The Surrogacy Mix-Up Case

In 2021, a private fertility clinic in Taguig City became the center of controversy when a child named **Amara** was born through in vitro fertilization (IVF) and later claimed by **three different women** as her biological mother.

The clinic had handled several IVF embryo transfers on the same day due to a laboratory scheduling error. When Amara was born, inconsistencies in the documentation raised suspicion that the embryos might have been **mislabeled or cross-implanted**.

The following women filed claims:

- 1. **Isabel**, a business executive, who underwent IVF with her husband, **Dr. Adrian**, a fertility specialist who confirmed he was Amara's **biological father**.
- 2. **Jenna**, a professional model who claimed she had donated her egg but was not informed that it had been used.
- 3. **Grace**, a surrogate mother who carried the pregnancy but suspected the implanted embryo was not genetically hers.

To resolve the case, the court ordered **maternity and paternity testing** using **ABO blood typing** and **DNA profiling (13 STR loci)** for the child, the three putative mothers, and the biological father. The results are as follows:

| Person | ABO Type | |
|--------------------------------|----------|--|
| Child – Amara | 0 | |
| Alleged Mother 1 – Isabel | В | |
| Alleged Mother 2 – Jenna | В | |
| Alleged Mother 3 – Grace | В | |
| Biological Father – Dr. Adrian | В | |

| Locus | Child – Amara | Biological Father – Dr. Adrian | Mother 1 – Isabel | Mother 2 – Jenna | Mother 3 – Grace | Allele Frequencies (Observed) | Maternity Index |
|---------|------------------|--------------------------------------|-------------------------|------------------------|------------------------|---|--------------------|
| D3S1358 | 15,16 | 16,17 | 14,15 | 15,16 | 16,17 | 14:0.18; 15:0.29; 16:0.27; 17:0.12 | |
| vWA | 16,18 | 16,18 | 14,16 | 16,18 | 15,18 | 14:0.20; 15:0.21; 16:0.28; 18:0.19 | |
| FGA | 21,24 | 21,23 | 24,25 | 21,24 | 22,24 | 20:0.10; 21:0.17; 22:0.15; 23:0.12; 24:0.24; 25:0.11 | |
| D8S1179 | 12,14 | 14,15 | 10,12 | 12,14 | 13,14 | 10:0.09; 12:0.26; 13:0.19; 14:0.23; 15:0.11 | |
| D21S11 | 29,32 | 29,30 | 30,32 | 29,32 | 28,31 | 28:0.07; 29:0.18; 30:0.15; 31:0.16; 32:0.20 | |

| D18S51 | 13,15 | 15,17 | 12,13 | 13,15 | 13,14 | 12:0.12; 13:0.22; 14:0.19; 15:0.21; 17:0.08 | |
|---------|-------|-------|-------|-------|-------|---|--|
| D5S818 | 11,12 | 12,13 | 11,12 | 11,12 | 10,11 | 10:0.13; 11:0.28; 12:0.31; 13:0.07 | |
| D13S317 | 8,11 | 9,11 | 8,11 | 8,11 | 8,10 | 8:0.30; 9:0.10; 10:0.12; 11:0.27 | |
| D7S820 | 9,10 | 9,11 | 8,10 | 9,10 | 8,9 | 8:0.24; 9:0.26; 10:0.25; 11:0.08 | |
| TH01 | 6,9.3 | 6,9.3 | 6,7 | 6,9.3 | 6,9.3 | 6:0.33; 7:0.20; 9.3:0.21 | |
| TPOX | 8,11 | 8,11 | 8,11 | 8,11 | 11,12 | 8:0.32; 11:0.29; 12:0.07 | |

| CSF1PO | 10,12 | 11,12 | 12,11 | 10,12 | 11,12 | 10:0.25; 11:0.18; 12:0.31 | |
|---------|-------|-------|-------|-------|-------|--|--|
| D16S539 | 11,12 | 12,13 | 12,12 | 11,12 | 12,13 | 9:0.09; 11:0.29; 12:0.30; 13:0.08 | |

- 1. Who is/are the possible mothers based on the blood types? Why?
- 2. Who is/are excluded as mother? why?
- 3. Encircle the obligate maternal allele in the column of Amara's DNA profile.
- 4. Encircle the obligate alleles present in each putative mother's profile.
 - a. What does it mean if the putative mother does not have all or some of the obligate maternal allele? Why?
 - b. What does it mean if a putative mother has all the obligate maternal allele? Why?
- 5. Compute the Maternity Index (MI).
 - a. How is this computed?
 - b. What does the MI signify?
- 6. Compute the Combined Paternity Index (CMI).
 - a. How is this computed?
 - b. What does CMI signify?
- 7. Derive the Probability of Maternity and convert it into a percentage format.
 - a. How is this computed?
 - b. What does PoM signify?
- 8. Prepare a Legal Memorandum based on the facts and results of the Maternity test.