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Revised:1 year 2009

Syllabus For

Certificate Course In Software Programming  
Trade

Under G.C.V.T. Pattern



Directorate of Employment & Training

(An ISO-9000:2000 Certified Organization )

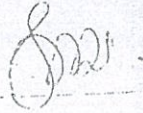
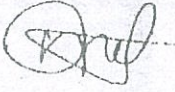
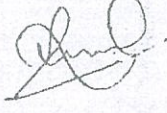

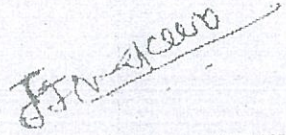
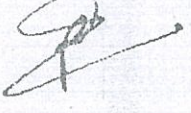
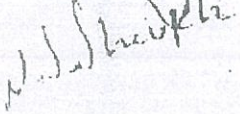
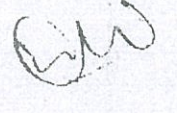
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## IT/COMPUTER FIELD RELATED TECHNICAL EXPERT OPINION

Sr. No.	Name of Expert	Designation	Address & Contact No.
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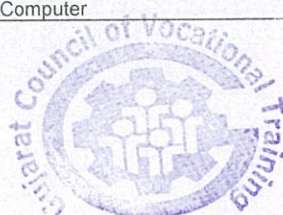
Syllabus for Software Programming						
Sr. No.	Week No.	Subject Code	Subject of Syllabus	Details of Teaching Topics	Duration in Weekly Hours	Duration in Daily Hours
1	1	1	Theory	INTRODUCTION TO COMPUTER, HISTORY OF COMPUTER-ATTRIBUTE TO THE PAST-GENERATIONS OF COMPUTER TYPES OF COMPUTERS -MICRO COMPUTER-MINI COMPUTER- MAINFRAMES-SUPER COMPUTER APPLICATIONS OF COMPUTERS ADVANTAGES OF COMPUTERS	12	2
		2	Practical	BASIC COMPUTER ORGANIZATION- INPUT DEVICES-MEMORY-PROCESSOR-OUTPUT DEVICES UNITS OF MEMORY TYPES OF MEMORY	24	4
		3	Soft Skill	1.11 , 1.12 , 2.01 , 3.01 , 6.01 , 7.01 , 8.02 , 11.01	6	1
					42	7
2	2	1	Theory	Concepts of an Operating System, Types of Operating System, Functions of an Operating System, Understanding Disk Organization, , Role of Config.sys	12	2
		2	Practical	DOS Internal Commands, DOS External Commands, DOS Device Descriptors, Importance of MS-DOS. SYS; COMMAND.COM , , Dos wildcards (*,?)	24	4
		3	Soft Skill	1.13 , 1.21 , 2.02 , 3.01 , 5.01 , 6.02 , 8.01 , 11.02	6	1
					42	7
3	3	1	Theory	WINDOWS'98 UNDERSTANDING WINDOWS MAXIMIZING/MINIMIZING WINDOWS MOVING/CLOSING/ENLARGING WINDOWS USING SYSTEM MENU WINDOWS TOOLBAR , Introduction to windows NT 4.0	12	2
		2	Practical	INSTALLED APPLICATION/UNINSTALL APPLICATION WINDOWS SETUP PAGE PAINT WORDPAD NOTEPAD CALCULATOR , DOS Internal Commands, DOS External Commands, DOS Device Descriptors	24	4
		3	Soft Skill	1.14 , 1.22 , 2.02 , 3.01 , 6.03 , 8.02 , 8.03 , 9.01 , 11.03	6	1
					42	7
4	4	1	Theory	Installing windows NT Server 4.0 Window NT workstation 4.0 Basics, Windows NT Server 4.0 Basics	12	2
		2	Practical	• MENU BAR• TOOLBOX • CONTROL PALETTE	24	4
		3	Soft Skill	1.23 , 2.02 , 3.02 , 4.01 , 6.04 , 8.03 , 11.04	6	1
					42	7
5	5	1	Theory	MENU BAR INTRODUCTION	12	2
		2	Practical	• FILE MENU• EDIT MENU• LAYOUT MENU• TYPE MENU• ELEMENT MEN• UTILITIES MENU• VIEW MENU• WINDOW MENU	24	4
		3	Soft Skill	1.15 , 1.24 , 2.03 , 3.02 , 5.02 , 6.04 , 8.02 , 8.07 , 11.05	6	1
					42	7
6	6	1	Theory	Intro. to Internet	12	2
		2	Practical	Uses & Advantage of Internet	24	4
		3	Soft Skill	1.25 , 2.03 , 6.04 , 8.02 , 8.07 , 10.01 , 11.06	6	1
					42	7
7	7	1	Theory	MS-FrontPage 2000	12	2
		2	Practical	Creating a Site, Working with Frames, Altering Images, Adding DHTML and Other Media, , Managing a Site, Othar Timesavers and New Features	24	4
		3	Soft Skill	1.16 , 1.26 , 2.04 , 6.05 , 8.02 , 8.11 , 8.12 , 8.13 , 10.02 , 11.07	6	1
					42	7
8	8	1	Theory	MS-FrontPage 2000	12	2
		2	Practical	create a Website in Frontpage	24	4
		3	Soft Skill	2.05 , 6.05 , 8.02 , 8.04 , 8.08 , 10.03 , 11.07	6	1
					42	7
9	9	1	Theory	Intro to Ms-office , Ms-Word	12	2
		2	Practical	Install Ms-Office, Ms-Word Start	18	3
		3	Soft Skill	1.17 , 1.27 , 2.01 , 3.01 , 6.01 , 7.02 , 8.05 , 10.01	12	2
					42	7
10	10	1	Theory	MeNU BAR INTRODUCTION & Command	12	2
		2	Practical	File, Edit, View,Insert Menubar Command	18	3



