electro - neet chem 12

# Question 1

Following reactions are taking place in a Galvanic cell,  Which of the given representations is the correct method of depicting the cell?

# Question 2

Ratio of number of faradays of electricity required to deposit magnesium, aluminium and sodium in equimolar ratio an electrolysis of their respective molten salts is:

# Question 3

When lead storage battery is charged:

1. Lead dioxide dissolves
2. Sulphuric acid is regenerated
3. The lead electrode becomes coated with lead sulphate
4. The amount of sulphuric acid decreases

# Question 4

A solution offered a resistance of in a conductivity cell is , find out the specific conductance of the sodium hydroxide solution.

# Question 5

Specific conductance of solution is . Its molar conductance in is:

# Question 6

for the reaction, at is . The equilibrium constant for the reaction is:

# Question 7

How much electricity in terms of Faraday is required to produce of Ca from molten

1. 1F
2. 2F
3. 3F
4. 5F

# Question 8

When an aqueous solution of is electrolysed between platinum electrodes, the substances liberated at anode and cathode are:

1. Silver is deposited at cathode and is liberated at anode
2. Silver is deposited at cathode and is liberated at anode
3. Hydrogen is liberated at cathode and is liberated at anode
4. Silver is deposited at cathode and Pt is dissolved in electrolyte

# Question 9

A solution offered a resistance of in a conductivity cell is , find out the molar conductivity of the sodium hydroxide solution.

# Question 10

How much electricity must pass through acidulated water to release of hydrogen at N.T.P.?

# Question 11

Standard electrode potentials of and are and respectively. The standard electrode potential for is:

# Question 12

When equilibrium is reached inside the two half-cells of the electrochemical cells, what is the net voltage across the electrodes?

