

# Exam for course 1

Surname :

Firstname :

Please report your answers on this page only. Questions are on the following pages.

**Question 1 (V-1.1) : AI and non-AI**

**Question 2 (V-1.1) : The rebirth of AI**

**Question 3 (V-1.3) : Open challenges in AI**

**Question 4 (B-1.1) : AI and non-AI**

**Question 5 (B-1.1) : The rebirth of AI**

**Question 6 (B-1.3) : Open challenges in AI**

### **[Vert] Question 1 : AI and non-AI**

Report the numbers corresponding to AI solutions :

1. Winning at a game by experiencing a lot of plays
2. Computing the missing length of a triangle given the two other ones using the Pythagorean theorem
3. Winning at a game by computing all possible combinations of plays and choosing the one that is the most likely to win
4. Computing the missing length of a triangle given the two other ones generalizing lots of previously seen examples

### **[Vert] Question 2 : The rebirth of AI**

Report the numbers corresponding to reasons for the rebirth of AI :

1. The easy access to huge datasets on the Internet
2. The novel ways of communicating research
3. The rise of a new generation of robots
4. The ability of algorithms to mimic the functioning of the human brain

### **[Vert] Question 3 : Open challenges in AI**

Cite at least two open challenges in AI.

### **[Bleu] Question 4 : AI and non-AI**

Give an example of a problem that is considered difficult for humans but is not considered AI for a machine

### **[Bleu] Question 5 : The rebirth of AI**

Cite the names of the three main scientists that contributed to the rebirth of AI

### **[Bleu] Question 6 : Open challenges in AI**

Describe briefly what a concrete problem related to computational and memory footprints could be.