



Exam : first session - third semester  
Academic year 2023/2024

Academic stage: Bachelor's degree

Course: Specialized Language (Foreign)

Second Year

Duration: two hours

Specialty : Data Science

Professor's name: Dr. Wafa Hoteit

**Question 1: Point out the following statement is true or false (4 points):**

- 1- Data science can be used to help you make better business decisions.
- 2- Semi-structured Data: is a combination of both unstructured and structured types of data.
- 3- Data mining, known also as knowledge discovery in data (KDD), but it is not a branch of data science.
- 4- Machine learning is not important component of the growing field of data science.

**Question 2: Answer each of the following in full sentences (4 points per each):(12points)**

- 1- There are mainly stages provide a general framework for data science work: Mention these stages and talk about one only in detail.
- 2- Explain the difference between Artificial intelligence (AI) and Data science .
- 3- Explain the Key Differences Between Data and Information.

**Question 3: Multiple Choice. Circle the correct answer, every multiple-choice question has exactly one correct answer (4 points):**

- 1- Machine learning is a subset of:

- a) artificial intelligence (AI).
- b) Data mining.
- c) algorithms.
- d) all of the above.

**2- key data science techniques among the following is:**

- a) Classification Analysis.
- b) Regression Analysis.
- c) Anomaly Detection.
- d) all of the above.

**3- Which of the following is not a part of data science process?.**

- a) Discovery.
- b) Modeling.
- c) Programming languages.
- d) Evaluation.

**4- Data science means:**

- a) Dealing with huge amounts of data to find marketing patterns is known as data science
- b) Extracting a meaningful insight from the data is what data science is
- c) It is a study that deals with a huge amount of all types of data structured, unstructured, or semi-structured
- d) All of the above

Good luck