

Computers in Accounting

Kerala · Class 11 · Accountancy — exam notes

Computerised accounting changes the TOOL, not the RULES. Every transaction still has two sides, assets still equal liabilities plus capital, and the trial balance must still tally. What changes is that you enter a transaction once and the software posts it, updates balances and produces reports instantly. This chapter covers databases and DBMS, accounting software, the real advantages, and the limitation that matters most — garbage in, garbage out.

Key terms & definitions

Computerised Accounting System (CAS)

A system that records, processes and reports financial transactions using accounting software and a computer, in place of handwritten journals and ledgers.

Database

An organised collection of related data stored in structured tables — the digital filing cabinet in which every ledger entry is held.

DBMS

Database Management System — the software that stores, organises, retrieves and protects the data in the database.

Accounting software

A program such as Tally, Busy or Zoho Books that sits on top of the database and automates posting, balancing and reporting.

Chart of accounts

The complete list of account heads used by the business, created during setup. Also called account grouping.

Audit trail

The automatic record of every entry — who made it, when, and what was changed — which makes tampering visible.

Garbage In, Garbage Out (GIGO)

The principle that a computer faithfully processes whatever it is given. A wrong account or a wrong amount is recorded without any warning.

Ready-made software

Standard off-the-shelf packages such as Tally, suitable for small businesses with conventional needs. Low cost, quick to install.

Customised software

Ready-made software modified to suit a particular business. Costlier than ready-made, with some training required.

Tailor-made software

Software developed specially for one large organisation's unique requirements. Most expensive, needs specialised training.

Output CGST / SGST

The central and state components of GST collected on a sale. Each is credited separately and is a liability until paid to the government.

Data security

Protection of accounting data through passwords, user access rights, regular backups and antivirus measures.

What changes — and what does not

- The RULES of accounting are completely unchanged: every transaction has two sides; $\text{Assets} = \text{Liabilities} + \text{Capital}$; the trial balance must tally.
- What changes is the METHOD of recording and processing.
- You enter a transaction ONCE — date, amount, accounts. The software then posts it to the ledger, updates balances and prepares reports.
- There is no new set of debit and credit rules to learn. Anyone claiming otherwise has misunderstood the chapter.
- The accountant's judgement about WHICH accounts to use remains entirely human work.

Database and DBMS

- At the heart of every computerised accounting system is a DATABASE — an organised collection of related data held in structured tables.
- The software managing it is the DATABASE MANAGEMENT SYSTEM (DBMS).
- Think of the database as a large digital filing cabinet in which every ledger entry is stored in an orderly way.
- Because the data is structured, the same entry can be pulled into many different reports without being written again.
- The DBMS also handles access rights, so different users can be allowed to see or change different things.

Accounting software in use

- Common packages in India include TALLY, BUSY and ZOHO BOOKS.
- The software automates exactly the repetitive tasks you have learned to do by hand — posting, balancing, totalling, carrying forward.
- It produces the trial balance, Trading and Profit & Loss Account, Balance Sheet, ageing of debtors and GST returns on demand.
- It handles GST computation automatically once rates are configured for each item.
- Reports that would take days by hand appear in seconds.

Setting the system up — where accounting knowledge is essential

- Create the CHART OF ACCOUNTS — the full list of account heads the business will use.
- Enter OPENING BALANCES for every asset, liability and capital account.
- Configure GST RATES for each item or service.
- Define USER ACCESS — who may enter, who may edit, who may only view.
- This setup phase demands solid accounting knowledge. Once it is done correctly, daily entry becomes routine.
- A badly designed chart of accounts produces badly classified reports for years afterwards.

Worked example — Ramesh's credit sale with GST

- Ramesh sells cotton cloth worth ₹50,000 on credit, subject to 5% CGST and 5% SGST.
- $\text{CGST} = ₹50,000 \times 5\% = ₹2,500$. $\text{SGST} = ₹50,000 \times 5\% = ₹2,500$.
- $\text{TOTAL INVOICE VALUE} = ₹50,000 + ₹2,500 + ₹2,500 = ₹55,000$.
- The software records: Debtor's A/c Dr. ₹55,000 / To Sales A/c ₹50,000; To Output CGST A/c ₹2,500; To Output SGST A/c ₹2,500.
- Simultaneously it updates the debtor's balance, the sales figure, both GST liability accounts, the stock of cloth and the GST return — all from one entry.
- Note that the GST collected is NOT income: it is a liability owed to the government until paid.

Advantages of computerised accounting

- SPEED: reports are available instantly; a manager can see a profit and loss statement daily instead of waiting for month-end.
- ACCURACY: once set up correctly the software never makes an arithmetical mistake — no wrong additions or carry-forwards.
- AUDIT TRAIL: every entry records who made it and when, so alterations are visible and accountability is clear.
- REPORTING: a wide range of reports can be generated from the same data without rewriting anything.
- STORAGE: years of records occupy no physical space and can be retrieved in seconds.
- SCALABILITY: volume can grow enormously without a proportionate increase in staff.
- LEGIBILITY AND RELIABILITY: printed output removes the problem of poor handwriting and mislaid ledgers.

