

7CAD5F=GCB'; FCID

Ô[{]ælå•[}Å*![~]ÅæææÁæ¦^Áå}&|~å^åÁc[Á]![çåå^ÁæÁ&[}c^¢cÁ-[lÁå}c^!]!^cå}*Á^[~iÁå}*da;[}q*Áå}*da;[]*da;[

- ▶Ø^¦¦ā•ÁÙcæc^ÁW}āç^¦•āc^ÁÇÓā*ÁÜæ]āå•ÊÁ⊤QD
- $\label{eq:second_second} $$ \mathbf{S}^c:c[_,]_{AW}_{ag^{\prime}}^{\bullet}=ac^{\Lambda}[_{AU^{\prime}}]_{\bullet}^{\bullet}]_{ga}^{\bullet}=ag^{\prime}_{ag^{\prime}}^{\bullet}=ag^{\prime}_{a$
- $$\begin{split} & \hspace{-0.5cm} \hspace{0.5cm} \hspace{0.5$$

- ▶ Ù|ā]]^\^ÁÜ[&\ÁW}āç^\•àc^Á[-ÁÚ^}}•^|çæ}āæÁÇÙ|ā]]^\^ÁÜ[&\ÉÁÚŒD
- $\label{eq:continuous} \ragain = \ragain$
- ► V@^AW}iç^¦•ic^A[-AV^}}^••^^ËÔ@æccæ}[[*ækÇÔ@æccæ}[[*ækkVÞD
- ► W}āç^!•āc^Á[~ÁY^•cÁŐ^[!*āæÁÇÔæ!![||c[}ÊÁŐŒD
- Y^•c^\}ÁÔæ\[|ā}æÁW}āç^\•āc^ÁÇÔ~||[¸@^^ÊÁÞÔD

$\label{eq:hamiltonian} $HYZ_{[i]} ifYg_{[b]}^{h}g_{[b]}^{h}U_{[i$

Hcd]W ⁻ 5fYU	:][ifYg	DU[Yg
FDÁŒå{ā••ā[}•ÁÇ[} ^Á~[¦Á}[}Ē[]^}Ēæå{ā••ā[}•Á•&@[[•D	FÁæ}åÁG	Н
GDÁÙcˇå^}cÁÒ}¦[{^}c	HÉÁ I Áæ} åÁ Í	HÁæ}åÁI
HDÁŒ,æ¦å•	Î	I
IDÁÔ@æ¦*^•Áæ}åÁÞ^cÁÚ¦ã&^	ÏÁæ}åÁÌ	lÁæ}åÁÍ
ÍDÁÙcˇå^}cÁØã}æ}&äæ ÁŒãå	JÁæ}åÁF€	ĺ
Î DÁ T āļācæ¦ ^ÁÓ^ } ^~āc•E	ŽÞ[Á&@æ¦c•Áæ]] á&æà ^á	
ÏDÁÜ^c^}æí[}Áæ}åÁÕ¦æå~æá[}ÁÜæc^•	FFÉÁFGÉÁFHÉÁF I ÉÁF Í ÉÁF Í ÉÁF Í ÉÁF Í ÁÆ} åÁFJ	Í ÊÁ Î ÊÁ Ï ÊÁ Ì Áæ}åÁJ
Ì DÁØä}æ}&^	G€Áæ}åÁGF	F€
JDÁÙcæ⊷	GGÁæ}åÁGH	F€
F€DÁŠià¦æ¦i^∙E	GIÁæ}åÁGÍ	FF

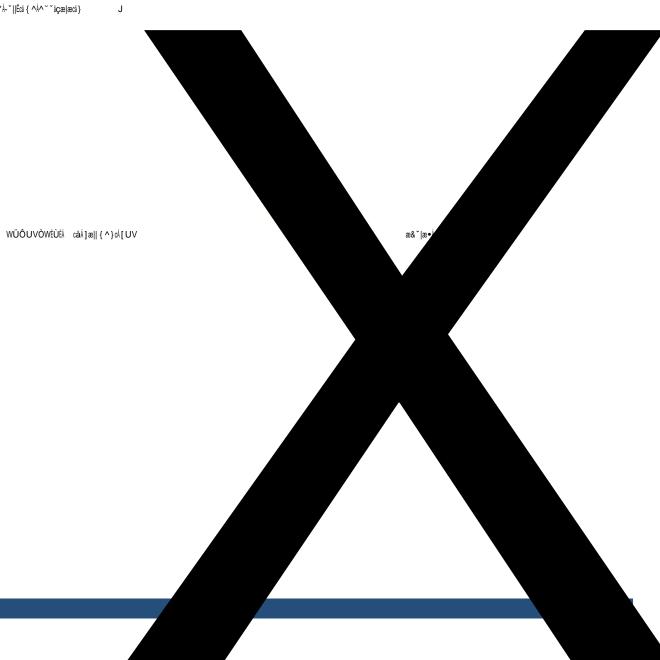
EV@^+^k;"^+k[]|^kæ]]^æ;ki}\&*-c[{i:^ák|Oææk|0^^åàæ&\kÜ^][:c+k;ÖØÜ+OÉk,@i&@kæ;^kæçæi@à|^ko!["*@kW+^k;@^kÖæœk][!cæ|k[}ko%kÜÖÖÜk,^å*ix^£

