



GCSE DIGITAL TECHNOLOGY (ICT) – MARK SCHEME

Total Marks: 100

SECTION A – HARDWARE, SOFTWARE & SYSTEMS (30 MARKS)

1. Keyboard device type

B. Input device (1 mark)

2. Two output devices

Any two:

- Monitor
- Printer
- Speakers
- Projector (2 marks)

3. Difference between RAM and ROM

Award up to **2 marks**:

- RAM is temporary/volatile memory (1)
- ROM is permanent/non-volatile memory (1) (2 marks)

4. What is an operating system + one function

Up to **3 marks**:

- Definition: Software that manages the computer's hardware and software (1)
- Function examples:
 - Manages files (1)
 - Manages memory (1)

- Manages input/output devices (1) (3 marks)

5. Network type (small area)

LAN (1 mark)

6. Two advantages of cloud storage

Any two:

- Access files anywhere (1)
- Automatic backups (1)
- Saves local storage space (1)
- Easy to share files (1) (2 marks)

7. Open-source software

Up to **2 marks**:

- Software with source code available (1)
- Can be modified or shared freely (1) (2 marks)

8. Two reasons to use a server for student files

Any two:

- Central storage (1)
- Easier backups (1)
- Better security (1)
- Access from any school computer (1) (2 marks)

9. Difference between router and switch

Up to **4 marks**:

- Router connects networks / connects to the internet (1-2)
- Switch connects devices within a network (1-2) (4 marks)

10. Two factors when choosing new hardware

Up to **4 marks**: Any two explained:

- Cost (1-2)
- Compatibility (1-2)
- Performance/specifications (1-2)
- Storage needs (1-2)

- Reliability (1–2) (4 marks)

SECTION B – DATA, SECURITY & ONLINE SAFETY (30 MARKS)

11. Phishing

Up to 2 marks:

- Attempt to trick someone into giving personal information (1)
- Often through fake emails/messages (1) (2 marks)

12. Example of personal data

Any one:

- Name
- Address
- Email
- Phone number
- Date of birth (1 mark)

13. Two ways to create a strong password

Any two:

- Use numbers, symbols, upper/lowercase (1)
- Make it long (1)
- Avoid personal info (1) (2 marks)

14. Encryption explanation

Up to 4 marks:

- Encryption scrambles data (1–2)
- Only readable with a key/password (1–2)
- Used to protect data from hackers (1–2) (4 marks)

15. Two risks of poor cybersecurity

Any two:

- Data theft (1)
- Identity fraud (1)
- Loss of customer trust (1)

- Financial loss (1) (2 marks)

16. Two-factor authentication

Up to **2 marks**:

- Requires two steps to log in (1)
- Example: password + code sent to phone (1) (2 marks)

17. Steps student should take

Up to **4 marks**: Any two explained:

- Do not reply (1–2)
- Report the message (1–2)
- Delete it (1–2)
- Change password if worried (1–2) (4 marks)

18. Biometric security – advantage + disadvantage

Up to **4 marks**:

- Advantage: hard to fake, convenient (1–2)
- Disadvantage: expensive, privacy concerns, can't be changed if stolen (1–2) (4 marks)

19. Difference between data and information

Up to **3 marks**:

- Data = raw facts (1)
- Information = processed/organised data (1–2) (3 marks)

20. CCTV ethical + legal issue

Up to **4 marks**:

- Ethical: privacy concerns (1–2)
- Legal: must follow GDPR / signs must be displayed (1–2) (4 marks)

SECTION C – DIGITAL APPLICATIONS (40 MARKS)

21. Two types of presentation software

Any two:

- PowerPoint
- Google Slides

- Keynote (2 marks)

22. Two examples of spreadsheet data

Any two:

- Date
- Amount spent
- Category
- Total (2 marks)

23. What is a formula + example

Up to 3 marks:

- A formula performs a calculation (1–2)
- Example: =SUM(A1:A5) or =A1+B1 (1) (3 marks)

24. Database field vs record

Up to 4 marks:

- Field = one piece of data (e.g., name) (1–2)
- Record = all fields for one person/item (1–2) (4 marks)

25. Two digital marketing methods

Any two:

- Social media
- Email newsletters
- Online adverts
- Website banners (2 marks)

26. Two advantages of email

Any two explained:

- Fast (1–2)
- Can send attachments (1–2)
- Free/low cost (1–2) (4 marks)

27. Two features of good digital design

Any two explained:

- Clear layout (1–2)

- Appropriate colours (1–2)
- Readable fonts (1–2)
- Relevant images (1–2) (4 marks)

28. Video-conferencing – benefit + limitation

Up to **4 marks**:

- Benefit: saves travel time, easy communication (1–2)
- Limitation: requires good internet, technical issues (1–2) (4 marks)

29. Digital footprint

Up to **3 marks**:

- The trail of information you leave online (1–3) (3 marks)

30. Website design considerations (3 points)

Up to **8 marks**: Any three explained:

- Easy navigation (1–2)
- Clear layout (1–2)
- Mobile-friendly (1–2)
- Safe handling of photos (1–2)
- Up-to-date information (1–2)
- Accessibility (1–2) (8 marks)