

# INDIRA PRIYADARSHINI COLLEGE, CHHINDWARA ( M.P.)

## CONSPECTUS

CLASS- **B.C.A. V Sem.**

SUBJECT- **Computer Graphics**

Date	Unit	Proposed Contents	Remark
01 Aug 14 - 06 Aug 14	I	Introduction to Computer Graphics, Types of refresh graphics displays,	
07 Aug 14 – 12 Aug 14		CRT Raster Scan basics, Video Basics,	
13 Aug 14 - 18 Aug 14		Interactive input and output Devices, Raster scan graphics,	
19 Aug 14 - 24 Aug 14		Line drawing algorithms, Bresenham's algorithm,	
25 Aug 14 - 31 Aug 14		Scan Conversion, polygon filling.	
01 Sep 14 - 06 Sep 14	II	Clipping- 2D clipping, line clipping algorithms, Cyrus-Beck algorithm convex polygon & inward normal,	
07 Sep 14 – 12 Sep 14		concave clipping, 3D clipping, midpoint subdivision algorithm Cyrus-Beck algorithm,	
13 Sep 14 - 18 Sep 14		Homogeneous co-ordinate clipping,	
19 Sep 14 - 24 Sep 14		concave clipping character clipping.	
25 Sep 14 - 30 Sep 14			
	III	Hidden line and Hidden surface algorithms,	
01 Oct 14 - 06 Oct 14		Floating horizon, Roberts- Warnock,	
07 Oct 14 – 12 Oct 14		Weiler-Atherton-Subdivision-Z-buffer,	
13 Oct 14 - 18 Oct 14		Scan lines – spanning scan line- racy tracing algorithm.	
19 Oct 14 - 24 Oct 14			
25 Oct 14 - 31 Oct 14			
01 Nov 14 - 06 Nov 14	IV	Rendering, illumination model,	
07 Nov 14 – 12 Nov 14		surface normal, Reflection vector,	
13 Nov 14 - 18 Nov 14		shading, transparency,	
19 Nov 14 - 24 Nov 14		Shadows, Texture,	
25 Nov 14 - 30 Nov 14		Ray tracing, color.	

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## CONSPECTUS

CLASS- B.C.A. V Sem.

SUBJECT- UNIX and Shell Programming

Date	Unit	Proposed Contents	Remark
01 Aug 14 - 06 Aug 14	I	Unix Operating System – the kernel structure,	
07 Aug 14 – 12 Aug 14		Files and commands, directories, shell, The file system basics,	
13 Aug 14 - 18 Aug 14		Directories and file names, permissions,	
19 Aug 14 - 24 Aug 14		Inodes, devices,	
25 Aug 14 - 31 Aug 14		Introduction of Unix Editors including- nroff, troff.	
01 Sep 14 - 06 Sep 14	II	Unix file system commands: cat ,cp, mv, rm,	
07 Sep 14 – 12 Sep 14		hard and soft links, wc, chmod, chown Shell, command line structures,	
13 Sep 14 - 18 Sep 14		creating new commands, I/O redirection Pipes and Filters,	
19 Sep 14 - 24 Sep 14		grep family, stream editor(sed),	
25 Sep 14 - 30 Sep 14		pattern scanning and processing language awk.	
01 Oct 14 - 06 Oct 14	III	Shell programming- Shell scripts, The Bourne,	
07 Oct 14 – 12 Oct 14		Korn and C shell, Shell variables and shell scripts,	
13 Oct 14 - 18 Oct 14		Meta characters and environment variables,	
19 Oct 14 - 24 Oct 14		Arguments and parameters,	
25 Oct 14 - 31 Oct 14		Conditional statements and loops of both shells.	
01 Nov 14 - 06 Nov 14	IV	UNIX system calls. I/O file system, processes,	
07 Nov 14 – 12 Nov 14		signals and interrupts. System Administration in UNIX	
13 Nov 14 - 18 Nov 14		User management,	
19 Nov 14 - 24 Nov 14		Device management.	
25 Nov 14 - 30 Nov 14		Process management,	

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## CONSPECTUS

**CLASS- B.C.A. V Sem.**

**SUBJECT- Software Engineering**

Date	Unit	Proposed Contents	Remark
01 Aug 14 - 06 Aug 14	I	Software as a product,	
07 Aug 14 – 12 Aug 14		Software characteristics and components,	
13 Aug 14 - 18 Aug 14		Software process models,	
19 Aug 14 - 24 Aug 14		Linear prototype and RAD models,	
25 Aug 14 - 31 Aug 14		Evolutionary models formal methods model.	
01 Sep 14 - 06 Sep 14	II	Software process and project matrices,	
07 Sep 14 – 12 Sep 14		Software measurement, metric for software quality.	
13 Sep 14 - 18 Sep 14		Software project scheduling and tracking.	
19 Sep 14 - 24 Sep 14		task set for software project,	
25 Sep 14 - 30 Sep 14		Scheduling the task.	
01 Oct 14 - 06 Oct 14	III	Software analysis concept and principles,	
07 Oct 14 – 12 Oct 14		Modeling, partitioning specifications,	
13 Oct 14 - 18 Oct 14		Software design process, principles and concepts,	
19 Oct 14 - 24 Oct 14		Design concepts,	
25 Oct 14 - 31 Oct 14		Modular design.	
01 Nov 14 - 06 Nov 14	IV	Software testing methods,	
07 Nov 14 – 12 Nov 14		basis path testing,	
13 Nov 14 - 18 Nov 14		control structure testing,	
19 Nov 14 - 24 Nov 14		black and white box testing,	
25 Nov 14 - 30 Nov 14		Testing GUI and Client - server architecture.	

