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| **Nama** | Edgrant Henderson Suryajaya | **Kode Asisten** | ………………………… |
| **NPM** | 2206025016 | **Jenis Tugas** | TP/CS…………………. |

**Jawaban**

1. A Cyber-Physical System (CPS) refers to the amalgamation of computational constituents with corporeal entities, such as machinery, sensors, actuators, and human beings, that creates an integrated system which interacts with its physical milieu. CPS are characterized by a broad spectrum of complexity, ranging from elementary gadgets such as thermostats to intricate systems like autonomous vehicles, smart cities, and industrial control systems.

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1. CPS are designed to optimize the efficacy, safety, dependability, and efficiency of diverse domains, including transportation, healthcare, manufacturing, and energy. Nonetheless, they also expose novel security and confidentiality predicaments, as they are susceptible to cyber-attacks, data breaches, and other malicious activities.

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