

T3 Examination Specifications (2016-2017)

Subject	Chemistry																						
Grade	10																						
Duration	90 minutes																						
Mark Determination	<ul style="list-style-type: none"> One step or one idea is equivalent to at least one degree and half a score is not distributed to any question. Each score must be consistent with the level of skill required in the question. The student must receive one degree for each expected answer. A score is set in parentheses, so [] for each parent or sub-grade at the end of the question. Minimum one idea is only one degree. 																						
Question Types/ Details	<ul style="list-style-type: none"> Multiple-choice. Short answers Questions. Matching Questions. Multiple particle questions, long answers or a combination of both. 																						
Outcomes which may be selected for assessment in the exam	<ul style="list-style-type: none"> The test will include 12 learning outcomes <table border="1"> <tr> <td>CL1.M1.32</td> <td>Explain how the octet rule applies to covalent bonds.</td> </tr> <tr> <td>CL1.M1.33</td> <td>Describe the formation of single, double, and triple covalent</td> </tr> <tr> <td>CL1.M1.34</td> <td>Compare sigma and pi bonds.</td> </tr> <tr> <td>CL1.M1.35</td> <td>Explain how the strength of a covalent bond, bond length and bond dissociation energy are related and to predict the relative bond – dissociation energies needed to break the bonds in a</td> </tr> <tr> <td>CL1.M1.36</td> <td>Explain the rules for naming binary molecular compounds, binary acids, and oxy-acids and to apply the rules for naming binary molecular compounds and writing the molecular formula.</td> </tr> <tr> <td>CL1.M1.37</td> <td>List the basic steps used to draw Lewis structures.</td> </tr> <tr> <td>CL1.M1.38</td> <td>Explain why resonance occurs and identify resonance structures.</td> </tr> <tr> <td>CL1.M1.39</td> <td>Identify the molecules that are exceptions to the octet rule and explain why those exceptions occur.</td> </tr> <tr> <td>CL1.M1.40</td> <td>Describe and summarize the VSEPR bonding theory and use it to predict the shape of and the bond angles in, a molecule.</td> </tr> <tr> <td>CL1.M1.41</td> <td>Describe and classify bond types between atoms using electronegativity difference and to predict the type of bond that will form between pairs of atoms.</td> </tr> <tr> <td>CL1.M1.42</td> <td>Compare polar and nonpolar covalent bonds and polar and nonpolar molecules</td> </tr> </table> 	CL1.M1.32	Explain how the octet rule applies to covalent bonds.	CL1.M1.33	Describe the formation of single, double, and triple covalent	CL1.M1.34	Compare sigma and pi bonds.	CL1.M1.35	Explain how the strength of a covalent bond, bond length and bond dissociation energy are related and to predict the relative bond – dissociation energies needed to break the bonds in a	CL1.M1.36	Explain the rules for naming binary molecular compounds, binary acids, and oxy-acids and to apply the rules for naming binary molecular compounds and writing the molecular formula.	CL1.M1.37	List the basic steps used to draw Lewis structures.	CL1.M1.38	Explain why resonance occurs and identify resonance structures.	CL1.M1.39	Identify the molecules that are exceptions to the octet rule and explain why those exceptions occur.	CL1.M1.40	Describe and summarize the VSEPR bonding theory and use it to predict the shape of and the bond angles in, a molecule.	CL1.M1.41	Describe and classify bond types between atoms using electronegativity difference and to predict the type of bond that will form between pairs of atoms.	CL1.M1.42	Compare polar and nonpolar covalent bonds and polar and nonpolar molecules
CL1.M1.32	Explain how the octet rule applies to covalent bonds.																						
CL1.M1.33	Describe the formation of single, double, and triple covalent																						
CL1.M1.34	Compare sigma and pi bonds.																						
CL1.M1.35	Explain how the strength of a covalent bond, bond length and bond dissociation energy are related and to predict the relative bond – dissociation energies needed to break the bonds in a																						
CL1.M1.36	Explain the rules for naming binary molecular compounds, binary acids, and oxy-acids and to apply the rules for naming binary molecular compounds and writing the molecular formula.																						
CL1.M1.37	List the basic steps used to draw Lewis structures.																						
CL1.M1.38	Explain why resonance occurs and identify resonance structures.																						
CL1.M1.39	Identify the molecules that are exceptions to the octet rule and explain why those exceptions occur.																						
CL1.M1.40	Describe and summarize the VSEPR bonding theory and use it to predict the shape of and the bond angles in, a molecule.																						
CL1.M1.41	Describe and classify bond types between atoms using electronegativity difference and to predict the type of bond that will form between pairs of atoms.																						
CL1.M1.42	Compare polar and nonpolar covalent bonds and polar and nonpolar molecules																						