		3	Soft Skill	1.17, 4.01, 5.03, 6.01, 8.05, 9.01, 11.01	Total Hours :	12	2
11	11	1	Theory	MeNU BAR INTRODUCTION & Command		42	7
		2	Practical	Format, Tools, Table, Window, Help Menu Command		12	2
		3	Soft Skill	1.18, 1.27, 2.02, 3.01, 6.02, 7.02, 8.06, 10.03		18	3
					Total Hours :	12	2
12	12	1	Theory	Intro. To Oracle 8.0 DBA		42	7
		2	Practical	Install a Oracle 8.0		12	2
		3	Soft Skill	1.18, 4.02, 5.03, 6.02, 8.06, 9.02, 11.02		18	3
					Total Hours :	12	2
13	13	1	Theory	Tools of Oracle	2	42	7
		2	Practical	uses of Oracle Tools in Table		12	2
		3	Soft Skill	1.19, 1.27, 2.04, 3.02, 6.03, 7.03, 8.02, 10.03		18	3
					Total Hours :	12	2
14	14	1	Theory	DML & TCL Command		42	7
		2	Practical	Use of DML & TCL Command(Insert,Select,Update,Delete)		12	2
		3	Soft Skill	4.02, 5.04, 6.03, 8.09, 9.02, 11.03		18	3
					Total Hours :	12	2
15	15	1	Theory	Database Management		42	7
		3	Practical	Create a Forms in Oracle DBMS		12	2
		4	Soft Skill	1.27, 1.31, 2.05, 3.02, 6.04, 7.03, 8.09, 10.03		18	3
					Total Hours :	12	2
16	16	1	Theory	Oracle Forms	2	42	7
		2	Practical	Create a Forms/Reports in Oracle DBMS		12	2
		3	Soft Skill	1.32, 4.03, 5.04, 6.04, 8.1, 9.02, 11.04		18	3
					Total Hours :	12	2
17	17	1	Theory	Javascript Breakup	2	42	7
		2	Practical	Javascript Breakup Operators,Functions,Objects		12	2
		3	Soft Skill	1.27, 1.33, 2.06, 3.01, 6.05, 7.04, 8.1, 10.04		18	3
					Total Hours :	12	2
18	18	1	Theory	VBScript Breakup	2	42	7
		2	Practical	VBScript Breakup <script> Tag,Objects,Linking		12	2
		3	Soft Skill	1.34, 4.03, 5.05, 6.05, 9.03, 11.05		18	3
					Total Hours :	12	2
19	19	1	Theory	Advanced Java 2.0		42	7
		2	Practical	Intro. To Java 2.0 & Install a Java 2.0		12	2
		3	Soft Skill	1.28, 1.35, 2.07, 3.01, 6.06, 7.04, 8.11, 10.04		18	3
					Total Hours :	12	2
20	20	1	Theory	Fundamental Programming Structure in Java	2	42	7
		2	Practical	Comments, Data Types,Integers, The Boolean Type,Variables,The Character Type,Constants,Strings		12	2
		3	Soft Skill	1.36, 4.04, 5.05, 6.06, 8.12, 9.03, 11.05		18	3
					Total Hours :	12	2
21	21	1	Theory	Objects & Classes in Java	2	42	7
		3	Practical	Intro to OOP & Relationship between Classes,Using Existing Classes,Use Multiple source File		12	2
		4	Soft Skill	1.28, 1.37, 2.01, 3.02, 6.01, 7.05, 8.13, 10.04		18	3
					Total Hours :	12	2
22	22	1	Theory	Interface & Inner class in Java	2	42	7
		2	Practical	Properties of Interface,Object Cloning, Inner Classes, Local & Static Inner Classes		12	2
		3	Soft Skill	1.31, 4.04, 5.06, 6.01, 9.03, 11.05		18	3
					Total Hours :	12	2
23	23	1	Theory	Graphics Programming		42	7
		2	Practical	Intro.to Swing, Create Frame		12	2
		3	Soft Skill	1.28, 1.32, 2.02, 3.02, 6.02, 7.05, 8.14, 10.04		18	3
					Total Hours :	12	2
24	24	1	Theory	User Interface Components with Swing		42	7
		2	Practical	Border Layout,Panels, text input,Text Fields		12	2
		3	Soft Skill	1.33, 4.05, 5.06, 6.02, 8.03, 9.04, 11.05		18	3
					Total Hours :	12	2
25	25	1	Theory	Applets in Java 2.0		42	7
		2	Practical	Applets in Java 2.0 Basics		12	2
		3	Soft Skill	1.28, 1.34, 3.01, 6.03, 8.03, 10.04		18	3
					Total Hours :	12	2
26	26	1	Theory	Exceptions & Debugging in Java		42	7
		2	Practical	Dealing with errors & Debugging		12	2
		3	Soft Skill	1.35, 4.05, 5.03, 6.03, 8.03, 9.04, 11.06		18	3
					Total Hours :	12	2
		1	Theory	Java Swing		42	7
					Total Hours :	12	2



