

Protecting its Information systems and the data that they contain is a major concern for an organisation. Discuss the aspects of system security and data security that an organisation needs to consider, paying particular attention to the following:

- risk analysis;
- security policy;
- audit requirements;
- disaster recovery management.

The quality of written communication will be assessed in your answer (20 marks)

Continuous prose is expected for this answer. Discuss the question, so each point made must be full, not just a single word/phrase. Mark as **R, S, A** or **D** for four bullets. A full explanation/description gets an extension mark (**Re, Se, Ae** or **De**) . no more than 5 marks awarded in each section. Max 16 content marks.

R . risk analysis

- identify each element of a successful information system
- place a value . to the business . on that element
- identify any potential threats to that element
- the likelihood of the threat occurring
- use an algorithm to calculate an overall risk figure
- that will indicate a degree of severity

S . security policy

- Prevention of misuse
- Physical security procedures
- Logical (software) security procedures
- Detection of misuse
- Investigation of misuse
- Staff responsibilities
- Disciplinary procedures
- Code of Practice
- Adherence/Compliance with legislation

A . auditing

- Network auditing
- Financial systems auditing
- Application systems auditing
- Impact of auditing
- Audit tools
- Audit trails

D . disaster recovery

- Threats to systems . e.g. physical, document, personnel, hardware, communications (network), software (allow 1 mark in total if just listed, but 1 mark for each one explained/expanded)
- Why protect . commercial need
- Contingency plans . e.g. People involved, steps to be taken, types (RAID, cold site recovery, reciprocal agreements) etc (again, if many methods just listed, 1 mark total, if good explanations then 1 each)
- Criteria for selecting contingency plan . e.g. scale, location, likelihood, recovery costs , type of systems etc (again, 1 for list, or 1 for each well explained point)
- Backup (must talk about a feature or reason to get the first mark e.g. thinking about where to keep backup or frequency etc)
- Recovery (ditto)