UNIVERSITY OF TORONTO SCARBOROUGH

Fall 2019 Term Test Candidate Form – Version A

Multiple Choice Questions (1 Mark Each, Total Marks = 11)

Your multiple choice answers MUST be transferred to the scantron **DURING** the time allotted for the test. **ONLY THE ANSWERS ON THE SCANTRON SHEET WILL BE SCORED**

1. Identify the set of four quantum numbers that could represent the electron gained to form the Br ION from the Br atom.

   a) n = 5, l = 1, ml =-1 , ms = +1/2
   b) n = 4, l = 1, ml = 1, ms = -1/2
   c) n = 4, l = 0, ml = 1, ms = +1/2
   d) n = 3, l = 2, ml = 2, ms = +1/2
   e) n = 4, l = 2, ml = 1, ms = -1/2

2. Choose the ground-state electron configuration for Ti^{2+}.

   a) $[Ar]4s^23d^4$