

**Under the patronage of His Excellency the
Minister of Education
Mr. Mohamed Abdel Latif**

**and the directives of
Dr. Hala Abdel Salam**

**Head of the Central Department of General
Education**

Evaluations and Assignments

**Information and Communication Technology
for the Second Preparatory Grade
Preparation Committee**

Dr. Radwa Fouad Hassan

Review Committee

Dr. Mohamed Youssef

Scientific Supervision

Educational Computer Consultant

Dr. Abeer Hamed

Translated by

Miss. Asmaa Hamdy Aly

General Reference

Miss. Mervat Mubarak Soliman



Second Preparatory Grade – Weekly Evaluation and Homework – Week (5)

Weekly Evaluation

First Test

Put (✓) in front of the correct statement or (x) in front of the incorrect statement:

1. The neuron is the foundation upon which the structure of artificial neural networks is built. ()
2. The step that precedes passing the output directly to the activation function is assigning a weight to each input. ()

Second Test

Put (✓) in front of the correct statement or (x) in front of the incorrect statement :

1. Artificial neurons are used only in language translation and weather forecasting, and are not used in image recognition. ()
2. The activation function is the one that analyzes the image using the weights in the example of recognizing a cat. ()

Third Test

Put (✓) in front of the correct statement or (x) in front of the incorrect statement :

1. One of the practical applications of the artificial neuron is its use in diagnosing diseases in hospitals. ()
2. Self-driving cars are not considered among the complex problems that powerful neural networks can solve. ()

Class Evaluation

Dear student: Imagine you are designing a neuron that helps determine if a student needs help in a particular subject.

- What inputs would you use? (For example: student grades, number of absences).
- What decision would the neuron make? (For example: needs help or not).



Homework

Choose the appropriate answer to complete each of the following statements:

1- What is the basis for building what is known as artificial neural networks?

- A- Complex algorithms.
- B- The artificial neuron.
- C- Intelligent assistants.
- D- The instant translation function.

2- What is the step that follows determining the type of data and assigning a weight to each input in building the artificial neuron?

- A- Obtaining the final output.
- B- Passing the output to the activation function.
- C- Summing the inputs after multiplying them by their weights.
- D- Analyzing the image using the weights.