SECTION I **Short-Answer Questions:** in Questions 1-6 give a short explanation of your answer along with the answer itself.

1. **(2 marks)** Let $A = \{1, 2, 4, 8, 16\}$ and $B = \{1, 2, 3, 5, 8\}$. Find $(A \cup B) \backslash (A \cap B)$.

   Explain your answer.

$A \cup B = \{1, 2, 3, 4, 5, 8, 16\}$

$A \cap B = \{1, 2, 8\}$

$\rightsquigarrow (A \cup B) \backslash (A \cap B) = \{3, 4, 5, 16\}$

$(A \cup B) \backslash (A \cap B) =$ $\{3, 4, 5, 16\}$