

### LESSON PLAN

Name of the Assistant Professor : KIRANPAL SINGH VIRK

Class and Section: B.SC. Computer Application – VI Semester

Subject: PAPER 1 : Multimedia Tools (Thursday, Friday, Saturday)

PAPER 2: Advance Programming in C++ (Monday, Tuesday, Wednesday)

WEEK	DATE	TOPICS
1	1-Jan-18	Dynamic Polymorphism
	2-Jan-18	Function Overriding
	3-Jan-18	Function Overriding
	4-Jan-18	Multimedia Introduction: Definition, Characteristics, Multimedia Classification, Multimedia elements
	5-Jan-18	Multimedia devices: Multimedia Input devices, Output devices
	6-Jan-18	Multimedia devices: Communication devices, memory devices
	7-Jan-18	<b>SUNDAY</b>
2	8-Jan-18	Virtual Function and its Need
	9-Jan-18	Virtual Function and its Need
	10-Jan-18	Pure Virtual Function
	11-Jan-18	Application of multimedia: General Applications, Edutainment, application in interactive television
	12-Jan-18	Multimedia applications in entertainment & performing arts, Multimedia use in museum and galleries
	13-Jan-18	Concept generation of multimedia project;
	14-Jan-18	<b>SUNDAY</b>
3	15-Jan-18	Abstract Class
	16-Jan-18	Abstract Class
	17-Jan-18	Virtual Derivation
	18-Jan-18	Process and stages of multimedia production, Multimedia production team members
	19-Jan-18	PAPER 1 : Assignment I Total class strength will be divided into groups. Each group shall have 3 students(Maximum) Different assignment will be given to each group. Each group has to prepare a power point presentation and submit the same on Google Drive up to 29-Jan-2017)
	20-Jan-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 1)
	21-Jan-18	<b>SUNDAY</b>
4	22-Jan-18	<b>VASANT PANCHAMI</b>
	23-Jan-18	Virtual Destructor
	24-Jan-18	<b>SIR CHHOTU RAM JAYANTI</b>
	25-Jan-18	Text – Concepts of plain & formatted, text, RTF & HTML texts
	26-Jan-18	<b>REPUBLIC DAY</b>
	27-Jan-18	using common text preparation tools, Conversion to and from of various text formats, using standard software
	28-Jan-18	<b>SUNDAY</b>
5	29-Jan-18	Virtual Destructor
	30-Jan-18	PAPER 2 : Assignment I Total class strength will be divided into groups. Each group shall have 3 students(Maximum) Different assignment will be given to each group. Each group has to prepare a power point presentation and submit the same on Google Drive up to 09-Feb-2017)
	31-Jan-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 1)

WEEK	DATE	TOPICS
1	1-Feb-18	using common text preparation tools, Conversion to and from of various text formats, using standard software
	2-Feb-18	using common text preparation tools, Conversion to and from of various text formats, using standard software
	3-Feb-18	Object Linking and Embedding concept
	4-Feb-18	<b>SUNDAY</b>
2	5-Feb-18	Type Conversion
	6-Feb-18	Basic Type Conversion
	7-Feb-18	Conversion between objects and basic types
	8-Feb-18	Basics of font design, overview of some fonts editing and designing tools
	9-Feb-18	Understanding & using various text effects
	10-Feb-18	<b>MAHARSHI DAYANAND SARASWATI JAYANTI</b>
11-Feb-18	<b>SUNDAY</b>	
3	12-Feb-18	Conversion between objects of different classes
	13-Feb-18	<b>MAHA SHIVRATRI</b>
	14-Feb-18	Inheritance
	15-Feb-18	Images – importance of graphics in multimedia, Vector and Raster graphics
	16-Feb-18	image capturing methods – scanner, digital camera etc., Image file formats – BMP,
	17-Feb-18	Image file formats – BMP, DIB, EPS, CIF, PEX, PIC, JPG, TGA, PNG and TIF format – their features and limitations
18-Feb-18	<b>SUNDAY</b>	
4	19-Feb-18	Rules of Derivations – Private
	20-Feb-18	Rules of Derivations – Protected
	21-Feb-18	Rules of Derivations – Public
	22-Feb-18	graphic file formats conversions
	23-Feb-18	processing images with common software tools such as Photoshop
	24-Feb-18	processing images with common software tools such as Photoshop
25-Feb-18	<b>SUNDAY</b>	
5	26-Feb-18	Inheritance
	27-Feb-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 2)
	28-Feb-18	<b>WINTER BREAK FROM 28.02.2017 TO 04.03.2017</b>

