**STEPHJOY HIGH SCHOOL**

**COMPUTER STUDIES FORM TWO MARCH/APRIL 2022 ASSIGNMENT**

NAME………………………………………………………………………………………………………………………..CLASS……………..

**DATA SECURITY & CONTROL**

1. (a) Differentiate between Data Security and Data Integrity. (2mks)

(b) Give the Two types of data that should be protected in a computer. (3mks)

1. State any three threats to data and information. (3mks)
2. State five possible ways of preventing data loss from a computer. (5mks)
3. (a) Define the term Computer crime. (2mks)

(b) Explain the meaning of each of the following with reference to computer crimes.

1. Tapping
2. Piracy.
3. Trespass.
4. Industrial espionage
5. Data alteration
6. Fraud
7. Firewalls
8. Give two reasons that may lead to computer fraud. (2mks)
9. Outline four ways of preventing piracy with regard to data and information. (4mks)
10. (a) Differentiate between Hacking and Cracking with reference to computer crimes. (2mks)

(b) Describe the following terms with respect to computer security: (6mks)

1. Audit trail.
2. Data Encryption.
3. Log files.
4. Firewalls.
5. Physical security
6. Logic bombs.
7. (a) What is a Computer virus? (2mks)

(b) Outline four symptoms of a virus infection in a computer system. (4mks)

(b) State two damages which a computer virus may cause to a computer. (2mks)

(c) Explain three control measures you would take to protect your computers from virus attacks. (3mks)

1. List three functions of an antivirus software. (3mks)
2. Computer systems need maximum security to prevent an unauthorized access. State three precautions that you would expect an organization to take to prevent illegal access to its computer-based systems. (3mks)
3. (i) Explain what is meant by the term “computer security” (2mks)
4. Explain why the following controls should be implemented for computer based systems.
5. Backups (2mks)
6. Air conditioning (2mks)
7. Uninterruptible power supply (UPS) (2mks)
8. Segregation of duties (2mks)
9. Passwords (2mks)
10. Give four rules that must be observed in order to keep within the law when working with data and information. (4mks)
11. (a) Define the term Computer ethics. (1mk)