

**S.G.M.EnglishMediumCollege of Commerce and Management
Course Plan (2013 - 2014)**

TYBCA (Semester-V)

Computer Graphics

FACULTY NAME: Palak Patel

Course Objectives:

1. To introduce the basic concepts of computer graphics to the students.
2. To teach the concepts, algorithms, attributes and clipping operations of output primitives.
3. To teach one of the computer graphics softwares - FLASH for 2-D animation creation.

Unit No.	Topics	No. of Lectures
1	Introduction of Computer Graphics	
	A survey of major applications of Computer Graphics	1
	Overview of different video display Devices: CRT, Raster scan, Color Monitors, DVST, Flat Panels	2
	Input Devices: Keyboard, Mouse, Trackball, Spaceball, Joystick, Data Glove, Digitizers, Image Scanner, Touch Panel, Light pen & Voice System	1
	Hardcopy Devices: Printers and Plotters	1
	Graphics Software and Coordinate representation	
	Graphics Functions	
	Software Standards	1
	Logical Classification of input Devices	
	Input modes (request, sample & event mode – Definitions)	1
<i>TOTAL NO. OF LECTURES / UNIT</i>		6
2	Output Primitives and their attributes	
	Output Primitives: Points, Lines, Circles	1
	Line Drawing Algorithm (Without program): Digital Differential Analyzer (DDA) and Bresenham	2
	Circle generating algorithm (without program): Midpoint Circle Algorithm	2
	Filled Area primitives: Scan Line Polygon Fill Algorithm (Without Program)	1
	Inside-Outside tests: Odd even rule & Non-zero winding number rule	2
	Boundary Fill Algorithm (with procedure)	1
	Flood Fill Algorithm (with procedure)	1
	Character Generation	1
	Attributes: Line, Color, Area fill, Character	2
<i>TOTAL NO. OF LECTURES / UNIT</i>		13
3	Transformations and Clipping	
	Transformations: Translation, Rotation, Scaling, Reflection & Shear (with example)	1
	Viewing Pipeline, Window-to-Viewport transformation	1
	Point Clipping	1

	Line Clipping (Without Program)	1
	Cohen Sutherland line clipping algorithm	1
	Polygon Clipping	1
	Sutherland Hodgeman polygon clipping algorithm	2
	Text Clipping	2
	Exterior Clipping	2
	TOTAL NO. OF LECTURES / UNIT	12
4	Introduction to 2D Animation Package and Scripting Language	
	Timeline Window, Layers, Key Frame, Frames	1
	Toolbox	2
	Types of Symbols	1
	Types of Animation – Frame By Frame and Tween (Motion and Shape)	2
	Onion Skinning	1
	Import and Export images	1
	Publish settings, Guided Layer, Alpha Effect, Using Color properties (Brightness , Tint), Masking (Using Filled shape, Text), Motion guide and Movie Clip Mask	3
	Introduction to Action scripting	1
	Play & Stop, GetURL	1
TOTAL NO. OF LECTURES / UNIT	13	

Total No. of Lectures/Labs : 44

Weightage of Unit : 25 % / Unit

Total No. of Lecture(s) : 4 / week

Total No. of Practical(s) : 4 / week

List of Reference Books : **1.** Computer Graphics by Donald Hearn & M. Paulin Baker, PHI, 1995
2. Macromedia Flash MX 2004 in 24 Hours by Robert Renihardt and Snow Dowd
3. Flash MX-Manual

Course Outcomes:

1. Students are able to describe the concepts of computer graphics.
2. Students have clear concept about the creation and modification of output primitives to be displayed on output devices.
3. Students are able to create various animated movies using FLASH.

**S.G.M.EnglishMediumCollege of Commerce and Management
Course Plan (2013 - 2014)**

FYBCA (Semester-I)

Desktop Publishing

FACULTY NAME: Palak Patel

Course Objectives:

4. To make students aware of the concepts of publication.
5. To make students aware of the various facilities and options of Desktop Publishing Software-Page Maker 7.
6. To make students able to create different publications in Page Maker 7.

