**GENERAL INTEGRATED SCIENCE– UNIT 2**

**TASK 9 – Forensics Ethics Extended Response Marking Key**

1. **Define ‘ethics’.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Appropriate definition of ‘ethics’ | 1 |
|  | **1** |

1. **Describe what objectivity is in forensic science.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. States that objectivity is removing bias 2. Defines objectivity, and explains that it is important in forensic science in order to have unbiased/fair/evidence-based trials. | 1-2 |
|  | **2** |

1. **Describe what competence is in forensic science.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. States that competence is being able to confidently and accurately complete a task 2. Defines competence, and then explains that it is important in forensic science in order for all evidence to be useful and all reports true. | 1-2 |
|  | **2** |

1. **Describe what security of evidence is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. States that security of evidence is having all evidence for a case safely locked away 2. Define security of evidence, and then explains that it is important for forensic science to ensure that evidence has not been tampered with. | 1-2 |
|  | **2** |

1. **Describe why ‘accurate analysis and reporting’ is important in forensic science.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. States that accurate reporting and analysis involves scientists using valid/reliable/careful investigate measures to create true reports 2. States above, then explains that this is important to ensure that all evidence is accurate. | 1-2 |
|  | **2** |

1. **Outline the steps that crime scene investigators follow when they arrive at a crime scene.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Briefly states overview of general steps 2. List most steps, some detail omitted 3. Lists all steps in detail (*Observe scene, secure and protect scene, preliminary survey, evaluate physical evidence, prepare narrative, photograph scene, sketch scene, detailed search, collect and record evidence, final survey, release scene)* | 1-3 |
|  | **3** |

1. **Describe what is meant by the ‘chain of custody’, and explain why it is important in criminal investigations.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Vague description of ‘chain of custody’ *(e.g. ‘where evidence goes’).* States that it is important, limited developed of why. 2. Briefly describes ‘chain of custody’, omitting some detail, and describes why it is important. 3. Describes ‘chain of custody’ in detail and clearly links that it can impact the reliability of evidence in criminal investigations. | 1-3 |
|  | **3** |

1. **Explain how investigators go about collecting and storing evidence to ensure that it is not contaminated**.

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Brief description including irrelevant points 2. Description, missing some key points 3. Detailed description of how evidence is collected, some examples for specific evidence types – *(gloves, hair tied back, tweezers, labels, paper bags, cool dry room, locked).* | 1-3 |
|  | **3** |

1. **Describe what ‘DNA Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes what DNA analysis is, omitting some detail, briefly states why it is important 3. Detailed description of DNA analysis, and explanation of why it is reliable | 1-3 |
|  | **3** |

1. **Describe what ‘Fingerprint Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes fingerprint analysis, omitting some detail, briefly states why it is important 3. Detailed description of fingerprint analysis, and explanation of why it is reliable | 1-3 |
|  | **3** |

1. **Describe what ‘Fibre Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes fibre analysis, omitting some detail, briefly states why it is not highly important 3. Detailed description of fibre analysis, and explanation of why it is rarely useful | 1-3 |
|  | **3** |

1. **Describe what ‘Blood Type Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes blood type analysis, omitting some detail, briefly states why it is important 3. Detailed description of blood type analysis, and explanation of why it is reliable but rarely useful | 1-3 |
|  | **3** |

1. **Describe what ‘Blood Spatter Analysis ’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes blood spatter analysis, omitting some detail, briefly states why it is important 3. Detailed description of blood spatter analysis, and explanation of why it is reliable | 1-3 |
|  | **3** |

1. **Describe what ‘Handwriting Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes handwriting analysis, omitting some detail, briefly states why it is not reliable 3. Detailed description of handwriting analysis, and explanation of why it is not reliable | 1-3 |
|  | **3** |

1. **Describe what ‘Forensic Toxicology Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes toxicology analysis, omitting some detail, briefly states why it is important 3. Detailed description of toxicology analysis, and explanation of why it is highly reliable | 1-3 |
|  | **3** |

1. **Describe what ‘Tread Analysis’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes tread analysis, omitting some detail, briefly states why it is rarely reliable 3. Detailed description of tread analysis, and explanation of why it is rarely reliable | 1-3 |
|  | **3** |

1. **Describe what an ‘eyewitness testimony’ is, and how reliable it is.**

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1. Poor description of process, limited description of reliability 2. Describes eyewitness testimony, omitting some detail, briefly states why it is important 3. Detailed description of eyewitness testimony, and explanation of why it is often unreliable | 1-3 |
|  | **3** |

**Persuasive Essay Plan Marking Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **5** | **4** | **3** | **2** | **1** |
| **Case Summary** | Explains case, including all relevant details. | Explains case, some detail missing. | Describes some parts of case, some key points missing. | Lists some facts about the case. | Extremely limited case summary. Missing nearly all details. |
| **Building argument** | Presents clear and logical argument that is supported by evidence. | Presents argument or statements that are not well‐supported by evidence. | Presents statements of ideas with some development of an argument | Presents statements of ideas with limited development of an argument. | Does not present an argument. |
| **Referring to evidence** | Explains why evidence used in case was not reliable by evaluating the forensic analysis methods used. | Describes why evidence used in case was not reliable by comparing the forensic analysis methods used. | Describes some issues with evidence used in case and refers to some of the forensic analysis methods used. | Inappropriately states why evidence used was unreliable. | Does not comment on poor evidence used in the case. |
| **Ways to improve investigation** | Suggests appropriate ways to improve the investigation using more reliable forensic analysis methods. | Makes general suggestions to improve the investigation using forensic analysis methods. | Suggests general improvements to investigation. | Suggests some general improvements to the investigation that are irrelevant or incorrect. | Does not identify ways to improve investigation |