

## Module 9: Exercise 2 on Information Availability

### Scenario:

A company has three components in a system and requires all three to be operational from 8 a.m. to 5 p.m. business hours, Monday to Friday. Failure of component 2 occurs as follows:

- Monday = 8 a.m. to 11 a.m.
- Tuesday = No failure
- Wednesday = 4 p.m. to 7 p.m.
- Thursday = 5 p.m. to 8 p.m.
- Friday = 1 p.m. to 2 p.m.

### Task:

Calculate the availability of component 2.

### Solution:

Availability (%) = system uptime / (system uptime + system downtime)

System downtime = 3 hours on Monday + 1 hour on Wednesday + 1 hour on Friday  
= 5 hours

System uptime = total operational time – system downtime  
= 45 hours – 5 hours = 40 hours

Availability (%) =  $40/45 = 88.9\%$