SYLLABUS · SCIENCES · WASSCE 2026

Data Processing syllabus

Every examinable topic area in WAEC Data Processing, in one place — with how the papers are structured and answers to common questions. Compiled by waeccbt.com; not an official WAEC document.

How the papers work: Two papers taken as a composite at one sitting. Paper 1: 40 multiple-choice objective questions in 1 hour for 40 marks. Paper 2 has two sections — Section A: 4 essay questions, answer any 3 in 1 hour for 30 marks; Section B: a test of practical work with 2 compulsory essay questions in 1 hour for 40 marks.

1. Information Age

- History of computers: computing devices from counting to date (abacus, Napier’s bones, Pascaline, Leibniz machine, Jacquard loom, Babbage’s engines, Hollerith machine)
- Concept of number systems in computing and their importance
- Generations of computers (1st–5th): year of development, basic component/technology, speed, storage capacity
- Data and information: definitions and differences; types of data; ways of handling data; digitalization

2. Basic Computing

- Classification of computers by type (analog, digital, hybrid), by size (super, mainframe, mini, micro) and by usage (general purpose, special purpose)
- Application of ICT in everyday life: uses and impact of ICT on society
- Components of computers: input devices, output devices, the system unit, storage devices — examples and their roles in data processing

3. Information Processing

- Definition of information processing
- Steps involved in information processing and what happens at each step

4. Information Transmission

- Definition of information transmission; methods of transmitting information
- Modes: visual (newspaper), audio (radio, telephone), audio-visual (GSM, television)
- Types and classification of means of transmission
- Networking: meaning of networking, internet and intranet; types — LAN, MAN, WAN; significance of networking
- Internet: definition, benefits, internet browsers, internet security, abuse of the internet

5. Tools for Processing Information

- Operating system: definition, types, examples and functions; text (character) interface vs graphical user interface (GUI)
- Word processing: definition, uses, examples; starting, loading and exiting; creating, saving and retrieving documents
- Spreadsheet: definition, uses, examples; loading and exiting; creating, saving and retrieving worksheet files
- Database management system: definition, uses, examples (e.g. Microsoft Access); creating, saving and retrieving database files
- Presentation packages: definition, uses, examples; creating, saving and retrieving presentation files
- Web design packages: definition, uses, components, examples (designing of web pages not required)
- Graphic packages: definition, uses, examples — focus on CorelDraw

6. Maintenance, Ethics and Human Issues

- Maintenance of computers: general cleaning; battery charging/replacement and UPS; DVD lens cleaning; hardware maintenance; software maintenance; computer crash and data recovery
- Computer ethics: computer room management ethics; laboratory rules and regulations
- Safety measures: sitting arrangement; positioning of monitor, keyboard, CPU and mouse; illumination; dust-free environment; keeping liquids away
- Career opportunities in data processing: computer professions, qualities of a good professional, professional bodies and their duties
- Computer virus: definition, types/examples, sources, warning signals, prevention, detection and deletion

7. Data Management

- Relational model: database and table creation with application packages; relationships between tables; forms, queries and reports; primary and foreign keys, entities, attributes and relationships; query by example and SQL (limited to the package)
- File organization: definition and types, with comparison of the types
- Database security: data security, access control and data encryption; role of the database administrator
- Parallel and distributed databases: basic concepts; storing data in a distributed DBMS and its significance

Frequently asked questions

How many papers does WASSCE Data Processing have?

Two papers written as one composite sitting. Paper 1 is 40 multiple-choice questions in 1 hour for 40 marks. Paper 2 has Section A (4 essay questions — you answer any 3 in 1 hour for 30 marks) and Section B (2 compulsory practical-based questions in 1 hour for 40 marks).

Is there a practical component in Data Processing?

Yes. Paper 2 Section B is a test of practical work worth 40 marks — the biggest single block of marks in the subject. Expect tasks built around word processing, spreadsheets, databases and presentation packages, so hands-on practice with real software matters.

Do I need to know programming or web design?

No. The syllabus says designing of web pages is not required — you only need the definition, uses, components and examples of web design packages. There is no programming; the focus is on using application packages and understanding data management concepts.

Which topics carry the most weight?

The tools for processing information (word processing, spreadsheets, DBMS, presentation packages) and data management (relational model, file organization, database security) dominate, because they feed both the objective paper and the practical section. Basic computing and the information age topics supply many Paper 1 questions.

Do I need number systems and binary arithmetic?

Yes. The information age section explicitly includes the concept of number systems in computing, so conversions between binary, octal, decimal and hexadecimal, plus simple binary arithmetic, are fair game in Paper 1.

Which software examples should I memorise?

Know standard examples for each category: operating systems (Windows, Linux, macOS, Android, MS-DOS), word processors (Microsoft Word), spreadsheets (Microsoft Excel), DBMS (Microsoft Access, MySQL, Oracle), presentation (PowerPoint) and graphics — the syllabus specifically points to CorelDraw for graphic packages.

How should I prepare for the practical questions?

Practise the full create–save–retrieve cycle in each package: create and format documents, build worksheets with formulas, create database tables with primary keys plus forms, queries and reports, and make short slide presentations. WAEC tests the steps, so be able to describe them in writing too.