Limitations and risks

- GARBAGE IN, GARBAGE OUT: the software records exactly what you type. A wrong account or amount is stored faithfully, with no warning.
- A balanced entry can still be LOGICALLY WRONG — debiting Rent when Repairs was meant keeps debits equal to credits but misstates the accounts.
- COST of software, hardware and training, which can be significant for a small trader.
- TRAINING: staff must learn the package; errors are common in the early months.
- DATA LOSS through system failure, virus or hardware damage, unless regular backups are taken.
- SECURITY: unauthorised access or tampering is a real risk, which is why passwords and user rights matter.
- SYSTEM FAILURE or a power cut can halt work entirely.
- Fear of retrenchment among staff accustomed to manual work.

Manual versus computerised accounting

- **RECORDING:** manual entries are handwritten in journals and ledgers; computerised entries are keyed in once and posted automatically.
- **CALCULATION:** manual totalling is slow and error-prone; the computer calculates instantly and without arithmetical error.
- **ADJUSTING ENTRIES:** both systems require them, but the computer applies them to all affected reports at once.
- **TRIAL BALANCE:** prepared manually with effort; generated at the click of a button in a computerised system.
- **BACKUP:** manual records can be lost to fire or damage; computerised data can be backed up, but is exposed to virus and system failure.
- The underlying accounting principles are identical in both.

Types of accounting software

- **READY-MADE:** standard packages such as Tally, suited to small businesses with ordinary requirements. Cheapest and quickest to install, with limited flexibility.
- **CUSTOMISED:** a ready-made package modified to suit the particular needs of a business. Costs more, and some training is needed.
- **TAILOR-MADE:** developed specially for a single large organisation with unique requirements. Most expensive, and specialised training is essential.
- The choice depends on the size of the business, the volume of transactions, the level of secrecy required and the budget available.

Three misconceptions to clear

- **WRONG:** 'Computerised accounting changes the rules of debit and credit, so a new set must be learned.' The rules are identical; only the tool changes.
- **WRONG:** 'Once you use software you need not understand which accounts to use — the computer decides.' The computer cannot decide classification. It records what you tell it, which is why GIGO matters.
- **WRONG:** 'Only large companies use computerised accounting; small shops still work manually.' Small traders across Kerala routinely use Tally or similar software, not least because GST returns are filed online.

Formulas & formats

- GST on a sale:
 $\text{CGST} = \text{Taxable value} \times \text{CGST rate}$
 $\text{SGST} = \text{Taxable value} \times \text{SGST rate}$
 $\text{Invoice value} = \text{Taxable value} + \text{CGST} + \text{SGST}$
Example: $50,000 + 2,500 + 2,500 = ₹55,000$
- Entry generated by the software for a credit sale with GST:

Debtor's A/c	Dr. 55,000
To Sales A/c	50,000
To Output CGST A/c	2,500
To Output SGST A/c	2,500
- Components of a computerised accounting system:
DATA → DATABASE → DBMS → ACCOUNTING SOFTWARE → REPORTS
(supported by hardware, people and procedures)
- Setup sequence:
 1. Create the chart of accounts
 2. Enter opening balances
 3. Configure GST rates
 4. Define user access rights
- Types of software:
Ready-made → small business, low cost, low flexibility
Customised → modified to fit, medium cost
Tailor-made → large organisation, high cost, specialised training

Important questions & model answers

2 marks What is a computerised accounting system?

- A computerised accounting system is one in which financial transactions are recorded, processed, stored and reported using a computer and accounting software instead of handwritten books.
- It applies exactly the same accounting principles as the manual system — double entry, the accounting equation and the trial balance — but automates the recording and reporting work.

3 marks 'Computerised accounting changes the rules of accounting.' Do you agree? Give reasons.

- No, this is incorrect.
- The fundamental rules are unchanged: every transaction still has two aspects, Assets still equal Liabilities plus Capital, and the trial balance must still tally.
- What changes is only the METHOD of recording — entries are keyed in once and the software posts, balances and reports automatically.
- The accountant must still decide which accounts to debit and credit; that judgement cannot be automated.

3 marks What is a database? What is its role in a computerised accounting system?

- A database is an organised collection of related data stored in structured tables.
- In a computerised accounting system it holds every ledger entry in an orderly form, rather like a digital filing cabinet.
- The software that manages it is called the Database Management System (DBMS), which stores, retrieves and protects the data and controls who may access it.
- Because the data is structured, one entry can be drawn into many different reports without being written again.

4 marks State any four advantages of computerised accounting over manual accounting.

