**NAME: NGOCINDO JIMA FESTUS**

**DEPARTMENT: CHEMICAL ENGINEERING**

**MATRIC NO: 13/ENG01/008**

**COURSE: PROCESS DYNAMICS AND CONTROL I**

**COURSE CODE: CHE 531**

**ASSIGNMENT II**

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| **S/N** | **Point of difference** | **Feed-****forward control system**  | **Feed-backward control system** |
| **1.** | **Definition**  | Systems in which corrective action is taken before disturbances affect the output | Systems in which corrective action is taken after disturbances affect the output |
| **2.** | **Necessary requirements**  | Measurable disturbance or noise  | Not required |
| **3.** | **Corrective Action** | Corrective action taken before the actual disturbance occurs on the output | Corrective action taken after the disturbance occurs on the output |
| **4.** | **Control Variable adjustment** | Variables are adjusted based on prior knowledge and predictions. | Variables are adjusted depending on errors |
| **5.** | **Example**  | Use of flowmeter as feed forward block in temperature control systems. | Use of roll sensor as feedback element in ship stabilization system |