1. > 1
2. < 1
3. = 0
4. Not defined

# Question 13

<style>.fm-math,fmathfont-family:STIXGeneral,’DejaVu Serif’,’DejaVu Sans’,Times,OpenSymbol,’Standard Symbols L’,serif;line-height:1.2.fm-math mtext,fmath mtextline-height:normal.fm-mo,.ma-sans-serif,fmath mi[mathvariant\*=sans-serif],fmath mn[mathvariant\*=sans-serif],fmath mo,fmath ms[mathvariant\*=sans-serif],fmath mtext[mathvariant\*=sans-serif]font-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Arial Unicode MS’,’Lucida Grande’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.fm-mo-Lucfont-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.questionsfontfont-weight:200;font-family:Arial, sans-serif, STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif!important.fm-separatorpadding:0 .56ex 0 0.fm-infix-loosepadding:0 .56ex.fm-infixpadding:0 .44ex.fm-prefixpadding:0 .33ex 0 0.fm-postfixpadding:0 0 0 .33ex.fm-prefix-tightpadding:0 .11ex 0 0.fm-postfix-tightpadding:0 0 0 .11ex.fm-quantifierpadding:0 .11ex 0 .22ex.ma-non-markingdisplay:none.fm-vert,fmath menclose,menclose.fm-menclosedisplay:inline-block.fm-large-opfont-size:1.3em.fm-inline .fm-large-opfont-size:1emfmath mrowwhite-space:nowrap.fm-vertvertical-align:middlefmath table,fmath tbody,fmath td,fmath trborder:0!important;padding:0!important;margin:0!important;outline:0!importantfmath tableborder-collapse:collapse!important;text-align:center!important;table-layout:auto!important;float:none!important.fm-fracpadding:0 1px!importanttd.fm-den-fracborder-top:solid thin!important.fm-rootfont-size:.6em.fm-radicandpadding:0 1px 0 0;border-top:solid;margin-top:.1em.fm-scriptfont-size:.71em.fm-script .fm-script .fm-scriptfont-size:1emtd.fm-underover-baseline-height:1!importanttd.fm-mtdpadding:.5ex .4em!important;vertical-align:baseline!importantfmath mphantomvisibility:hiddenfmath menclose[notation=top],menclose.fm-menclose[notation=top]border-top:solid thinfmath menclose[notation=right],menclose.fm-menclose[notation=right]border-right:solid thinfmath menclose[notation=bottom],menclose.fm-menclose[notation=bottom]border-bottom:solid thinfmath menclose[notation=left],menclose.fm-menclose[notation=left]border-left:solid thinfmath menclose[notation=box],menclose.fm-menclose[notation=box]border:thin solidfmath nonedisplay:none</style> Molar conductance of an electrolyte increase with dilution according to the equation:<fmath class="fm-inline"><mrow><msub><mi class="fm-mi-length-1" mathvariant="italic">Λ</mi><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">m</mi></msub><mo class="fm-infix-loose">=</mo><mrow><msubsup><mi class="fm-mi-length-1" mathvariant="italic">Λ</mi><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">m</mi><mo>∘</mo></msubsup><mo class="fm-infix">−</mo><mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">A</mi><mrow mtagname="msqrt"><mo class="fm-radic">√</mo><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">c</mi></mrow></mrow></mrow></mrow></fmath>of the following statements are true?(A) This equation applies to both strong and weak electrolytes.(B) Value of the constant A depends upon the nature of the solvent.(C) Value of constant <fmath class="fm-inline"><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">A</mi></fmath> is same for both <fmath class="fm-inline"><msub><mi class="ma-repel-adj" mathvariant="normal">BaCl</mi><mn>2</mn></msub></fmath> and <fmath class="fm-inline"><msub><mi class="ma-repel-adj" mathvariant="normal">MgSO</mi><mn>4</mn></msub></fmath>(D) Value of constant <fmath class="fm-inline"><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">A</mi></fmath> is same for both <fmath class="fm-inline"><msub><mi class="ma-repel-adj" mathvariant="normal">BaCl</mi><mn>2</mn></msub></fmath> and <fmath class="fm-inline"><mrow class="ma-repel-adj"><mi class="ma-repel-adj" mathvariant="normal">Mg</mi><msub><mrow><mo class="fm-mo-Luc">(</mo><mi class="ma-repel-adj" mathvariant="normal">OH</mi><mo class="fm-mo-Luc">)</mo></mrow><mn>2</mn></msub></mrow></fmath>the most appropriate answer from the options given below:

1. (A) and (B) only
2. (A), (B) and (C) only
3. (B) and (C) only
4. (B) and (D) only

