

## **JUAS 2017**

### **Exercise associated with the lecture “Life-cycle and reliability of accelerators”**

#### **Reliability**

The log-book file joined (annex1) is of an accelerator used in a facility of research.

The scheduled time of beam usable for users is the slot 8h-20h.

1.1. Calculate the MTBF and MTTR (based on the definitions given in the lecture)

- for each system (RF, Powersupply n°2, Vacuum)
- for the all “accelerator”

1.2. Calculate the global availability of the accelerator.

1.3. Propose actions plans in order to improve the reliability, describing the different task group. Then give a classification of priority for the following two options:

Option 1: The experimentation needs a maximum of beamtime during the scheduled time

Option 2: The experimentation needs each day a slot of 5h of beam without interruption