27	27	2	Practical	Intro to Swing	18	3
		3	Soft Skill	1.29 , 2.04 , 3.01 , 6.04 , 7.05 , 8.02 , 8.07 , 10.05	12	2
					Total Hours :	42
28	28	1	Theory	Intro to Ms-Excel	12	2
		2	Practical	Ms-Excel Menu Command, File, Edit, View, Insert Menu	18	3
		3	Soft Skill	1.36 , 4.02 , 5.04 , 6.04 , 8.07 , 9.04 , 11.06	12	2
			Total Hours :	42	7	
29	29	1	Theory	Ms-Excel Menu Command	12	2
		2	Practical	Format, Tools, Data, Window, Help Menu Command	18	3
		3	Soft Skill	1.29 , 2.05 , 3.02 , 6.05 , 7.05 , 8.02 , 8.12 , 10.05	12	2
			Total Hours :	42	7	
30	30	1	Theory	E-mail Intro.	12	2
		2	Practical	Create E-mail, Send E-mail, Chatting	18	3
		3	Soft Skill	1.37 , 3.02 , 4.03 , 6.05 , 8.14 , 9.05 , 11.06 , 11.06	12	2
			Total Hours :	42	7	
31	31	1	Theory	Cutting Edge Technology	12	2
		2	Practical	Latest Information of the Current Software/Hardware	18	3
		3	Soft Skill	1.29 , 2.06 , 3.01 , 6.05 , 7.06 , 8.02 , 8.03 , 10.05	12	2
			Total Hours :	42	7	
32	32	1	Theory	Intro to Ms-office & PowerPoint	12	2
		2	Practical	Install Ms-Office, Menu Command	18	3
		3	Soft Skill	1.31 , 2.07 , 3.01 , 6.06 , 8.03 , 9.05	12	2
			Total Hours :	42	7	
33	33	1	Theory	Intro to C Programming	12	2
		2	Practical	Overview of C Program, history, Operators	18	3
		3	Soft Skill	1.32 , 2.01 , 3.02 , 6.06 , 7.06 , 8.02 , 8.03 , 10.05	12	2
			Total Hours :	42	7	
34	34	1	Theory	C Functions	12	2
		2	Practical	Create a Program in C Language	18	3
		3	Soft Skill	1.31 , 2.02 , 3.02 , 6.06 , 8.07 , 9.05 , 11.07	12	2
			Total Hours :	42	7	
35	35	1	Theory	Use Looping in C	12	2
		2	Practical	Create a Program in C Language Using Looping	18	3
		3	Soft Skill	1.32 , 2.04 , 3.01 , 6.06 , 7.06 , 8.05 , 8.07 , 10.05	12	2
			Total Hours :	42	7	
36	36	1	Theory	Search Engine Intro.	12	2
		2	Practical	Uses of Search Engine Google	18	3
		3	Soft Skill	1.31 , 2.05 , 3.01 , 6.06 , 8.07 , 9.06 , 11.07	12	2
			Total Hours :	42	7	
37	37	2	Theory	Intro to C++ Programming Language	12	2
		3	Practical	Starting with C++, What is C++	18	3
		4	Soft Skill	1.32 , 2.06 , 3.02 , 6.06 , 7.06 , 8.05 , 8.09 , 10.06	12	2
			Total Hours :	42	7	
38	38	1	Theory	Functions in C++	12	2
		2	Practical	Class & Objects in C++, C++ Streams, Work with Files	18	3
		3	Soft Skill	1.31 , 2.07 , 3.02 , 8.09 , 9.06 , 11.07	12	2
			Total Hours :	42	7	
39	39	1	Theory	Create a Website in Frontpage	12	2
		2	Practical	How to Create a Website in Frontpage	18	3
		3	Soft Skill	1.32 , 2.01 , 3.01 , 7.07 , 8.05 , 8.1 , 10.06	12	2
			Total Hours :	42	7	
40	40	1	Theory	Linux 7.0 Foundation & Advanced Topics	12	2
		2	Practical	Introduction & Installing Linux 7.0, use Red Hat Linux 7.0	18	3
		3	Soft Skill	1.33 , 2.02 , 3.01 , 8.1 , 9.06 , 11.07	12	2
			Total Hours :	42	7	
41	41	1	Theory	Database Management, Security, Backup in All Software	12	2
		2	Practical	Uses of Database Management, Security, Backup in All Software	18	3
		3	Soft Skill	1.33 , 2.04 , 3.02 , 7.07 , 8.06 , 8.14 , 10.06 , 12	12	2
			Total Hours :	42	7	
42	42	1	Theory	General Programming Language Techniques	12	2
		2	Practical	General Programming Language Techniques	18	3
		3	Soft Skill	1.34 , 2.05 , 3.02 , 7.07 , 8.06 , 10.06 , 12	12	2
			Total Hours :	42	7	
43	43	1	Theory	Intro.to Hardware	12	2
		2	Practical	Assemble the Computer	18	3
		3	Soft Skill	1.34 , 2.06 , 3.01 , 7.07 , 8.07 , 10.06 , 12	12	2
			Total Hours :	42	7	
44	44	1	Theory	Hardwae	12	2
		2	Practical	Assemble the Computer	18	3