# Question 14

<style>.fm-math,fmathfont-family:STIXGeneral,’DejaVu Serif’,’DejaVu Sans’,Times,OpenSymbol,’Standard Symbols L’,serif;line-height:1.2.fm-math mtext,fmath mtextline-height:normal.fm-mo,.ma-sans-serif,fmath mi[mathvariant\*=sans-serif],fmath mn[mathvariant\*=sans-serif],fmath mo,fmath ms[mathvariant\*=sans-serif],fmath mtext[mathvariant\*=sans-serif]font-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Arial Unicode MS’,’Lucida Grande’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.fm-mo-Lucfont-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.questionsfontfont-weight:200;font-family:Arial, sans-serif, STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif!important.fm-separatorpadding:0 .56ex 0 0.fm-infix-loosepadding:0 .56ex.fm-infixpadding:0 .44ex.fm-prefixpadding:0 .33ex 0 0.fm-postfixpadding:0 0 0 .33ex.fm-prefix-tightpadding:0 .11ex 0 0.fm-postfix-tightpadding:0 0 0 .11ex.fm-quantifierpadding:0 .11ex 0 .22ex.ma-non-markingdisplay:none.fm-vert,fmath menclose,menclose.fm-menclosedisplay:inline-block.fm-large-opfont-size:1.3em.fm-inline .fm-large-opfont-size:1emfmath mrowwhite-space:nowrap.fm-vertvertical-align:middlefmath table,fmath tbody,fmath td,fmath trborder:0!important;padding:0!important;margin:0!important;outline:0!importantfmath tableborder-collapse:collapse!important;text-align:center!important;table-layout:auto!important;float:none!important.fm-fracpadding:0 1px!importanttd.fm-den-fracborder-top:solid thin!important.fm-rootfont-size:.6em.fm-radicandpadding:0 1px 0 0;border-top:solid;margin-top:.1em.fm-scriptfont-size:.71em.fm-script .fm-script .fm-scriptfont-size:1emtd.fm-underover-baseline-height:1!importanttd.fm-mtdpadding:.5ex .4em!important;vertical-align:baseline!importantfmath mphantomvisibility:hiddenfmath menclose[notation=top],menclose.fm-menclose[notation=top]border-top:solid thinfmath menclose[notation=right],menclose.fm-menclose[notation=right]border-right:solid thinfmath menclose[notation=bottom],menclose.fm-menclose[notation=bottom]border-bottom:solid thinfmath menclose[notation=left],menclose.fm-menclose[notation=left]border-left:solid thinfmath menclose[notation=box],menclose.fm-menclose[notation=box]border:thin solidfmath nonedisplay:none</style> The molar conductance of <fmath class="fm-inline"><mrow><mrow><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">N</mi><mi class="fm-mi-length-1" mathvariant="italic">a</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">C</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow><mo class="fm-separator">,</mo><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">H</mi><mi class="fm-mi-length-1" mathvariant="italic">C</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow></mrow></fmath> and <fmath class="fm-inline"><mrow><msub><mrow><mi class="fm-mi-length-1" mathvariant="italic">C</mi><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">H</mi></mrow><mn>3</mn></msub><mrow><mrow><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">C</mi><mi class="fm-mi-length-1" mathvariant="italic">O</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">O</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">N</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">a</mi></mrow></mrow></fmath> at infinite dilution are 126.45, <fmath class="fm-inline"><mn>426.16</mn></fmath> and <fmath class="fm-inline"><mrow><mrow><mrow><mn>91.0</mn><mi class="fm-mi-length-1" mathvariant="italic">S</mi></mrow><msup><mrow><mi class="fm-mi-length-1" mathvariant="italic">c</mi><mi class="fm-mi-length-1" mathvariant="italic">m</mi></mrow><mn>2</mn></msup></mrow><msup><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">m</mi><mi class="fm-mi-length-1" mathvariant="italic">o</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow><mrow><mo class="fm-prefix-tight">−</mo><mn>1</mn></mrow></msup></mrow></fmath> respectively. The molar conductance of <fmath class="fm-inline"><mrow><msub><mrow><mi class="fm-mi-length-1" mathvariant="italic">C</mi><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">H</mi></mrow><mn>3</mn></msub><mrow><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">C</mi><mi class="fm-mi-length-1" mathvariant="italic">O</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">O</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">H</mi></mrow></mrow></fmath> at infinite dilution is. Choose the right option for your answer.

