Question 1

1.1.

**Interrupt**

An interrupt is an asynchronous, hardware-generated change of flow within an operating system. Hardware will trigger an interrupt by sending a signal to the CPU. In some cases, software may trigger an interrupt by executing a special operation called a system/monitor call.

**Trap**

A trap is a synchronous, software-generated interrupt. A user program can intentionally generate a trap as an exception. Traps can be used to call operating system/kernel routines or be an indicator of errors (division by zero or invalid memory access in user processes).

Question 2

Question 3

Question 4

Question 5

Question 6

Question 7

Question 8