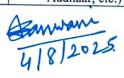
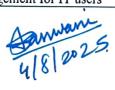
			PART A: Introduction		
Program: Under Graduate Course Level - Beginner Session:2025-26					
				Cotol 2 c	
	Subject: Information Technology (2 Theory + 1 Practical = Total 3 credits)				
1	Course Code		V1-COS-IT		
2	Course Title		Information Technology (Theory)		
3	Course Type		Vocational		
4	Pre-Requisit		No Pre-Requisite		
5	Course Learning Outcomes (CLO)		<ol> <li>On completion of this course, learners will be able to:         <ol> <li>Understand IT components &amp; its applications</li> <li>Promote digital literacy, ethical awareness, and cyber hygiene.</li> <li>Exposure to IT tools for office work including Indian languages</li> <li>Encourage healthy and mindful habits through yoga and Indian values.</li> </ol> </li> <li>Introduce learners to emerging technologies like AI and cloud platforms.</li> </ol>		
6.	Credit Value	7/	Theory—2 Credits		
7.	7. Total Marks		Max. Marks : 100 Min. Passing Marks :35		
		P	ART B: Content of the Course		
		No. of I	ectures (in hours per week): 2 Hrs. per wee	k	
			Total No. of Lectures: 30 Hrs.		
1	Module		Topics		No. of Lectures
Knowledge Sy History of Cor (e.g., binary lo Overview of C Devices, Mem Operating Sys Introduction to Concept of Dia Activity:  1. Visit to Center)		Knowledge S History of Cor (e.g., binary lo Overview of C Devices, Mem Operating Sys Introduction to Concept of Di Activity:  1. Visit to Center) 2. Create	omputing: From Ancient Indian contributions logic in Pingala's Chandaḥśāstra) to modern IT Computer Systems: Hardware, Software, I/O mory ystems (Windows/Linux), File Management to Number Systems with Indian numeral history Digital India and e-Governance initiatives to a Digital Seva Kendra (Common Service or)		7



Information Technology					
II	Office Tools, Language & Communication in IT	7			
	Word Processing, Spreadsheets, and Presentations				
	Use of local languages in IT (Unicode, Google translation				
	tools, Indic typing tools)				
	English for IT: Email Writing, IT vocabulary, presentation				
	skills				
	Language models and voice-to-text (Google Lens, ChatGPT, A				
	typing tools)				
	UPI and QR Code: Introduction, Functionality, Challenges and				
	Application in Indian context.				
	Activity:				
	1. Prepare a bilingual presentation (English + regional				
	language)				
	2. Draft an email for a job application and create a				
	digital resume				
III	Internet, AI Tools & Cyber security Awareness	6			
	Introduction to Internet, Cloud, and Email				
	Cyber security basics: Phishing, Malware, Identity Theft				
	Digital Ethics and Indian perspectives on "Dharma in				
	Technology"				
	Hands-on: Google Workspace, ChatGPT, Canva, Gemini,				
	Indian AI tools				
	Cybercrime awareness: Government portals (CERT-IN,				
	Cyber Crime Reporting Portal).				
	Activity:				
	Mock simulation of cybercrime reporting				
	2. Create a "Stay Safe Online" digital awareness video				
	or poster.				
IV	Text and Image Data: Introduction, Storage Formats for	5			
100	pictures, Image compression fundamentals, Image acquisition				
	with Digital Camera.				
	Audio Data: Introduction, Audio Signals, Acquisition and				
	Storage, Compression				
	Video Data: Introduction, Capturing a moving scene with				
	Video Camera, Compression, MPEG compression standard.				
	Activity:				
	1. Understand how digital images are captured, stored in				
	various formats, and compressed, while analyzing the				
	impact of these factors on quality and size.				
	2. Understand how audio and video data are captured,				
	stored, and compressed, and how different formats				
V	and compression levels affect quality and file size.	5			
,	IT Profession, Indian Values, Yoga & Social Impacts of Technology	5			
	Careers in IT: Freelancing, BPO, Data Entry, Web				
	Development, AI				
	Work ethics, time management, and digital wellbeing				
	Indian Values: Satya, Ahimsa, and Seva in Tech Service				
	Yoga for concentration, posture correction, and stress				
	management for IT users				



mornation reciniology			
Social implications: Digital divide, screen addiction, misinformation.			
Activity:			
1. Daily 5-minute yoga for eyes and back			
(Demonstration & practice)			
2. Conduct a debate: "Has Technology made us more			
connected or more isolated?"			

### Keywords/ Tags:

### **PART C: Learning Resources**

### Text books, Reference Books, Other Resources

### Suggested Readings:

- Introduction to Information Technology By RAJARAMAN V., PHI Learning Pvt. Ltd. (Fourteenth Printing, Third Edition, January 2018)
- "Fundamentals of Information Technology" Alexis Leon & Mathews Leon
- Vedic Mathematics 2005, Sterling Publishers Pvt. Ltd. ISBN 978-81-7963-001-3 Reprint 2006, 2009
- "Digital Literacy Curriculum" MeitY (Govt. of India)

### Suggestive digital platform web links:

• National Digital Library of India (NDLI)

en.wikipedia.orgswayam.gov.in.

