BINGHAM UNIVERSITY, KARU

COMPUTER SCIENCE DEPARTMENT

CMP 405-MODELLING AND SIMULATION

**SUBMITTED BY**

HARUNA SALIM DANTINE

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**QUESTIONS**

1. Benefits of simulation.

2. Benefits of Modelling.

# **BENEFITS OF SIMULATION**

1. Simulation provide users with practical feedback when designing real world systems. This allows the designer to determine the correctness and efficiency of a design before the system is actually constructed.
2. Simulation permit system designers to study a problem at several different levels of abstraction. By approaching a system at a higher level of abstraction, the designer is better able to understand the behavior’s and interactions of all the high level components within the system and is therefore better equipped to counteract the complexity of the overall system.
3. Simulators can be used as an effective means for teaching or demonstrating concepts to students. This is particularly true of simulators that make intelligent use of computer graphics and animation. Such simulators dynamically show the behavior and relationship of all the simulated system's components, thereby providing the user with a meaningful understanding of the system's nature.
4. Simulation can be used to compress a time frame, a simulation model run on a computer system can be used to investigate quickly the effects of a change in a real life situation that take place over several years.
5. It is cost effective.

# **BENEFIT OF MODELLING**

1. Improving impact analysis, identifying potential consequences of a change, or estimating modifications to implement a change.
2. Doesn't require any physical components, so money isn't wasted on expensive parts.
3. You can save and edit ideas, which makes it easier and cheaper to modify your design as you go along.
4. You can choose pre-drawn circuits or system blocks, which speeds up the process even further.
5. Speeds up production process.

REFERENCES

1. <http://cpanel.stpaulsscience.org/gceict/specifications/wjec/unit1/model/simulation/adv.htm>
2. <http://www.bbc.co.uk/schools/gcsebitesize/ict/modelling/1computersimulationrev3.shtml>
3. <http://www.bbc.co.uk/schools/gcsebitesize/design/systemscontrol/ictinindustryrev1.shtml>
4. <https://www.wisdomjobs.com/e-university/quantitative-techniques-for-management-tutorial-297/simulation-1640/advantages-and-disadvantages-of-simulation-10185.html>
5. <http://web.cs.mun.ca/~donald/msc/node7.html>