# Uttarakhand Sanskrit University Haridwar



#### **CURRICULUM**

#### **FOR**

### **Certificate in Computer Application**

(C.C.A.)

(06 Months: 1 Semester Program)

(Year 2019-2020)

## Uttarakhand Sanskrit University, Haridwar (Certificate in Computer Application) – 06 Months Paper Name: Computer Fundamental Paper- I

Total Marks: 100 Time: 03 Hours

External Marks: 80 Internal Marks: 20

Unit	Description	Total: 80
1	History of Development of Computers, Computer System Concept, Block diagram of Computer, Computer System Characteristics, Advantages and	16
	Disadvantages, Types of Computers, Basic Components of a Computer System – CPU, Control Unit, ALU, Register, Motherboard, System bus, SMPS, UPS;	
2	Computer Memory:	16
	Primary Memory: RAM, ROM, EPROM, EEPROM, Cache Memory; Primary Memory vs Secondary Memory.	
	Storage Devices - Magnetic Disks, Hard Disk Drives, Floppy Disks, Optical	
	Disks, Blue-Ray Disk, Other portable storage devices, Cloud Storage(Like	
	Google Drive etc.)	
3	Input Devices: Keyboard, Mouse, Joystick, Scanners, Digital Camera, MICR,	16
	OCR, OMR, OBR, Light pen, Touch Screen.	
	Output Devices: Monitors – Characteristics, Types of Monitor; Printers- Impact,	
	Non-Impact Printer, Dot Matrix, Inkjet, Laser Printer; Sound Card and Speakers;	
4	Computer Programming Languages- Machine, Assembly and High Level;	16
	Computer Software- Application Software, Systems Software, Open Source	
	Software, Operating System; Computer Virus and Antivirus.	
5	Communication and IT, Network Concept, Network Services, Component of	16
	Communication- Sender, Receiver, Transmission medium and Protocols.	
	Direction of Transmissions Flow- Simplex, Half Duplex, Full Duplex. Types of	
	Network - LAN, WAN, MAN. Topologies of LAN - Ring, Bus, Star, Mesh and	
	Tree topologies.	

#### **Text & Reference Books:**

- 1) Sinha P.K., "Computer Fundamentals", 6th Edition, BPB Publication, 2012.
- 2) Goel.A, "Computer Fundamentals", Reprint, Pearson Education, 2011.
- 3) Thareja R., "Fundamentals of Computers", Oxford University Press, 2014.
- 4) Rajaraman, V., "Computer Fundamentals", 6th Edition, PHI, 2012.
- 5) Srivastva C., "Fundamentals of Information Technology", 3rd Edition, Kalyani Publishers, 2008.
- 6) Stallings W., "Operating systems", 8th Edition, Pearson, 2014.

#### Uttarakhand Sanskrit University, Haridwar (Certificate in Computer Application) – 06 Months Paper Name: PC Packages Paper- II

Total Marks: 100 Time: 03 Hours

External Marks: 80 Internal Marks: 20

Unit	Description	Total: 80
1	Windows Operating System : Basics of Operating system , Operating Systems for	16
	Desktop and Laptop, Operating Systems for Mobile Phone and Tablets, User	
	Interface for Desktop and Laptop, Task Bar, Icons & shortcuts, Running an	
	Application, Operating System Simple Setting, Using Mouse and Changing its	
	Properties, Changing System Date and Time, Changing Display Properties, To	
	Add or Remove program and features, Adding, Removing & Sharing Printers, File	
	and Folder Management, Types of file Extensions;	
2	MS Word: Introduction, Area of use, Starting Word, Different Bars, Document	16
	View, Text Area, Exiting Word; Creating, Editing, Saving, Closing, Printing and	
	Opening an Existing Document.	
	Working with Fonts, Style, Layout, Paragraph, Cut, Copy, Paste, Undo and Redo,	
	Spell Check, Find, Replace, Bullets, Numbering, Header, Footer, Page-Setup, Page	
	Number. Creating Table, Modifying Table, Merging of Cells, Split Cells, Insert	
	Pictures, Symbols and Graphics. Mail Merge, Importing and exporting to and from	
	various formats.	1.0
3	MS Excel: Introduction, Area of use, Concepts of Workbook & Worksheets,	16
	Starting MS-Excel, different Bars, Row, Column and Cell. Exiting MS-Excel.	
	Creating a New Workbook, Working with Cells. Working with Fonts. Merging of Cells. Inserting a Row and Column, Deleting a Row and Column. Saving a	
	Workbook, Closing a Workbook. Different Data Types and Operators used in	
	Excel, Working with Calculation and Functions. Working with Chart.	
4	MS PowerPoint: Starting MS-PowerPoint, different Bars, Different Types of	16
	Views and Exiting MS-PowerPoint. Creating a New Presentation, Working with	10
	Slides, Applying Design Templates, Applying Custom Animations, Applying Slide	
	Transitions. Saving a Presentation, Running a Presentation, Closing a Presentation	
	and Opening an Existing Presentation. Working with Notes, Handouts, Columns &	
	Lists, Adding Graphics, Sounds and Movies to a Slide	
5	Introduction of MS Access: Database, Tables, Create Table, Insert data in Table,	16
	Data types in MS Access.	
	Microsoft Office Picture Manager: Introduction and uses; Image Editing.	
	<b>Introduction of DTP:</b> Definition of D.T.P, Uses and Advantage of DTP, Working	
	with Microsoft Publisher for DTP, Various Templates of MS Publisher for DTP,	
	Microsoft Office Picture Manager for Picture.	
	Defenence Deales	