• SWAYAM "Fundamentals of Information Technology" (AMU)

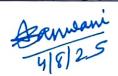
swayam.gov.in+11onlinecourses.swayam2.ac.in+11classcentral.com+11.

https://www.nielit.gov.in/content/digital-literacy-courses

### Suggestive equivalent online courses:

- Diksha Portal, NPTEL, Cyber Surakshit Bharat
- MyGov Cyber Safety Module
- AI Tools Practice: ChatGPT, Bard/Gemini, Canva, Grammarly, Scratch/Python IDEs
- SWAYAM Fundamentals of IT (AMU)
  - Comprehensive coverage of Module I, including history, hardware, OS, memory, number systems, and an intro to cybersecurity
  - onlinecourses.swayam2.ac.in+15onlinecourses.swayam2.ac.in+15testbook.com+15.
- SWAYAM Course in Information Technology (Savitribai Phule Pune Univ.)
  - A 30-module, 8-week program with cloud introduction, Google Workspace, e-Governance concepts and basic security onlinecourses.swayam2.ac.in+1swayam.gov.in+1.
- IIT Madras C Programming & Assembly Language (SWAYAM)
  - Ideal for Module IV: hands-on programming, logical thinking, algorithms, flowcharts, and connection to hardware fundamentals

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PART D : Assessment and Evaluation					
Total Marks: 100 Min. Marks: 35					
External Assessment: University Exam Section	Section (A) Objective Type Questions	10 Marks			
Time: 03:00 Hours	Section (B) Short Questions (200 Words Each)	40 Marks			
	Section (C) Long Questions (500 Words Each)	50 Marks			



			PART A: Introduction		
Program	n : Under Grad	luate Course	Level - Beginner Session:2025-26		
			Subject : Information Technology		
1	Course Code		V1-COS-IT		
2	Course Title		Information Technology (Practical)		
3	Course Type		Vocational		
4	Pre-Requisite(if any)		No Pre-Requisite		
5	Course Learning Outcomes(CLO)		On completion of this course, learners will be able to:  1. Practically identify computer system components, accessories & connections 2. Install OS of different types, learn basic commands 3. Exposure to practical aspects of using digital India portals including those related to cyber security 4. Exposure to office tools including support of Indian languages 5. Exposure to modern AI tools 6. Learn yoga exercises through practice sessions		
6.	Credit Value		Practical- 1 credit		
7.	7. Total Marks		Max. Marks :		
		P	ART B: Content of the Course		
		No. of I	Practicals (in hours per week): 2 Hrs. per we	ek	
			Total No. of Lectures: 30 Hrs.		
	Module		Topics		No. of Lectures
Open a mother diagram 2. Install Dual-b file sys 3. File M Create line (V 4. Number Converted Hexade		Open a mother diagram 2. Install Dual-b file sys 3. File M Create line (V 4. Number Converse Hexade	fy and List Computer System Components a PC, identify hardware parts (RAM, HDD, rboard, I/O devices), and create a labelled m.  and Compare OS (Windows vs Linux) poot or virtual install Linux (Ubuntu), compare stems, UI, and commands.  Ianagement Operations of folders, copy/move/delete files, use command-Windows CMD or Linux terminal).  The System Converter Using Spreadsheet ort between Decimal, Binary, Octal, and decimal.  The Digital India Portals		30



- Navigate portals like *UMANG*, *MyGov*, or *eDistrict* and note their services.
- 6. Create a Document with Word Processor Prepare a report with headings, bullet points, image insertion, and page formatting.
- 7. Use Spreadsheets for Budget/Attendance Calculation Formulas, charts, conditional formatting, and data filtering.
- 8. Prepare a Presentation with Animations
  Slides with images, transitions, and speaker notes
  (topic: e-Governance or AI in India).
- Type a Paragraph in Hindi or Your Local Language Using Google Input Tools or Indic Keyboard with Unicode support.
- Translate a Passage Using Google Translate
   Translate English to any Indian language, check accuracy, and voice pronunciation.
- Practice Email Writing & IT Vocabulary
   Compose a formal IT-related email; identify 20 IT-specific terms.
- Test Voice-to-Text Using Google Lens or ChatGPT Speak a paragraph and convert it to digital text. Analyze accuracy and limitations.
- 13. QR Code Scanner & UPI Demo (Mock Activity)
  Generate a QR code using a tool, and simulate UPIbased payments (no real transactions).
- Create and Share a Document Using Google
   Workspace
   Collaborate on Google Docs or Sheets with comments
   and version history.
- 15. Visit CERT-IN and Cybercrime Portals Explore the Government's cybercrime reporting portal and note key features.
- Hands-on with AI Tools (ChatGPT, Gemini, etc.)
   Ask an AI to generate a bio, convert text to summary, or translate content. Document outputs.
- 17. Capture an image, audio, and video using a smartphone or digital camera. Save each file in multiple formats (e.g., JPEG, PNG, WAV, MP3, MP4) and record file sizes. Compare quality and size across formats to understand storage and compression.
- Record audio and video clips and compress them using Audacity and Hand Brake tools. Analyze quality differences and calculate compression ratios.
- 19. Draw a Flowchart for a Real-Life Task E.g., Making tea, submitting an online form.
- 20. Daily Yoga Routine for Digital Wellness Follow a 15-min yoga/stretch session for posture & stress relief. Log benefits weekly.

Danware 418/25.

Keywords/ Tags:

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  - Comprehensive coverage of Module I, including history, hardware, OS, memory, number systems, and an intro to cybersecurity

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- IIT Madras C Programming & Assembly Language (SWAYAM) - Ideal for Module IV: hands-on programming, logical thinking, algorithms, flowcharts, and connection to hardware fundamentals

PART D : Assessment and Evaluation				
Internal Assessment: NIL		End Term Examination(s): 100 Marks Time: 03:00 Hours		
Class Test	NIL	Viva Voce on Practical	20	
Presentation/Assignment/Quiz/Group Discussion	NIL	Practical Record File	30	
Appropriate weight age of attendance in the class	NIL	Table Work/Experiments	50	
Total	NIL	Total	100	
Any Remarks/ Suggestions:				



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