

Quiz 1A

رقم الشعبة الأصلية:

رقم التسجيل:

الاسم:

Instructions: Time **15** minutes. Open book and notes exam. No electronics. Please answer all problems in the space provided and limit your answer to the space provided. No questions are allowed.

P1. Of the 6 reasons given below, \checkmark check the three main reasons why AI is succeeding now.

- Problems are becoming easier to solve.
- Computers are becoming faster.**
- Training datasets are becoming more available.**
- More users are becoming connected through the internet.
- Developers are developing better algorithms.**
- Internet communication is becoming faster.

P2. Assume that you have a very small dataset. What validation scheme you would use and why?

k-fold cross validation technique because it provides better accuracy as every training

instance gets the chance to be in the train and test sets.

P3. Given the following code and output, write your Python code below to handle any missing data.

```
import pandas as pd
data = pd.read_csv("filename.csv")
data.info()
```

```
<class 'pandas.core.frame.dataframe'="">
RangeIndex: 100000 entries, 0 to 99999
Data columns (total 3 columns):
column_1 100000 non-null float64
column_2 100000 non-null float64
column_3      10 non-null float64
dtypes: float64(3)
memory usage: 2.5 MB
```

```
data = data.drop('column_3', axis=1)
```

<Good Luck>