WEEK	DATE	TOPICS
1	1-Mar-18	<b>GURU RAVIDAS BIRTHDAY</b>
	2-Mar-18	<b>HOLI</b>
	3-Mar-18	<b>WINTER VACATION</b>
	4-Mar-18	<b>SUNDAY</b>
2	5-Mar-18	Different Forms of Inheritance - Single
	6-Mar-18	Different Forms of Inheritance – Multiple, Multilevel,
	7-Mar-18	Different Forms of Inheritance –Hierarchical and Multipath Inheritance
	8-Mar-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 2)
	9-Mar-18	Sound and its Attributes, Mono V/s Stereo sound, Sound channels
	10-Mar-18	Sound and its effect in multimedia, Analog V/s Digital sound
	11-Mar-18	<b>SUNDAY</b>
3	12-Mar-18	Roles of Constructors in Inheritance
	13-Mar-18	Roles of Constructors in Inheritance
	14-Mar-18	Roles of Destructors in Inheritance
	15-Mar-18	Basics of digital sounds-Sampling, Frequency, Sound Depth,Channels
	16-Mar-18	Sound on PC, Sound standards on PC, Capturing and Editing sound on PC, Overview and using some sound recording, editing software,
	17-Mar-18	Overview of various sound file formats on PC – WAV, MP3, MP4 etc
	18-Mar-18	<b>SUNDAY</b>
4	19-Mar-18	Genericity in C++:
	20-Mar-18	Genericity in C++:
	21-Mar-18	Templates in C++
	22-Mar-18	Animation: Basics of animation, Principle and use of animation in multimedia, Effect of resolutions, pixel depth, Images size on quality and storage.
	23-Mar-18	<b>SHAHEEDI DIWAS OF BHAGAT SINGH, RAJGURU &amp; SUKHDEV</b>
	24-Mar-18	Overview of 2-D and 3-D animation techniques: Cell Animation, Kinematics, Morphing, RotoScoping, Antialiasing
	25-Mar-18	<b>SUNDAY/ RAM NAVAMI</b>
5	26-Mar-18	Function templates
	27-Mar-18	PAPER 2: Assignment 2 Different assignment will be given to each student. Each student has to prepare a 8-10 hand written page assignment, and submit the hand written copy to class teacher and submit scanned copy of the same on Google Drive up to 04-Apr-2017)
	28-Mar-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 3)
	29-Mar-18	Overview of 2-D and 3-D animation techniques: Cell Animation, Kinematics, Morphing, RotoScoping, Antialiasing
	30-Mar-18	Features of Computer Animation software- animation pro, 3D studio & Paint Shop pro animator. Animation on the Web – features and limitations
	31-Mar-18	creating simple animations for the Web using GIF Animator and Flash.

WEEK	DATE	TOPICS
1	1-Apr-18	<b>SUNDAY</b>
	2-Apr-18	Class templates in C++
	3-Apr-18	Exception Handling in C++
	4-Apr-18	try, throw and catch
	5-Apr-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 3)
	6-Apr-18	PAPER 1: Assignment 2 Different assignment will be given to each student. Each student has to prepare a 8-10 hand written page assignment, and submit the hand written copy to class teacher and submit scanned copy of the same on Google Drive up to 16-Apr-2017)
	7-Apr-18	Video: Basics of Video – Analog and Digital Video, Introduction to graphics accelerator cards, DirectX
	8-Apr-18	<b>SUNDAY</b>
2	9-Apr-18	try, throw and catch
	10-Apr-18	try, throw and catch
	11-Apr-18	Files I/O in C++: Class , Hierarchy for Files I/O
	12-Apr-18	Introduction to AV/DV and IEEE1394 cards, Digitization of analog video to digital video, Interlacing and non-interlacing,
	13-Apr-18	Various video standards – NTSC, PAL, SECAM, HDTV, Introduction to video capturing
	14-Apr-18	<b>DR AMBEDKAR JAYANTI / VAISAKHI</b>
	15-Apr-18	<b>SUNDAY</b>
3	16-Apr-18	Text versus Binary Files, Opening and Closing Files, File Pointers
	17-Apr-18	Operation on files.
	18-Apr-18	Operation on files.
	19-Apr-18	Media & instrument – Videodisk, DVCAM, Camcorder, Introduction to digital video compression techniques and file formats – AVI, MPEG, MOV, Real Video.
	20-Apr-18	Multimedia on the Web: Bandwidth relationship, broadband technologies, Text in the web – Dynamic and embedded font technology, Audio on the Web – Real Audio and MP3/MP4, Audio support in HTML,
	21-Apr-18	Graphics – HTML safe color palate, Interlaced V/s Non interlaced model, Graphics support in HTML, Image Map, Video on the Web – Streaming video, Real Video, MPEG and SMIL, Virtual Reality on the Web.
	22-Apr-18	<b>SUNDAY</b>
4	23-Apr-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 4)
	24-Apr-18	Queries on Paper 2: Unit 1,2
	25-Apr-18	Queries on Paper 2 : Unit 3,4
	26-Apr-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 4)
	27-Apr-18	Queries on Paper 1: Unit 1,2
	28-Apr-18	Queries on Paper 1 : Unit 3,4