First Name: _____

Last Name: _____

Student Number: _____

UNIVERSITY OF TORONTO FACULTY OF APPLIED SCIENCE AND ENGINEERING Final Exam – December 10, 2018 First Year **APS110/164** – ENGINEERING CHEMISTRY AND MATERIALS SCIENCE Exam Type: A Examiners – CQ Jia, SD Ramsay Duration: 150 minutes • Permissible Calculators: Casio FX-991 or Sharp EL-520 Rulers permitted	**Marks** ***Part A:*** *(/10)* ***Part B:*** **1.***(/20)* **2.***(/10)* **3.***(/10)* **4.***(/10)* **5.***(/10)* **6.***(/5)*