

## ASSESSMENT TEST 1

---

**INSTRUCTIONS: Answer all Questions**

**(30 marks)**

1. Differentiate between a relative filename and an absolute filename **(2 marks)**
2. Discuss the three multithreading models that exist within operating systems **(3 marks)**
3. Differentiate between the Interactive and Real-Time operating systems **(4 marks)**
4. Discuss one benefit and one drawback of the first-fit system **(4 marks)**
5. The biggest drawback of the segmented/demand paged memory is the need to access 4 tables meaning lots of overhead. Discuss how this can be mitigated **(4 marks)**
6. Compare and contrast internal fragmentation and external fragmentation **(4 marks)**
7. Briefly discuss any two functions of an operating system **(4 marks)**
8. Using a diagram, show the different thread states as a thread moves through the system. **(5 marks)**