



MINISTRY OF EDUCATION

SIIMUT ACADEMY

INFORMATION COMMUNICATION
TECHNOLOGY (ICT)
SCHEMES OF WORK
FORM II



Learn. Transform. Inspire.

TERM I

Week	Topic	Subtopic	Competences / Learning Outcomes	Knowledge	Methods & Strategies	Learner Activities	Assessment
1	Review of ICT Fundamentals	Computer Systems, Components, Software	1. Recall and identify system components 2. Differentiate hardware & software 3. Explain software types	Hardware: CPU, RAM, storage Software: OS, applications, utility programs	Explanation, Q&A, Discussion	Label components, identify software installed	Oral Q&A, Observation
2	File Management	Creating, Organizing, Renaming, Deleting Files	1. Organize files into folders 2. Rename and delete files safely 3. Apply naming conventions	File hierarchy, folder creation, file operations	Demonstration, Guided practice	Create folders, move and rename files	Practical task, Observation
3	File Compression & Encryption	Zip/RAR files,	1. Compress files to save space 2. Encrypt files for	Compression software,	Demonstration, Hands-on	Compress and encrypt files	Practical task, Observation

		Password protection	security 3. Extract compressed files	encryption basics			
4	Digital Storage & Backup	External storage, Cloud storage	1. Identify storage types 2. Use cloud storage for backup 3. Compare advantages/disadvantages	SSD, USB, Cloud, Backup procedures	Explanation, Demo, Guided practice	Backup school documents to USB/cloud	Practical task, Observation
5	Advanced Spreadsheets	Formulas, Functions, Charts	1. Apply formulas & functions 2. Create charts for data visualization 3. Format data for readability	SUM, AVERAGE, MIN, MAX, chart types	Demonstration, Guided practice	Solve sample exercises, make charts	Practical exercises, Observation
6	Databases	Tables, Fields, Records, Queries	1. Create tables and define fields 2. Enter and retrieve records 3. Run simple queries	Database structure, primary key, simple queries	Demo, Hands-on practice	Create a student database, run queries	Practical task, Observation
7	Digital Communication Tools	Email, Video Conferencing	1. Compose, send, and receive emails 2. Use video conferencing platforms 3. Apply etiquette & security	Email protocols, conferencing tools (Zoom, Google Meet)	Demonstration, Discussion	Send emails, join virtual meeting	Practical task, Observation
8	Mid-Term Test	All topics covered	Evaluate knowledge and skills	All knowledge from Weeks 1–7	Written & practical test	Complete Mid-Term Test	Marking scheme

9	ICT in Business	Digital tools for record keeping	1. Use ICT for accounting and inventory 2. Analyze business data 3. Identify appropriate tools for tasks	Accounting software, spreadsheets, POS	Case study, Discussion	Explore software for business applications	Practical task, Observation
10	ICT in Education & Health	LMS, Digital Records	1. Explain ICT applications in schools/hospitals 2. Use LMS or health management software 3. Evaluate effectiveness	Learning Management Systems, Telemedicine tools	Demonstration, Hands-on	Explore LMS, simulate digital record management	Practical exercises, Observation
11	Cybersecurity	Passwords, Antivirus, Safe Browsing	1. Create strong passwords 2. Install and update antivirus 3. Apply safe browsing practices	Password policies, antivirus software, malware types	Demo, Guided practice	Setup antivirus, evaluate online safety	Practical task, Observation
12	End-of-Term Test	All Term I Topics	Evaluate competence	All knowledge from Weeks 1–11	Written & practical test	Complete End-of-Term Test	Marking scheme
13	Open Day	Report Card / Results	Reflection & feedback	Review overall learning	Discussion	Receive feedback, self-assess	Teacher observation

TERM II

Week	Topic	Subtopic	Competences / Learning Outcomes	Knowledge	Methods & Strategies	Learner Activities	Assessment
1	Advanced Computer System Components	CPU, RAM, GPU, Motherboard, Power Supply	1. Identify advanced components 2. Explain their functions 3. Discuss interaction for performance	CPU, GPU, RAM, ROM, motherboard, power supply roles	Explanation, Demonstration, Q&A	Label parts, discuss functions, compare components	Observation, Oral Q&A
2	Input & Output Devices	Advanced Peripherals (Graphics Tablet, VR headset, 3D printer)	1. Identify advanced input/output devices 2. Explain their purposes 3. Demonstrate usage	Graphics tablets, scanners, VR headsets, 3D printers	Demonstration, Hands-on, Guided practice	Use devices, classify peripherals	Practical task, Observation
3	Advanced Storage Devices	SSD, NVMe, Cloud storage integration	1. Explain types of storage 2. Compare speed and reliability 3. Use storage efficiently	SSD, NVMe, cloud storage, RAID basics	Demo, Guided practice, Discussion	Save/retrieve files, backup to cloud	Practical task, Observation

4	Spreadsheets	Advanced Formulas, Charts, Conditional Formatting	1. Apply advanced formulas 2. Create charts for data visualization 3. Format and organize data	SUMIF, COUNTIF, charts, conditional formatting	Demonstration, Guided practice	Solve exercises, create charts	Practical exercises
5	Database Management	Queries, Reports, Relationships	1. Create queries and reports 2. Define table relationships 3. Analyze database info	Tables, fields, records, queries, relationships	Demo, Hands-on, Discussion	Build database, run queries	Practical task, Observation
6	Internet & Online Research	Advanced Search Techniques, Evaluating Sources	1. Conduct effective searches 2. Evaluate credibility of sources 3. Organize research findings	Search engines, Boolean operators, reliable vs unreliable sources	Explanation, Guided practice	Perform online research, evaluate sources	Practical exercises
7	Digital Communication Tools	Collaborative Platforms, Messaging Apps	1. Use email and messaging professionally 2. Collaborate using online platforms	Email, Google Docs, Microsoft Teams, Zoom	Demonstration, Hands-on	Send professional emails, collaborate on a shared doc	Practical task, Observation