1. <fmath class="fm-inline"><mrow><mrow><mrow><mrow><mrow><mrow><mn>201.28</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">S</mi></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mi class="fm-mi-length-1" mathvariant="italic">c</mi><mi class="fm-mi-length-1" mathvariant="italic">m</mi></mrow><mn>2</mn></msup></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">m</mi><mi class="fm-mi-length-1" mathvariant="italic">o</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow><mrow><mo class="fm-prefix-tight">−</mo><mn>1</mn></mrow></msup></mrow></fmath>
2. <fmath class="fm-inline"><mrow><mrow><mrow><mrow><mrow><mrow><mn>390.71</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">S</mi></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mi class="fm-mi-length-1" mathvariant="italic">c</mi><mi class="fm-mi-length-1" mathvariant="italic">m</mi></mrow><mn>2</mn></msup></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">m</mi><mi class="fm-mi-length-1" mathvariant="italic">o</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow><mrow><mo class="fm-prefix-tight">−</mo><mn>1</mn></mrow></msup></mrow></fmath>
3. <fmath class="fm-inline"><mrow><mrow><mrow><mrow><mrow><mrow><mn>698.28</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">S</mi></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mi class="fm-mi-length-1" mathvariant="italic">c</mi><mi class="fm-mi-length-1" mathvariant="italic">m</mi></mrow><mn>2</mn></msup></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">m</mi><mi class="fm-mi-length-1" mathvariant="italic">o</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow><mrow><mo class="fm-prefix-tight">−</mo><mn>1</mn></mrow></msup></mrow></fmath>
4. <fmath class="fm-inline"><mrow><mrow><mrow><mrow><mrow><mrow><mn>540.48</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><mi class="fm-mi-length-1" mathvariant="italic">S</mi></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mi class="fm-mi-length-1" mathvariant="italic">c</mi><mi class="fm-mi-length-1" mathvariant="italic">m</mi></mrow><mn>2</mn></msup></mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;"> </mi></mrow><msup><mrow><mrow><mi class="fm-mi-length-1" mathvariant="italic">m</mi><mi class="fm-mi-length-1" mathvariant="italic">o</mi></mrow><mi class="fm-mi-length-1" mathvariant="italic" style="padding-right: 0.44ex;">l</mi></mrow><mrow><mo class="fm-prefix-tight">−</mo><mn>1</mn></mrow></msup></mrow></fmath>

