**I. Pen-and-paper**

1. Forward Propagation:

This part objective is to transform the input no output , for achieving this we apply recursively these functions

Aplicando a forward propagation nos dados do enunciado obtemos os seguintes vetores de ativação e net input

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| (input) |  |  |  |  |  |  |
| 1 | 6 | 0.999988 | 3.76157 | 0.99892 | 0 | 0 |
| 1 | 1 | 0.761594 | 3.76157 | 0.99892 | 0 | 0 |
| 1 | 6 | 0.999988 |  |  |  |  |
| 1 |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |

Back Propagation:

Após a forward propagation devemos aplicar o SGD para determinar os parâmetros que melhor se adequam ao resultado pretendido

Updates:

**II. Programming and critical analysis**

1. Answer 5
2. Answer 6
3. Answer 7
4. Answer 8

**III. APPENDIX**

Paste your programming code here using Consolas 9pt or 10pt.

Use **highlighting** or colored text to facilitate the analysis by your faculty hosts.

**END**