IEST8001

9bj]fcba YbhU` @YUXYfg\]d DfUWh]WYa ´=DfcYWhcf ±bhYfbg\]d

HYfa ´Hk c ´##´&$&%

7ci fgY Cj Yfj]Yk

GhUZZ 7cbhUWh 8YhU]`g

7cbj Ybcfg

BUaY	9a U]`	5j U]`UV]`]hm	@cWUh]cb	D\cbY
8f 5]`K U`_Yf	U"k U`_Yf4 i bgk "YXi "Ui	7cbgi `hUh]cb Vm Uddc]bha Ybh		

GW\cc` 7cbhUWh]bZcfa Uh]cb

GW\cc` cZ <i a Ub]h]Yg UbX @Ub[i U[Yg

@cWUh]cb. GW\cc` cZ Z]W`žA cfjYb 6fck b 6u]`X]b[ ž@YjY `&ž&),

CdYb]b[<ci fg. AcbXUm! :f]XUmž-Ua !`)da

D\cbY. Ž*%&-',) %*,%

: Ul . Ž*%&-',) `, +$)

9a U]`. \U`4 i bgk "YXi "Ui

IEST8001 Term 2, 2021 published at 27-04-2021 // © University of New South Wales, 2021

2

7ci fgY 8YHU]`g

7fYX]h Dc]bhg *

Gi a a Ufm cZ h\Y 7ci fgY

H\]g Wci fgY cZ Yfg mci h\Y cddcfh ib]hm hc XYYdYb UbX Yl dUbX i dcb h\Y Ybj]fcba Ybh UbX gcW]Yhm VX\Ub[Y! a U_]b[_bck `YX[ Y mci \Uj Y [ UbYX ]b dfYj ]ci g 9GH Wci fgg h\fci [ \ Udd`]YX YldYf]Ybh U `]b\Wcbh\Yl H `YUfb]b[`"I g]b[ `h\Y ZYl]V]`]hm cZK cf_ =bhY[ fUhYX @YUfb]b[ `fK =L `UhX BGK žmci `k]``]XYbh]Zm U dUfhbYf cf[ Ub]gUh]cb gi dYfj ]gcf k ]h\ k \ca `mci bY[ ch]UhY h\Y h Yfm g UbX [ cU`g cZ mci f d`UWY a Ybhↄ UWW cfXUbW\ k ]h\ K =@dc`]Wmž"dUfhbYf cf[ Ub]gUh]cb" W Ub fYZYf hc h\cgY YlhYfbU `hc ↄ BGK žgi W\ Ug ]bXi ghfm UbX Wca a ib]hmž Ug k Y``Ug hc ↄ BGK]bgZ`H\Y dUfhbYf cf[ Ub]gUh]cb gi dYfj ]gcf]g h\Y dYfgcb Uhh\Y dUfhbYf cf[ Ub]gUh]cb fYgdcbg]VZ`Y Zcf gi dYfj]g]b[mci UbX``]Ug]b[ `k ]h\ h\Y Wci fgY WccfX]bUhcf": c``ck]b[`Uddfcj U` cZ mci f]bhYfbg\]d cf dfUWh]Wa Vm h\Y Wci fgY WccfX]bUhcfžmci k]``gdYbX %$) \ci f k cf_]b[k]h\ mci f dUfhbYf cf[Ub]gUh]cb" H\]g]g [YbYfU `mcbY cf hk c XUmg dYf k YY_ hc Z h\Ufci bX h\Y %$ k YY_ hYfa "

BchY. Hc [U]b Ybhfm]bhc h\]g Wci fgÿ mci a i gh \Uj Y UW\]Yj YX Uh `YUghU `cfYX]h fↄ) ι Ł Uj YfU[Y UWfcgg h\fYY 9GH Wci fgYg"

Mci a Umi bXYfhU_Y %& l c7 cZ dfUWh]WↄUW a `Wci fgYg VmYbfc``]b[ ]b `]b`Vchↄ 9GH, $$% UbX 9GH, $$' "H\Y Wci fgYg a UmVY hU_Yb]b cbW ffYbhↄmcf]b X]ZZYfYbh hYfa g cZ mci f XY[fYY"

7ci fgY @YUfb]b[Ci hWa Yg

1. 8Yj Y`cd U dfcZYgg]cbU`#fYgYUfW\ dfc YWh
2. 8Yg][b UbX]a d`Ya YbhUb YZZYWhj Y dfc Ywhcf ]bhYfbg\]d a UbU[ Ya Ybh d`Ub
3. 8Yj Y`cd UbX Udd`m Uddfcdf]UhY a Yh\cXc`c[Yg hc UXXfYgg h\Y U]a g cZ h\Y cf[Ub]gUh]cb UbX h\Y]bhYfbg\]d cf dfc Ywhc
4. 7cbXi Wh]bhY[fUh]j Y fYj]Yk g hc UXXfYgg gdYW]Z]WUdd`]WUV`Y dfUWh]Wↄa `hcd]Wg
5. 5bU`mgYž ]bhYfdfYhž UbX fYZ`YWhi dcb Z]bX]b[g UbX YldYf]YbWYg
6. 8Y`]j Yf WcbWi g]cbg UbX fYWca a YbXUh]cbg h\fci [ \ fYdcfh]b[ UbX cfU`XY`]j Yfm

