|  |  |  |
| --- | --- | --- |
|  | OCR Cambridge TEC (Introductory Diploma) in IT Spec 2016  **Unit 2 – Global Information (Exam unit)**  **L06 : Understand the principles of Information Security** | Student Name:­­­­ \_\_\_\_\_\_\_\_\_\_\_ **Grade Awarded by: \_\_n/a\_\_**  **Date Awarded: \_\_\_\_\_n/a\_\_\_** Grade: PASS/MERIT/DISTINCTION |

##### Unit 02 LO6 – Personalised Learning Checklist

*Note : This LO is worth 10 – 20%*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Topic** | **ACTIVITIES** | | | | | | | | | | | | | | **Secure?** |
| **6.1 Principles of information security** | Produce a **TABLE or MINDMAP** the PRINCIPLEs and AIMS of Information Security | | | | | | | | | | | | | |  |
| **CONFIDENTIALITY** *(information can only be accessed by individuals, groups or processes authorised to do so)* | | | **INTEGRITY** *(information is maintained, so that it is up to date accurate, complete and fit for purpose)* | | | | | | | **AVAILABILITY** *(information is always available to and usable by the individuals, groups or processes that need to use it).* | | | |  |
| **Aim of Information Security for holders of information** | | | | | | | | | | | | | |  |
| **6.2 Risks of breaches in Information Security** | Produce a **TABLE or MINDMAP** that IDENTIFIES the Risks of breaches in Information Security | | | | | | | | | | | | | |  |
| **Unauthorised or unintended access to data** (eg. Espionage, poor information security policy) | | **Accidental loss of data** (Eg. Human error, equipment failure) | | | | **Intentional destruction of data** (Eg. Computer virus, targeted malicious attack) | | | | | | **Intentional tampering with data** (Eg. Fraudulent activity, hacking) | |  |
| **6.3**  **Impact of Risks of breaches in Information Security**  **to Holders of Information** | Produce a **TABLE or MINDMAP** that IDENTIFIES the **Impact of Risks of breaches in Information Security to Holders of Information** | | | | | | | | | | | | | |  |
| **Loss of Intellectual Property** | **Loss of service and access** | | | | | | **Failure in security of confidential information** | | | | | | **Loss of information belonging to a third party** |  |
| **Loss of reputation** | **Threat to national security** | | | | | | | **Recent cases of failures of information security** *(collaboration work : each student research/write two different real cases where failures of information security in organisations has made huge news)* | | | | | |  |
| **6.4 Protection measures to mitigate breaches in Information Security** | Produce a **TABLE or MINDMAP** that IDENTIFIES Protection measures POLICIES to mitigate breaches in Information Security | | | | | | | | | | | | | |  |
| Policy of staff access rights to information | | | | | | Policy on the responsibilities of staff for security of information | | | | | | | |  |
| Policy on Disaster Recovery | | | | | | Policy on Information Security Risk Assessment | | | | | | | |  |
| Policy on Data Recovery (eg. Back up policy, frequency, prevention against deletion or corruption etc) | | | | | | Policy includes the need for Staff Training on how to handle information (sensitive data, data protection act) | | | | | | | |  |
| **JUSTIFICATIONs of different measures that can be used in a given context.** | | | | | | | | | | | | | |  |
| **6.5 Physical protection of Information Security** | Produce a **TABLE or MINDMAP** that IDENTIFIES **Physical protection** of Information Security | | | | | | | | | | | | | |  |
| Locks, keypads and biometrics used on workstations, server room access | | | | Placing computers above known flood levels | | | | | | | Backup systems in other locations | | |  |
| Security staff | | | | Shredding old paper based records | | | | | | | | | |  |
| **6.6 Logical Protection of Information Security** | Produce a **TABLE or MINDMAP** that IDENTIFIES **Logical Protection** of Information Security | | | | | | | | | | | | | |  |
| Tiered levels of access of data | Firewalls (hardware and software) | | | | Obfuscation *(purposely make something unintelligible so that it cannot be understood – can be carried out by individuals but more commonly by specialist software)* | | | | | | | | |  |
| Anti-malware applications | Encryption of data at rest | | | | Encryption of data in transit | | | | Password protection | | | | |  |