- SPEED: transactions are processed and reports produced instantly, so management can see up-to-date figures daily.
- ACCURACY: once correctly set up, the software makes no arithmetical errors in totalling, balancing or carrying forward.
- AUDIT TRAIL: every entry is automatically logged with the user and time, so alterations are traceable.
- REPORTING AND STORAGE: a wide range of reports can be generated from the same data, and years of records are stored without physical space.
- SCALABILITY: a large increase in the volume of transactions can be handled without a proportionate increase in staff.

3 marks Explain 'Garbage In, Garbage Out' with an example.

- GIGO means that a computer processes faithfully whatever data it is given; if the input is wrong, the output will be wrong, and the system gives no warning.
- Example: if an amount spent on repairs is entered against the Rent account, the entry is still balanced — debits equal credits — so no error is flagged.
- The trial balance will tally, yet both the expense classification and the reports drawn from it are wrong.
- This is why accounting knowledge remains essential: the software cannot judge whether the account chosen is the correct one.

5 marks Ramesh sells cloth worth ₹50,000 on credit with 5% CGST and 5% SGST. Show the entry the software generates.

- $\text{CGST} = ₹50,000 \times 5\% = ₹2,500$. $\text{SGST} = ₹50,000 \times 5\% = ₹2,500$.
- Total invoice value = $₹50,000 + ₹2,500 + ₹2,500 = ₹55,000$.
- ENTRY: Debtor's A/c Dr. ₹55,000
- To Sales A/c ₹50,000; To Output CGST A/c ₹2,500; To Output SGST A/c ₹2,500.
- The software simultaneously updates the debtor's balance, the sales total, both GST liability accounts, the stock records and the GST return.
- The GST collected is a LIABILITY owed to the government, not income of the business.

4 marks State any four limitations of a computerised accounting system.

- GIGO — incorrect input is recorded faithfully and without warning, so errors of classification go undetected.
- COST of software, hardware and training, which may be heavy for a small business.
- TRAINING is required, and mistakes are common while staff are learning the package.
- DATA LOSS may occur through system failure, virus attack or hardware damage unless regular backups are maintained.
- SECURITY risks from unauthorised access or tampering, and complete stoppage of work during a power failure or system breakdown.

3 marks Distinguish between ready-made, customised and tailor-made accounting software.

- READY-MADE software is a standard off-the-shelf package such as Tally, suited to small businesses with ordinary requirements. It is cheapest and quickest to install but offers little flexibility.
- CUSTOMISED software is a ready-made package modified to suit a particular business. It costs more and requires some training.
- TAILOR-MADE software is developed specially for one large organisation with unique needs. It is the most expensive and requires specialised training.
- The choice depends on the size of the business, the volume of transactions, the secrecy required and the budget.

3 marks What is an audit trail, and why is it valuable?

- An audit trail is the automatic record kept by the software of every entry — who made it, when it was made, and what was subsequently changed.
- It makes any alteration visible, so entries cannot be quietly modified or deleted.
- It therefore discourages fraud, fixes responsibility on individual users, and greatly assists auditors in verifying the accounts.
- This is a significant advantage over manual books, where an erasure may leave no trace of who made it.

4 marks State the steps involved in setting up a computerised accounting system.

- Create the CHART OF ACCOUNTS — the complete list of account heads the business will use, properly grouped.
- Enter the OPENING BALANCES of all assets, liabilities and capital accounts.
- Configure GST RATES for each item or service so that tax is computed automatically.
- Define USER ACCESS RIGHTS — deciding who may enter transactions, who may edit them and who may only view reports.
- This setup requires sound accounting knowledge; a poorly designed chart of accounts will distort reports for years.

Exam tips

- State early in any answer that computerised accounting changes the TOOL, not the RULES — it is a frequently marked point.
- When asked for advantages, give named headings (speed, accuracy, audit trail, reporting, storage, scalability) rather than a vague paragraph.
- For GST sums, show CGST and SGST as SEPARATE lines and separate accounts. Merging them into one 'GST A/c' loses marks.
- Remember GST collected is a LIABILITY, never income — say so explicitly if the question involves a sale with GST.
- Explain GIGO with a concrete example; the example carries its own mark.
- Do not write that the software decides which accounts to use. It cannot — that is the accountant's judgement.
- Name real packages (Tally, Busy, Zoho Books) when asked for examples of accounting software.

Quick revision

- Computerised accounting changes the TOOL, not the RULES.
- DATA → DATABASE → DBMS → SOFTWARE → REPORTS.
- Software examples: Tally, Busy, Zoho Books.
- Setup: chart of accounts → opening balances → GST rates → user access.
- Ramesh: 50,000 + CGST 2,500 + SGST 2,500 = ₹55,000 invoice; Debtor Dr 55,000, Sales Cr 50,000, Output CGST 2,500, Output SGST 2,500.
- GST collected is a LIABILITY, not income.
- Advantages: speed, accuracy, audit trail, reporting, storage, scalability, legibility.
- Limitations: GIGO, cost, training, data loss, security, system failure.
- Software types: ready-made, customised, tailor-made.
- A balanced entry can still be logically wrong — the computer cannot classify for you.