D1.1 – External Threats

Class Tasks

MARK SCHEME

# Class Task 1 – Viruses and Malware

## Question 1.1

What is a threat? (***1 mark***)

It is any one of the ways that a ***cybersecurity*** attack can happen

***Do not award marks for just saying ‘hacking’***

## Question 1.2

From the following examples, name any two non-technical threats? (***2 marks***)

* Writing your password down on a piece of paper.
* Injecting malware into a system.
* Lending someone the keycard to the server room.
* Creating a botnet.
* Launching a DDOS attack.

Writing your password down on a piece of paper

Lending someone the keycard to the server room

## Question 1.3

What is a vulnerability? **(2 marks**)

A known weakness or defect (1) in a system, network or application (1)

**Must have both parts to score both marks**

## Question 1.4

## Question 1.5

## Question 1.6

## Question 1.7

## Question 1.8

## Question 1.9

## Question 1.10

## Question 1.11

## Question 1.12

## Question 1.13

## Question 1.14

## Question 1.15

# Class Task 2 – Hackers and Accidental Damage

## Question 2.1

What is hacking? (**1 marks**)

It is where an individual tries to gain unauthorised access to a system (1)

**DO NOT award marks if the candidate mentions ‘causing damage’**

## Question 2.2

## Question 2.3

## Question 2.4

## Question 2.5

# Class Task 3 – Social Engineering

## Question 3.1

## Question 3.2

## Question 3.3

## Question 3.4

## Question 3.5

## Question 3.6

## Question 3.7

## Question 3.8

# Class Task 4 – Natural Disasters

## Question 3.1

## Question 3.2

## Question 3.3

## Question 3.4

# Exam Style Questions

## Question 1

Explain what is meant by a ‘Threat Actor’? (**3 *marks***)

|  |  |
| --- | --- |
| **Answer** | **Mark** |
| Award **one** mark for identification and **one** mark for an appropriate linked explanation/expansion up to a **maximum of three marks**.  An individual / group (1) that takes part in / plays a role (1) in an attack designed to cause damage to an individual / system (1)  An individual or group (1) that plays a role in a social engineering attack (1) designed to cause damage to an individual / system (1)  An individual or group (1) that designs / codes / engineers / installs malware (1) designed to cause damage to an individual / system (1)  **Accept any other appropriate/alternative response** | **(3)** |

## Question 2

DataStorm has a large CRM database that has not been updated for a while by the administrators.

Due to human error by a data engineer, some of this customer data was accidentally published to their live webserver where it was downloaded using a public API.

In this scenario, identify the Threat Actor and the Breach Point (***2 marks***)

|  |  |
| --- | --- |
| **Answer** | **Mark** |
| Award **one** mark for each of the following, up to a maximum of **two** marks.  **Threat Actor**  The Data Engineer (1)  **Breach Point**  The Web Server (1) | **(2)** |

## Question 3

Describe **TWO** ways in which bugs find their way into a program (4 marks)

## Question 4

## Question 5

## Question 6

## Question 7

## Question 8

## Question 9

## Question 10

## Question 11

## Question 12

## Question 13

## Question 14

## Question 15

## Question 16

## Question 17

## Question 18

## Question 19

## Question 20

## Question 21

## Question 22

*Logo, company name

Description automatically generated*

*No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the TheComputingTutor Ltd.*