***University of biskra***

***Faulty of Science and Engineering***

***Science &Technology***

***English Exam***

***Exercice 01***

Fill in the blanks with words from list 1

This paper presents an ……………….. controller that acts as a ………….. Contrller

(FCC) utilizing the benefits of…….. logic (FL),……..Networks (NNs)and…………. Algorithms(GAs), this controller is built to control ………..plants, where the GA is used to train this Fuzzy Neural Controller(FNC) by adjusting of its …………. Based on minimizing the Mean Squar of Error (MSE)criterion .These parametres of the inculde the ……… and …….. scaling factors , the ………..and…………. of the membership function (MFs) for the input ………and the quantisation levels of the output variable, that are subjected to constraints on their values by the expert . The GA used in this work is a real\_coding GA with………. Selection methode and elitisme ………. To show the……………………………. Of this FNC serval invertable (open-loop stable) nonlinear plants have been selected to be controlled by this FNC through ……..

***List 1***

*Variable- FeedForward-nonlinear-parameters- input-output –hybrid-strategy-centers-widths-effectiveness-simulation-intelligent-Fuzzy-Neural-Genetique*

***Exercice 02***

Give the expression of the following equations.

1. Absolute value of a equals b cubed minus c squard.

…………………………………………………………………………………………………………

1. The equation x equal to five plus or minus square root of four, has two solutions, x equals seven and x equals three

…………………………………………………………………………………………………………….

1. $∅$ equals root of $l$over ***N*** by the summation from $l$to ***N*** of *x* sub *i* minus *m all to the square.*

……………………………………………………………………………………………………………..

Write how should read the following equation

1. F$≈\frac{q\_{1}q\_{2}}{r^{2}}$

……………………………………………………………………………………………….

1. T=2$π\sqrt{\frac{m}{K}}$

…………………………………………………………………………………………………

1. L=r$×p=r×m$

………………………………………………………………………………………………

***Exercice 03***

Translate the following words into English

Déformation=………………………

Ténacité=………………………

Alliages légers=……………………..

Cisaillement=………………………

Amortissement=………………………

Court-circuit=…………………………

Isolant=…………………………………

Générateur=………………………….

Bobine=…………………………

Fil de contact=……………………..

Constante diélectrique=……………………………………