Unit No.	Topics	No. of Lectures
1	Introduction	
	Publishing – meaning and planning	2
	Graphics and desktop publishing	
	Publication purpose and effectiveness	2
	Introduction to a popular desktop publishing software	
	key features	1
Total Lectures	05	
2	Using DTP Software-I	
	Working with document - creating, saving, printing, etc.	1
	Working with tools and pallets, navigation	2
	Working with margins, indents, tabs and ruler	1
	Working with text, paragraph and graphics	2
	Total Lectures	06
3	Using DTP Software-II	
	Working with multipage documents	1
	Working with master pages, hyperlinks	2
	Working with frames, text frames	1
	Using tables	1
	Total Lectures	05
4	Using DTP Software-III	
	Using styles and story board	3
	Working with objects, forms	
	Working with templates	2
	Importing and exporting	1
	Total Lectures	06

Course Outcomes:

1. Students are aware of the concepts of publication.
2. Students are able to work with the various facilities and options of Desktop Publishing Software-Page Maker 7.
3. Students are able to create different publications in Page Maker 7 on their own.

Total No. of
Lectures/Labs : 22

Weightage of Unit : 25 % / Unit

Total No. of : 2 / week

Lecture(s)

List of Reference : 1. Jain S. : PageMaker 7 Training Guide, BPB, 2008
Books : 2. Busch : Teach Yourself PageMaker 6.5 for Mac & Windows, BPB, 2002
3. Connally C. : PageMaker (R) 7 – The Complete Reference, McGraw-Hill/Osborne Media, 2002
4. Manuals of relevant software packages

S.G.M.EnglishMediumCollege of Commerce and Management

Course Plan (2013 - 2014)

FYBBA-ITM (Semester-I)

Personal Computer and Software Packages

FACULTY NAME: Palak Patel

Course Objectives:

7. To make students aware of the various facilities and options of WORD.
8. To make students aware of the various facilities and options of EXCEL.
9. To make students aware of the various facilities and options of PowerPoint.

Unit No.	Topics	No. of Lectures	
	Word Processing Tool		
1	Introduction to Word Processing & Word Processors	4	
	Examples of some popular word processing packages		
	Uses of word processor		
	Application of Word Processor		
	Creating, Editing, Formatting of Documents		
	File, Edit , View menus, Header & Footer Option		
	Full Screen, Zoom, Font, Bullets, Border, paragraph, Change Case, Drop Cap options, Search and replacement of text, Print Features		4
	Mail Merge Facility, Auto Text, Spelling checker,		5
	Table creation, deletion, selection and formatting, Picture, word art & drawing toolbar facilities		3
	<i>TOTAL NO. OF LECTURES / UNIT</i>		<i>16</i>
	Spreadsheet Tool		
2	Introduction to spread sheet, Examples of some popular spreadsheet packages, Uses of spread sheet packages, Applications of spreadsheets,	1	
	All Formatting categories for Cell, Formula and Function Concepts,		
	In-Built Functions- Math & Trig Functions: SUM(), PRODUCT(), ABS(), FACT(), INT(), SUMIF(), POWER(), MOD(), ROUND(), ROUNDUP(), ROUNDDOWN(), TRUNC()	2	
	In-Built Functions- String Functions: LOWER(), UPPER(), PROPER(), LEN(), MID(), CHAR(), CODE(), SUBSTITUE(), EXACT(), FIND(), CONCATENATE(), REPT(), TRIM()	3	
	In-Built Functions- Statistical Functions: AVERAGE(), COUNT(), COUNTIF(), COUNTA(), MAX(), MIN()	3	
	In-Built Functions- Logical Functions: AND(), OR(), NOT, IF()	5	
	<i>TOTAL NO. OF LECTURES / UNIT</i>	<i>14</i>	

Advance EXCEL		
3	Macro Facility	2
	Graph-Plotting facilities (with formatting graph)	3
	Sort option, AutoFilter option, Advance Filter	3
	Pivot Table & Chart facility	3
	<i>TOTAL NO. OF LECTURES / UNIT</i>	<i>11</i>
MS POWER POINT		
4	Creating Presentation	2
	Formatting Slides, Slide Transition, Slide Animation	3
	Inserting Picture, sound, chart etc.	1
	Loop creation to run slides, drawing toolbar	4
	Linking Files & Slides	4
	<i>TOTAL NO. OF LECTURES / UNIT</i>	<i>14</i>

Total No. of : 55

Lectures/Labs

Weightage of Unit : 25 % / Unit

Total No. Of Lecture(s) : -

Total No. Of Practical(s) : 6 / week

List of Reference Books : 1. R K Taxali – PC Software
2. Master of Power Point 2000- Katherine Murray (BPB
Publication)

Course Outcomes:

4. Students are able to work with various facilities and options of WORD.
5. Students have clear concept of all the facilities and options of EXCEL.
6. Students can prepare a good presentation using different facilities and options of PowerPoint.