

**THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATION COUNCIL
GRADE A TEACHERS' CERTIFICATE EXAMINATION**

635

INFORMATION AND COMMUNICATION TECHNOLOGY

Time: 3 Hours.

ANSWER

Year: 2001

Instructions

1. This paper consists of sections **A**, **B** and **C**.
2. Answer **all** questions in sections A and **two (2)** questions from each sections B and C.
3. Mobile phones and unauthorized materials are **not allowed** in the examination room.
4. Write your **Examination Number** on every page of your answer **booklet(s)**.

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SECTION A (40 Marks)

Answer all questions from this section

1. List four uses of spreadsheets in schools.

Spreadsheets are used to prepare and calculate students' examination results quickly and accurately using formulas.

They help in organizing school budgets and financial accounts, making it easy to manage expenses and revenues.

Spreadsheets are used to keep class attendance records, allowing teachers to monitor student participation.

They also assist in analyzing performance trends through charts and graphs, helping teachers evaluate progress.

2. Mention four examples of communication networks.

A Local Area Network (LAN) connects computers within a small area such as a school or office.

A Wide Area Network (WAN) links computers over a large geographical area, for example across cities or countries.

A Metropolitan Area Network (MAN) connects computers across a town or city, often used by large organizations.

The Internet is a global network connecting millions of computers worldwide for communication and information sharing.

3. State four roles of ICT in modern agriculture.

ICT provides farmers with access to weather forecasts, helping them plan farming activities better.

It gives market information on prices, which allows farmers to sell produce at fair rates.

ICT introduces precision farming technologies that help reduce costs and increase yields.

It enables farmers to learn modern techniques through mobile apps, websites, and agricultural extension programs.

4. Explain four benefits of email communication.

Email allows instant communication regardless of distance, saving time compared to postal letters.

It is cost-effective, requiring only internet access rather than postage or transport costs.

Email provides a written record of communication, which can be stored and referred back to later.

It supports file attachments, enabling the sharing of documents, pictures, and other resources easily.

5. Give four signs of a computer infected by a virus.

The computer becomes unusually slow and unresponsive.

Programs may crash frequently or files fail to open properly.

Unwanted pop-ups and error messages appear unexpectedly.

New files or programs appear on the computer without the user's action.

6. List four examples of output devices.

A monitor displays visual output such as text, images, and videos.

A printer produces hard copies of digital documents.

Speakers provide sound output from the computer.

A projector displays content on a large screen for teaching or presentations.

7. Mention four advantages of wireless communication.

Wireless communication allows flexibility since users are not tied to cables.

It reduces installation costs because no physical wiring is required.

It enables connectivity in remote areas where laying cables is difficult.

It allows multiple devices to connect to the same network conveniently.

8. State four reasons for backing up school data.

Backing up data protects important information from loss due to hardware failure.

It safeguards against accidental deletion of files by users.

It provides recovery options in case of cyber-attacks such as ransomware.

It ensures continuity of academic records, financial data, and reports during emergencies.

9. Outline four differences between primary and secondary information sources.

Primary information is original and first-hand, while secondary information is based on analysis or interpretation of primary sources.

Primary sources include interviews and surveys, while secondary sources include textbooks and reports.

Primary information is often more accurate for research, while secondary information gives broader context.

Primary data collection is time-consuming, while secondary information is quicker to obtain.

10. Give four challenges of using social media in schools.

Social media can distract students from academic tasks.

It may expose learners to inappropriate content.

Cyberbullying can occur, affecting students' mental health.

It may reduce face-to-face interactions and weaken communication skills.

SECTION B (30 Marks)

Answer any two questions from this section.

11. Discuss five problems associated with the use of outdated ICT equipment.

Outdated equipment is slow, which reduces productivity in both teaching and administrative work.

It may not support modern software applications, limiting the range of programs that can be used.

Older devices are more prone to breakdowns, leading to frequent repairs and interruptions.

Outdated ICT tools often lack proper security updates, making them vulnerable to viruses and cyber-attacks.

They consume more energy compared to newer models, increasing operational costs for schools.

12. Explain five ways ICT can promote good governance.

ICT increases transparency by allowing citizens to track government services and expenditures online.

It improves efficiency by digitizing services such as tax collection and license applications.

It enhances communication between government and citizens through official websites and digital platforms.

ICT provides data for decision-making, enabling evidence-based policies.

It allows citizens to participate in governance through online consultations and feedback systems.

13. Analyse five benefits of ICT in the healthcare sector.

ICT enables electronic health records that allow doctors to access patient history quickly.

Telemedicine allows patients to consult doctors remotely, reducing travel costs and time.

ICT supports medical research by providing tools to analyze health data.

It helps in disease surveillance and monitoring outbreaks in real-time.

It improves hospital management by automating billing, scheduling, and inventory control.

14. Explain five contributions of ICT to entrepreneurship.

ICT enables online marketing, allowing entrepreneurs to reach wider audiences.

It provides platforms for e-commerce, making it easier to buy and sell goods.

ICT reduces costs by allowing digital transactions instead of cash handling.

It supports innovation through access to global knowledge and ideas.

ICT enhances customer relations through communication channels like websites, emails, and social media.

SECTION C (30 Marks)

Answer any two questions from this section.

15. Critically evaluate five limitations of using ICT as the only teaching method in secondary schools.

ICT may exclude students in rural or poor areas who lack access to digital devices.

It can reduce teacher-student interaction, which is essential for effective learning.

Technical problems like power cuts or network failures can disrupt lessons.

Over-reliance on ICT may weaken traditional learning skills such as handwriting.

Students may misuse ICT tools for non-academic purposes, leading to distractions.

16. With practical examples, discuss five effects of cybercrime on developing countries.

Cybercrime causes financial loss through theft of money in banks and mobile money platforms.

It damages the reputation of institutions, leading to loss of trust from citizens and investors.

Cybercrime disrupts services such as e-government portals when systems are hacked.

It results in identity theft, where criminals misuse personal data for fraudulent activities.

Governments spend huge amounts on cybersecurity measures, diverting funds from other development projects.

17. Justify five ways ICT can reduce inequality between rural and urban areas.

ICT provides access to online education for rural students, bridging the gap with urban schools.

It allows farmers in rural areas to access market prices and sell produce fairly.

Mobile banking services give rural populations financial access without physical banks.

Telemedicine brings healthcare services to remote communities.

ICT enables rural entrepreneurs to advertise and sell products online, competing with urban businesses.

18. Assess five drawbacks of over-reliance on mobile phones in communication.

Over-reliance on phones reduces face-to-face interaction, weakening social bonds.

It can cause health problems such as eye strain and poor posture.

Mobile phones expose users to risks of cyberbullying and fraud.

They can distract students and workers, reducing productivity.

Frequent use of phones leads to addiction, making it difficult to focus on other activities.