# Question 15

<style>.fm-math,fmathfont-family:STIXGeneral,’DejaVu Serif’,’DejaVu Sans’,Times,OpenSymbol,’Standard Symbols L’,serif;line-height:1.2.fm-math mtext,fmath mtextline-height:normal.fm-mo,.ma-sans-serif,fmath mi[mathvariant\*=sans-serif],fmath mn[mathvariant\*=sans-serif],fmath mo,fmath ms[mathvariant\*=sans-serif],fmath mtext[mathvariant\*=sans-serif]font-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Arial Unicode MS’,’Lucida Grande’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.fm-mo-Lucfont-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.questionsfontfont-weight:200;font-family:Arial, sans-serif, STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif!important.fm-separatorpadding:0 .56ex 0 0.fm-infix-loosepadding:0 .56ex.fm-infixpadding:0 .44ex.fm-prefixpadding:0 .33ex 0 0.fm-postfixpadding:0 0 0 .33ex.fm-prefix-tightpadding:0 .11ex 0 0.fm-postfix-tightpadding:0 0 0 .11ex.fm-quantifierpadding:0 .11ex 0 .22ex.ma-non-markingdisplay:none.fm-vert,fmath menclose,menclose.fm-menclosedisplay:inline-block.fm-large-opfont-size:1.3em.fm-inline .fm-large-opfont-size:1emfmath mrowwhite-space:nowrap.fm-vertvertical-align:middlefmath table,fmath tbody,fmath td,fmath trborder:0!important;padding:0!important;margin:0!important;outline:0!importantfmath tableborder-collapse:collapse!important;text-align:center!important;table-layout:auto!important;float:none!important.fm-fracpadding:0 1px!importanttd.fm-den-fracborder-top:solid thin!important.fm-rootfont-size:.6em.fm-radicandpadding:0 1px 0 0;border-top:solid;margin-top:.1em.fm-scriptfont-size:.71em.fm-script .fm-script .fm-scriptfont-size:1emtd.fm-underover-baseline-height:1!importanttd.fm-mtdpadding:.5ex .4em!important;vertical-align:baseline!importantfmath mphantomvisibility:hiddenfmath menclose[notation=top],menclose.fm-menclose[notation=top]border-top:solid thinfmath menclose[notation=right],menclose.fm-menclose[notation=right]border-right:solid thinfmath menclose[notation=bottom],menclose.fm-menclose[notation=bottom]border-bottom:solid thinfmath menclose[notation=left],menclose.fm-menclose[notation=left]border-left:solid thinfmath menclose[notation=box],menclose.fm-menclose[notation=box]border:thin solidfmath nonedisplay:none</style> The standard electrode potential <fmath class="fm-inline"><mrow><mo class="fm-mo-Luc">(</mo><msup><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">E</mi><mo>−</mo></msup><mo class="fm-mo-Luc">)</mo></mrow></fmath>values of <fmath class="fm-inline"><mrow><mrow><mrow><msup><mi class="ma-repel-adj" mathvariant="normal">Al</mi><mrow><mn>3</mn><mo class="fm-postfix-tight">+</mo></mrow></msup><mo class="fm-infix-loose">∕</mo><msup><mi class="ma-repel-adj" mathvariant="normal">Al</mi><mn>2</mn></msup></mrow><mo class="fm-separator">,</mo><mrow><msup><mi class="ma-repel-adj" mathvariant="normal">Ag</mi><mo>+</mo></msup><mo class="fm-infix-loose">∕</mo><mi class="ma-repel-adj" mathvariant="normal">Ag</mi></mrow></mrow><mo class="fm-separator">,</mo><mrow><msup><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">K</mi><mo>+</mo></msup><mo class="fm-infix-loose">∕</mo><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">K</mi></mrow></mrow></fmath> and <fmath class="fm-inline"><mrow><msup><mi class="ma-repel-adj" mathvariant="normal">Cr</mi><mrow><mn>3</mn><mo class="fm-postfix-tight">+</mo></mrow></msup><mo class="fm-infix-loose">∕</mo><mi class="ma-repel-adj" mathvariant="normal">Cr</mi></mrow></fmath> are <fmath class="fm-inline"><mrow><mrow><mo class="fm-prefix-tight">−</mo><mrow><mn>1.66</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">V</mi></mrow></mrow><mo class="fm-separator">,</mo><mrow><mn>0.80</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">V</mi></mrow></mrow></fmath>, <fmath class="fm-inline"><mrow><mo class="fm-prefix-tight">−</mo><mrow><mn>2.93</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">V</mi></mrow></mrow></fmath> and <fmath class="fm-inline"><mrow><mo class="fm-prefix-tight">−</mo><mrow><mn>0.74</mn><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">V</mi></mrow></mrow></fmath>, respectively. The correct decreasing order of reducing power of the metal is :

1. <fmath class="fm-inline"><mrow><mrow><mrow><mi class="ma-repel-adj" mathvariant="normal">Ag</mi><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Cr</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Al</mi></mrow><mo class="fm-infix-loose">></mo><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">K</mi></mrow></fmath>
2. <fmath class="fm-inline"><mrow><mrow><mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">K</mi><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Al</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Cr</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Ag</mi></mrow></fmath>
3. <fmath class="fm-inline"><mrow><mrow><mrow><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">K</mi><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Al</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Ag</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Cr</mi></mrow></fmath>
4. <fmath class="fm-inline"><mrow><mrow><mrow><mi class="ma-repel-adj" mathvariant="normal">Al</mi><mo class="fm-infix-loose">></mo><mi class="fm-mi-length-1 ma-upright" mathvariant="normal" style="padding-right: 0px;">K</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Ag</mi></mrow><mo class="fm-infix-loose">></mo><mi class="ma-repel-adj" mathvariant="normal">Cr</mi></mrow></fmath>