			3. Apply etiquette & security				
8	Cybersecurity	Advanced Security Practices	1. Identify security threats 2. Apply protective measures 3. Explain safe internet practices	Malware, phishing, encryption, strong passwords	Explanation, Discussion, Demo	Configure antivirus, encrypt files	Practical task, Observation
9	Mid-Term Break	—	—	—	—	—	—
10	Website Authoring	Multimedia Integration, Hyperlinks, Navigation	1. Create web pages with multimedia 2. Apply hyperlinks correctly 3. Design intuitive navigation	Embedding images/videos, hyperlinks, menus	Demonstration, Hands-on	Add content, organize pages, link menus	Practical assessment
11	CMS Advanced	Plugins, User Roles, Content Scheduling	1. Configure CMS plugins 2. Assign user roles 3. Schedule content publishing	WordPress, Joomla, user permissions, plugins	Demo, Guided practice	Add plugins, assign roles, schedule posts	Practical assessment

12	End-of-Term Test	All Term II Topics	Evaluate understanding and application of skills	All knowledge from Weeks 1–11	Written & practical test	Complete End-of-Term Test	Marking scheme
13	Open Day	Report Card / Results	Reflection & feedback, self-assessment	Review overall learning	Discussion	Receive feedback, self-assess	Teacher observation

TERM III

Week	Topic	Subtopic	Competences / Learning Outcomes	Knowledge	Methods & Strategies	Learner Activities	Assessment
1	Review of Previous ICT Concepts	Networks, CMS, Website Authoring	1. Recall previous knowledge 2. Explain concepts clearly 3. Apply skills in practical tasks	LAN, WAN, CMS features, website elements	Explanation, Discussion, Q&A	Group discussion, identify key points in lab exercises	Observation, Oral Q&A
2	Digital Financial Tools	Online Banking, Mobile Money, Budgeting	1. Identify financial ICT tools 2. Explain use in personal & business finance	Mobile wallets, banking apps, spreadsheets for budgeting	Demo, Hands-on, Guided practice	Simulate budgeting, transactions, online payments	Practical exercises

			3. Demonstrate safe transactions				
3	Advanced Spreadsheet Applications	Pivot Tables, Data Validation, Charts	1. Apply advanced formulas 2. Create pivot tables 3. Validate data and generate charts	SUMIF, COUNTIF, pivot tables, data validation	Demonstration, Guided practice	Solve exercises, create pivot tables and charts	Practical exercises
4	Databases Advanced	Relationships, Queries, Reports	1. Design relational databases 2. Run advanced queries 3. Generate meaningful reports	Table relationships, primary & foreign keys, query types	Demo, Hands-on	Create relational tables, run queries, generate reports	Practical exercises
5	Computer Networks	Network Components, Topologies	1. Identify advanced components 2. Explain topologies 3. Apply knowledge to small network setups	Router, switch, server, star/bus/ring topology	Explanation, Demonstration, Guided practice	Draw topology diagrams, connect devices	Observation, Diagram assessment

6	Cloud Computing & Storage	Cloud Services, Advantages	1. Explain cloud storage 2. Use cloud for collaboration 3. Compare cloud vs local storage	Google Drive, OneDrive, Dropbox, benefits & challenges	Demo, Guided practice	Upload/download files, collaborate online	Practical exercises
7	Digital Communication & Collaboration Tools	Emails, Video Conferencing, Shared Documents	1. Compose professional emails 2. Use collaborative platforms 3. Apply etiquette and safety	Email, Google Docs/Sheets, Zoom, Teams	Demo, Hands-on, Discussion	Send emails, collaborate on documents	Practical exercises
8	Mid-Term Test	All topics covered	Evaluate understanding and skills	All knowledge from Weeks 1–7	Written & practical test	Complete Mid-Term Test	Marking scheme
9	ICT in Business, Education & Health	Applications & Benefits	1. Identify ICT uses in different sectors 2. Analyze advantages 3. Suggest improvements	Business: POS, Accounting Education: LMS, e-learning Health: EMR, telemedicine	Case study, Discussion	Explore sector tools, present findings	Observation, Practical exercises

10	Cybersecurity Advanced	Firewalls, Encryption, Safe Browsing	1. Apply advanced security measures 2. Encrypt files 3. Evaluate risks	Encryption types, firewalls, malware, phishing	Demonstration, Guided practice	Encrypt files, configure firewalls, discuss threats	Practical exercises
11	Website Authoring & CMS Integration	Linking Pages, Plugins, User Management	1. Integrate CMS and website content 2. Use plugins and roles 3. Apply navigation best practices	WordPress, Joomla, navigation, plugins	Demonstration, Hands-on	Create linked pages, apply plugins	Practical exercises
12	End-of-Term Test	All Term III Topics	Evaluate overall competence	All knowledge from Weeks 1–11	Written & practical test	Complete End-of-Term Test	Marking scheme
13	Open Day	Report Card / Results	Reflection & feedback, self-assessment	Review overall learning	Discussion	Receive feedback, self-assess	Teacher observation