolbars, Insert comments, Protect documents and Track changes to a document. **MS-Excel**: Formatting Numbers, Working with Named Ranges, Working with Toolbars, Auditing a Worksheet, Displaying and Formatting Data, Applying number formats, Applying formulae, Creating charts and using Macros. **HTML:** Basics of HTML: How to write it. Basic text: Paragraphs, line breaks, headings, strong and emphasized text. More text: Quotations, pre-formatted text, and rule lines. Typography: Changing the font size, family, and color. Plus information about using color in Web Design and adding in special characters to your pages. Lists: Numbered lists, bulleted lists, and definition lists.	
4	**ADVANCE HTML AND MACROMEDIA FLASH** Images: Using graphics on Web pages, uploading graphics, adding photos, making them small. Links: Creating and using links, both internal (bookmarks) and external. Plus image maps and how to create them. Tables: The basics of HTML tables and how to create them on your Web site. Frames: What they are and how to build a framed Web page. Forms: Adding interactivity to your Web pages. **MACROMEDIA FLASH** Exploring the Flash Environment Drawing and Painting: Basic Drawing and Painting Tools, Applying Strokes and Fills to Existing Shapes, Creating Custom Colors, Gradients and Line Styles.	

	Manipulating Objects: Manipulating Vector Shapes, Single Layer Vector Shape Interaction, Transforming and Grouping Vector Shapes, Importing Artwork and Working with Bitmaps. Working with Text: Creating Text Blocks and Text Fields, Converting Text into Shapes. Multiple Layers in a Movie: Working with Layers, Mask Layers and Aligning Vector Shapes. **Creating Animation: Creating Animation, Motion Tweening, Using a Guide Layer, Mask Animations and Publishing Flash Movie.**	
	Practical:	
	As per theory.	

Basic Text & Reference Books:

- Introduction to Computers – Leon and Alexis, Leon Tech world, Chennai-1999.
- Fundamentals of Computer – Rajaraman V., PHI Limited, New Delhi, 4th Edition-2003.
- Internet: An introduction – Cistems, TMH Publishing, New Delhi, 7th reprint-2002.
- Office 2007 Bible – Walkenbach John, Wiley India (P) Ltd, New Delhi, 1st edition-2007.
- Teach yourself Web publishing with HTML in 21 days by Lemey, BPB publication
- Macromedia Flash 8 by Amstrong, Tech Media Publishers.
- Macromedia Flash Unleashed**.**