		3	Soft Skill	1.34 , 2.07 , 3.02 , 7.07 , 8.12 , 10.06 , 12		12	2
					2	42	7
45	45	1	Theory	Industrial Attachment		0	0
		2	Practical	Industrial Attachment		42	7
		3	Soft Skill	Industrial Attachment		0	0
					2	42	7
46	46	1	Theory	Industrial Attachment		0	0
		2	Practical	Industrial Attachment		42	7
		3	Soft Skill	Industrial Attachment		0	0
					Total Hours :	42	7
						0	0
47	47	1	Theory	Industrial Attachment		42	7
		2	Practical	Industrial Attachment		0	0
		3	Soft Skill	Industrial Attachment		0	0
					2	42	7
						0	0
48	48	1	Theory	Industrial Attachment		42	7
		2	Practical	Industrial Attachment		0	0
		3	Soft Skill	Industrial Attachment		0	0
					Total Hours :	42	7
						0	0
49	49	1	Theory	Industrial Attachment		42	7
		2	Practical	Industrial Attachment		0	0
		3	Soft Skill	Industrial Attachment		0	0
					Total Hours :	42	7
						0	0
50	50	1	Theory	Industrial Attachment		42	7
		2	Practical	Industrial Attachment		0	0
		3	Soft Skill	Industrial Attachment		0	0
					Total Hours :	42	7
						0	0
51	51	1	Theory	Industrial Attachment		42	7
		2	Practical	Industrial Attachment		0	0
		3	Soft Skill	Industrial Attachment		0	0
					Total Hours :	42	7
						0	0
52	52	1	Theory	Industrial Attachment		42	7
		2	Practical	Industrial Attachment		0	0
		3	Soft Skill	Industrial Attachment		0	0
					5	42	7