# Question 16

<style>.fm-math,fmathfont-family:STIXGeneral,’DejaVu Serif’,’DejaVu Sans’,Times,OpenSymbol,’Standard Symbols L’,serif;line-height:1.2.fm-math mtext,fmath mtextline-height:normal.fm-mo,.ma-sans-serif,fmath mi[mathvariant\*=sans-serif],fmath mn[mathvariant\*=sans-serif],fmath mo,fmath ms[mathvariant\*=sans-serif],fmath mtext[mathvariant\*=sans-serif]font-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Arial Unicode MS’,’Lucida Grande’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.fm-mo-Lucfont-family:STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif.questionsfontfont-weight:200;font-family:Arial, sans-serif, STIXGeneral,’DejaVu Sans’,’DejaVu Serif’,’Lucida Grande’,’Arial Unicode MS’,Times,OpenSymbol,’Standard Symbols L’,sans-serif!important.fm-separatorpadding:0 .56ex 0 0.fm-infix-loosepadding:0 .56ex.fm-infixpadding:0 .44ex.fm-prefixpadding:0 .33ex 0 0.fm-postfixpadding:0 0 0 .33ex.fm-prefix-tightpadding:0 .11ex 0 0.fm-postfix-tightpadding:0 0 0 .11ex.fm-quantifierpadding:0 .11ex 0 .22ex.ma-non-markingdisplay:none.fm-vert,fmath menclose,menclose.fm-menclosedisplay:inline-block.fm-large-opfont-size:1.3em.fm-inline .fm-large-opfont-size:1emfmath mrowwhite-space:nowrap.fm-vertvertical-align:middlefmath table,fmath tbody,fmath td,fmath trborder:0!important;padding:0!important;margin:0!important;outline:0!importantfmath tableborder-collapse:collapse!important;text-align:center!important;table-layout:auto!important;float:none!important.fm-fracpadding:0 1px!importanttd.fm-den-fracborder-top:solid thin!important.fm-rootfont-size:.6em.fm-radicandpadding:0 1px 0 0;border-top:solid;margin-top:.1em.fm-scriptfont-size:.71em.fm-script .fm-script .fm-scriptfont-size:1emtd.fm-underover-baseline-height:1!importanttd.fm-mtdpadding:.5ex .4em!important;vertical-align:baseline!importantfmath mphantomvisibility:hiddenfmath menclose[notation=top],menclose.fm-menclose[notation=top]border-top:solid thinfmath menclose[notation=right],menclose.fm-menclose[notation=right]border-right:solid thinfmath menclose[notation=bottom],menclose.fm-menclose[notation=bottom]border-bottom:solid thinfmath menclose[notation=left],menclose.fm-menclose[notation=left]border-left:solid thinfmath menclose[notation=box],menclose.fm-menclose[notation=box]border:thin solidfmath nonedisplay:none</style> When 0.1 mol <fmath class="fm-inline"><msubsup><mtext>MnO</mtext><mn>4</mn><mrow><mn>2</mn><mo class="fm-postfix-tight">−</mo></mrow></msubsup></fmath> is oxidised the quantity of electricity required to completely <fmath class="fm-inline"><msubsup><mtext>MnO</mtext><mn>4</mn><mrow><mn>2</mn><mo class="fm-postfix-tight">−</mo></mrow></msubsup></fmath> to <fmath class="fm-inline"><msubsup><mtext>MnO</mtext><mn>4</mn><mo>−</mo></msubsup></fmath> is

1. <fmath class="fm-inline"><mn>96500</mn></fmath> C
2. <fmath class="fm-inline"><mrow><mn>2</mn><mo class="fm-infix" lspace=".22em" rspace=".22em">×</mo><mn>96500</mn></mrow></fmath> C
3. <fmath class="fm-inline"><mn>9650</mn></fmath> C
4. <fmath class="fm-inline"><mn>96.50</mn></fmath> C

# Question 17

Assertion:During electrolysis coulombs of electricity will deposit gram equivalent of silver metal from ions.Reason:One Faraday of electricity will be required to deposit gram equivalent of any substance.

1. Both Assertion and Reason are correct and Reason is the correct explanation for Assertion
2. Both Assertion and Reason are correct but Reason is not the correct explanation for Assertion
3. Assertion is correct but Reason is incorrect
4. Assertion is incorrect but Reason is correct