

**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* is 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)