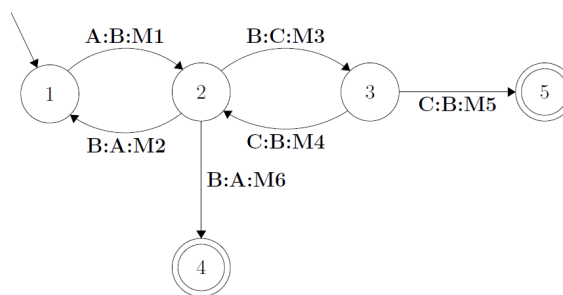


Assessment I
CS551K – Software Agents and Multi-Agent Systems
2020-2021

Instructions to students:

- Your solution should be one single PDF file which you should upload onto MyAberdeen by the established time/deadline. Please do not email us your solution.
 - Your PDF file should be named “CS551K-ASMNT1-Day-X-YourSurname-YourName-YourIDNo”. For instance, “CS551K-ASMNT1-Day-1-Smith-John-999999.pdf”, where Day 1-5 should be the day of the class test in question, and 999999 is your student ID. Please try to make your submission file less than 10MB as you may have issues uploading large files onto MyAberdeen.
 - Indicate clearly in your submission which item each solution is for. If we cannot identify this, you may be marked down.
2. **(Communicating)** The finite automaton below, where messages are in the format *Sender:Receiver:Message*, represents a protocol among 3 agents A, B and C (the actual content/format of *Message* is not important and we just use a generic label M1, M2, etc.):



You should:

- a) Represent the protocol as an *equivalent* AUML diagram.
- b) Provide the pseudo-code for agent A.
- c) Provide the pseudo-code for agent B.

(2 Marks)
(1.5 Marks)
(1.5 Marks)