HYUW\]b[GhfUhY[ ]Yg

H\]g Wci fgY]g XYg][bYX hc gi ddcfhmci]b Ub Ybj]fcba YbhU`]bhYfbg\]d cf dfc Ywhmci k ci `X `]_Y hc i bXYfhU_Y"

F Ygci fWYg

DfYgWf]VYX F Ygci fWYg

H\YgY k] `VY g\UfYX]b mci f Zcfhb][\hmgYgg]cbg"

F YWca a YbXYX F Ygci fWYg

H\YgY k] `VY g\UfYX]b mci f Zcfhb][\hmgYgg]cbg"

7ci fgY 9j U`i Uh]cb UbX 8Yj Y`cda Ybh

Ghi XYbhg k] `\Uj Y h\Y cddcfhi b]hm hc dfcj ]XY ]bZcfa U`ZYYXVUW_ h\fci [\ci h h\Y hYfa UbX Zcfa U`ZYYXVUW_ Uh h\Y YbX cZ h\Yfa h\fci [\ h\Y A m9l dYf]YbWY gi fj Ym"

Gi Va]gg]cb cZ 5ggYgga Ybh HUg_g

Hi fb]h]b Gi Va]gg]cb

=Zmci YbWci bhYf U dfcVYa k \Yb UhYa dh]b[hc gi Va]hmci f Ugg][ba Ybh \fci [\ Hi fb]h]bž d YUgY hY Yd\cbY 9 l hYfbU Gi ddcfh cb -',) '''% cf Ya U]hYa cb Yl hYfbU hY gi ddcfh4 i bgk "YXi "Ui '"'Gi ddcfh \ci fg UfY ',.$$Ua '—'%$.$$da 'cb k YY_XUmg UbX '-.$$Ua '—).$$da 'cb k YY_YbXg fl *) 'XUmg U mYUfŁ'=Zmci UfY i bUV Y hc gi Va]hmci f Ugg][ba Ybh Xi Y hc U ZUi hk]h\ Hi fb]h]b mci a UmUdd mZcf Ub Yl hYbg]cbž Vi hmci a i ghfYHU]b mci f h]W Yrbi a VYf Zrca '9 l hYfbU Gi ddcfhfU cb[k]h\ UbmchYffY Yj UbhXcW a Ybhg Łhc]bWi XY Ug Yj]XYbWY hc gi ddcfhmci f Yl hYbg]cb Udd]WUh]cb" =Zmci Ya U] 9 l hYfbU Gi ddcfhmci k] `

5WUXYa]W< cbYghmUbX D`U[ ]Uf]ga

D`U[ ]Uf]ga]g ï g]b[ìh Y k cfXg cf]XYUg cZ ch Yfg UbX dfYgYbh]b[ìh Ya Ug mci f ck b" ÷ WUb U_Y a Ubm
Zcfa g ž 7ca XY]VYfUhY WXYUh]b[hc UWW]XYbhU m Wcdm]b[7ca U gci fWY k]h ci hUW bck YX[Ya Ybh"

- i bXYfghUbX`mci f`f][\hg`UbX`fYgdcbg]V]`]h]Yg`Ug`U`ghXYbh`UhI BGK

- VY`Uk UfY`cZd`U[ ]Uf]ga žW`dmf][\hž`I BGK `Ghi XYbh`7cXY`cZ7cbXiWh`UbX`5WW`YdhUV`Y`I gY`cZ I BGK `=7 H`F Ygci fW`g`Dc`]W`n

- VY`Uk UfY`cZh\Y`ghUbXUfXg`cZVY\Uj]ci f`YldYWhYX`cZYjYfmcbY`]b`h\Y`I BGK `W`a a i b]hm

- `cWW`hY`gYfj]W`g`UbX`]bZcfa Uh]cb`UVci h`I BGK `UbX`I BGK `@]VfUfm

Gca Y`cZh\YgY`UfYUg`k ]`VY`Z`a]]Uf`hc`mci žch\Yfg`k ]`VY`bYk "; U]b]b[ `U`gc`]X`i bXYfghUbX]b[ `cZU``h\Y fY`UhYX`UgdYWhg`cZ9@G9`k]`\Y`d`mci `a U_Y`h\Y`a cgh`cZmci fghiX]Yg`UhI BGK "`
[\hmd.##gi V`YW[ ]i ]XYg"]VfUfm']i bgk "YXi "Ui #`Y`]gY#UVci h`Y`]gY](#)