#### **Text & Reference Books:**

- 1. Jain S. "MS Office 2010 Training Guide", BPB Publications, 2010.
- 2. Kroenke D., Nilson D., "Microsoft Office 365 in Business", US Edition, Wiley India Pvt. Ltd, 2011.
- 3. Sinha P.K., "Computer Fundamentals", 6th Edition, BPB Publication, 2012.
- 4. Goel.A, "Computer Fundamentals", Reprint, Pearson Education, 2011.
- 5. Prakhar Complete Course For DTP (Coreldraw, Pagemaker, Photoshop)

## Uttarakhand Sanskrit University, Haridwar (Certificate in Computer Application) – 06 Months Paper Name: IT Trends and Technologies Paper- III

Total Marks: 100 Time: 03 Hours

External Marks: 80 Internal Marks: 20

Unit	Description	Total: 80
1	Internet Communication:	16
	Internet Concepts: History of Internet, Internet Architecture, Applications of	
	Internet, Various Internet Services, Intranet, Extranet, ISP, Internet Connectivity,	
	DNS, WWW, URL, HTTP, IP, FTP, Web Browsers, Search Engines, E-mail	
	Concepts, Internet chatting, IP Addressing, Security issues on Internet, Google	
	Docs.	
2	Introduction to Web Technologies: Application of Web Technologies,	16
	Components of Web Technologies (Web Page, Web Server, Mail Server), Static	
	and Dynamic Websites, Web Publishing Concepts, Domain Name Registration,	
	Web Space Registration, Uploading (utilities like FTP), Client-Server	
	Architecture.	
3	HTML: Introduction To HTML, Elements of HTML Syntax, HTML Tags, Title,	16
	Head & Body Sections, Building HTML Documents, Formatting Tags, Inserting	
	Texts, Images, Hyperlinks, Backgrounds and Colour Controls, List, Table, Use of	
	different types of Tags.	
4	Introduction of E-Commerce, Introduction of E-Governance, Digital Locker,	16
	Introduction of E-learning, Introduction of Mobile Commerce;	
	Electronic Payment System: Introduction, Online payment systems, Smart Card,	
	Credit Card, Debit Card, Online banking (net banking), Mobile wallet,	
	UPI, BHIM, PAYTM app, Security issues on Electronic payment system;	
5	Introduction to Artificial Intelligence, Cloud computing, IOT, Big data, Virtual	16
	Reality and Blockchain Technology;	
	Introduction of Cyber Security.	

#### **Text & Reference Books:**

- 1. Data Communication and Networking B. Forouzan MCGrawth Hill.
- 2. Jain V.K., "O Level Module M 1.2 Internet & Webpage Designing" BPB Publications, 2015
- 3. Turban, Efraim, and David King, "Electronic Commerce: A Managerial Perspective", 2010, Pearson Education Asia, Delhi.
- 4. Whiteley D, "E Commerce: Strategy, Technologies and Applications", Tata McGraw hill, 1st edition.
- 5. Kalakota, Ravi, "Frontiers of Electronic Commerce", 2004, Addison Wesley, Delhi.
- 6. Joseph P.T., "E-Commerce An Indian Perspective (Second Edition)", S.J. Presentice-Hall of India

#### Uttarakhand Sanskrit University, Haridwar (Certificate in Computer Application) – 06 Months Paper Name: Practical & Viva Paper- IV

**Total Marks: 100** 

Unit	Description	<b>Total: 100</b>
1 to 5	Practical based on CCA01, CCA02 and CCA03	