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## CONSPECTUS

CLASS- **B.C.A. V Sem.**

SUBJECT- **Computer Networking**

Date	Unit	Proposed Contents	Remark
01 Aug 14 - 06 Aug 14	I	Computer hardware & Software,	
07 Aug 14 – 12 Aug 14		Reference models: OSI and	
13 Aug 14 - 18 Aug 14		TCP/IP. Novel Netware,	
19 Aug 14 - 24 Aug 14		Data communication services.	
25 Aug 14 - 31 Aug 14		B-ISDN model.	
01 Sep 14 - 06 Sep 14	II	Physical layer- Transmission media wireless transmission,	
07 Sep 14 – 12 Sep 14		RS - 232C and RS 449, Multiplexing.	
13 Sep 14 - 18 Sep 14		FDH, TDM, Switching.	
19 Sep 14 - 24 Sep 14		Narrow band and broadband ISDN,	
25 Sep 14 - 30 Sep 14		Communication satellite.	
01 Oct 14 - 06 Oct 14	III	Data link layer - framing error detection and correction,	
07 Oct 14 – 12 Oct 14		Data link protocol. Simplex protocol,	
13 Oct 14 - 18 Oct 14		Sliding protocol HDLC, SLIP, PPP,	
19 Oct 14 - 24 Oct 14		Medium access sublayer IEEE standard 802 for LANS and MANS.	
25 Oct 14 - 31 Oct 14		High speeds LANs Fast Ethernet, Satellite networks.	
01 Nov 14 - 06 Nov 14	IV	Network layer design, Inter networking,	
07 Nov 14 – 12 Nov 14		Network layer in the Internet. Routing algorithms,	
13 Nov 14 - 18 Nov 14		The transport service, transport protocol,	
19 Nov 14 - 24 Nov 14		The Application layer,	
25 Nov 14 - 30 Nov 14		Network security, DNS.	

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## CONSPECTUS

CLASS- **B.C.A. V Sem.**

SUBJECT- **(c) WebTechnology**

Date	Unit	Proposed Contents	Remark
01 Aug 14 - 06 Aug 14	I	Data transmission protocols,	
07 Aug 14 – 12 Aug 14		client/server architecture & its characteristics,	
13 Aug 14 - 18 Aug 14		ftp & its usages. Telnet concept, remote logging, protocols,	
19 Aug 14 - 24 Aug 14		terminal emulation, message board,	
25 Aug 14 - 31 Aug 14		internet chatting – voice chat, text chat.	
01 Sep 14 - 06 Sep 14	II	WWW, History, working, web browsers, its functions concept of search engines,.	
07 Sep 14 – 12 Sep 14		Searching the web, http, URLs, web servers, web protocols.	
13 Sep 14 - 18 Sep 14		Web publishing Concepts, domain name registration, space on host server for web site,	
19 Sep 14 - 24 Sep 14		html, design tools, html editors, image editors,	
25 Sep 14 - 30 Sep 14		issues in web site creations & maintenance, ftp software for upload web site	
01 Oct 14 - 06 Oct 14	III	Concepts of hypertext, versions of html, elements of html syntax, head & body sections,	
07 Oct 14 – 12 Oct 14		Building html documents insertion texts, html tags,	
13 Oct 14 - 18 Oct 14		images, hyperlinks, backgrounds and color controls , different,	
19 Oct 14 - 24 Oct 14		table: table layout and presentation , use of font size & attributes,	
25 Oct 14 - 31 Oct 14		list types and its tags. Use of frames and forms in web pages.	
01 Nov 14 - 06 Nov 14	IV	JavaScript overview, JavaScript and the www, JavaScript vs. VB script, JavaScript vs. java, JavaScript versions,	
07 Nov 14 – 12 Nov 14		Script element, inline JavaScript, including JavaScript. Functions: functions introduction, calling functions.	
13 Nov 14 - 18 Nov 14		Java script comments: comments overview, when to comment, types of comments Variables: variables overview,	
19 Nov 14 - 24 Nov 14		Declaring variables, types of variables, casting variables, alert box. Expressions: arithmetic operators, assignment operators,	
25 Nov 14 - 30 Nov 14		logical operators, expressions and precedence. Statements: if statement, for statement, while statement, break/continue.	