**Minimum Hardware and Furniture required for Computer Software Programming trade under GCVT pattern :**

Sr. No.	Hardware and Furniture Specification	Quantity Reqd. for 4 Batches
1	Server with P-IV Processor C2D 2.5GHz with 1 GB RAM, 250 GB HDD, 1.44 MB FDD, Ethernet Card, 52x DVD Writer 17" SVGA Color Monitor, 101 Keyboard, Mouse, Sound Card and Speakers + Microphone Separate Telephone line for Internet connection with 56.6 Kbps Modem Web Camera and Mpeg Encoder	1
2	Nodes P-IV Processor C2D 2.5GHz with 1 GB RAM, 250 GB HDD, 1.44 MB FDD, Ethernet Card, 52x DVD Writer 17" SVGA Color Monitor, 101 Keyboard, Mouse, Sound Card and Speakers + Microphone Separate.	25
3	5 KVA Stabilizer	2
4	0.5 KVA UPS for Server	1
5	24 Port Switch for LAN RJ45 Connectors and UTP Cable	2 Hubs (Cable and Connectors as per Requirement)
6	132 Column Dot Matrix Printer	1
7	Desk Jet or Laser or Inkjet Printer	1
8	Scanner	1
9	Window A.C. With 1.5 and 2 ton capacity	2 (one of 1.5 Ton/ one of 2 Ton)
10	Vacuum Cleaner	1
11	Computer Tables with Sun mica Top Having Sliding Tray for Keyboard and one shelf for Storage	25
12	Student Chairs with Castor and Adjustable Height Having Cushion	25
13	Cushion Fix Chairs with Rest arm and Movable writing pads up port	25
14	White Board	2
15	Over Head Projector or any other Multi Media Type Display Device	1

**Software Specification :**

Windows NT (Server), Windows NT (Workstation) Core Java, JDK1.3, Flash 4.0, Dream weaver 3.0, Photoshop 5.5, MS-Office 2000

All Software should be license version

**Faculty Qualification :** Diploma in Computer Science/ Computer Application / Computer Technology (2 years OR more) by any Institution approved by AICTE OR BCA (3 year course) or MCA or BE (Computer Science) from any recognized university.

In addition to above, the faculty should have minimum 3 years of teaching experience in any reputed Computer Institute in respect of topics covered in the course.