`Ib]jYfg]hm`cZ`Gcih\Yfb`=bX]UbU`

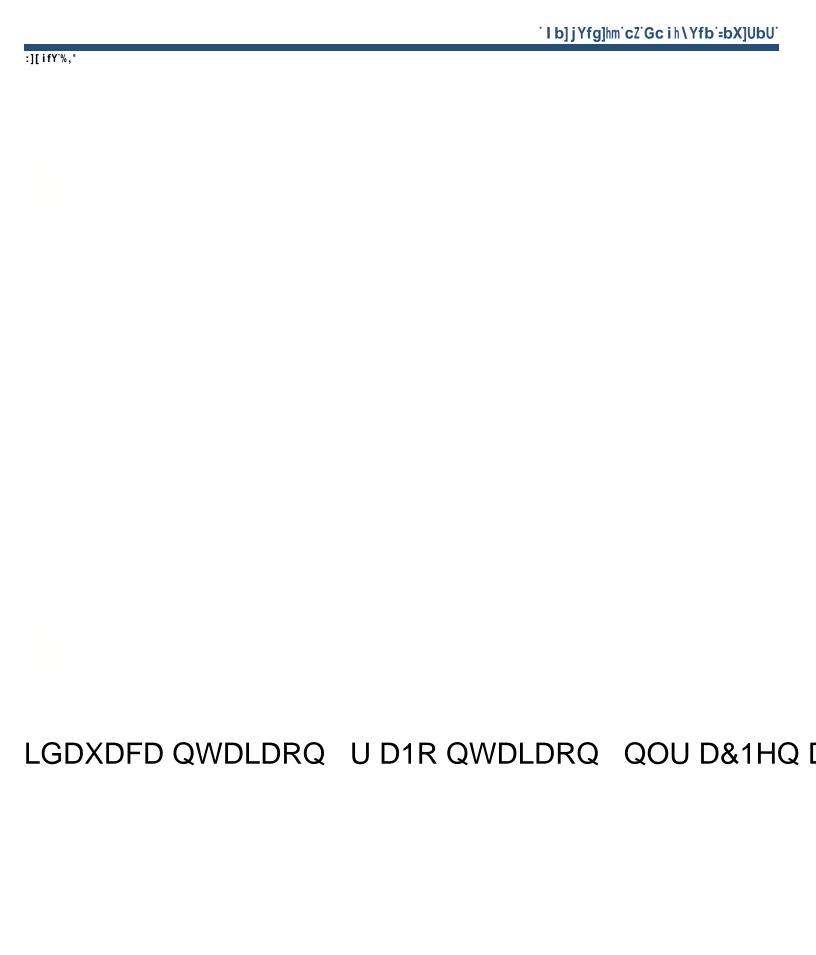
:][ifY'("

I bX i d`]WUhYX'%&! a cbh\`\YUXWc i bh'cZ'U```gh i XYbhg'UbX'cZ i bXYf [fUX i UhY'gh i XYbhg'fl&\$%,!%-Łž'hchU``: H9'Ybfc`` a Ybh fl&\$%,!%-Łż'UbX'Zi``'!'UbX'dUfh!h] a Y'ZU``'Ybfc`` a Ybh'fl: U`` &\$%-Ł

 $\textcolor{red}{\blacktriangleright UVOKAØ[!Aa^cæi]\bullet A[]A&æ|&`|æci]*A-`||Ēci}\{ ^AA^``içæ|æci}$

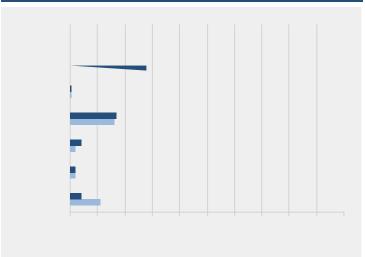


Then suppoped 6: 1.300 BM And 9 db g VV 1.000000 kg (Group 1.74 greet [7] 6 y 1 00 1 1 MOV 20 To 10 db g (Steel Standard

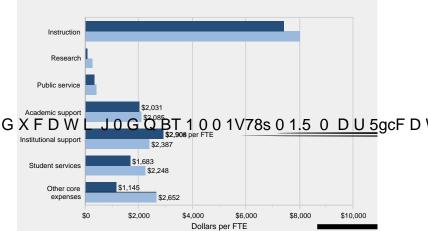


:][ifY'&\$" DYfWYbh'X]ghf]Vih]cb'cZ'WcfY'fYjYbiYgż'Vm'gcifWY.':]gWU' mYllf'&\$%-

:][ifY'&%" 7cfY'YldYbgYg'dYf':H9'Ybfc``aYbhž'Vm'ZibWh]cb.':]gWU`
mYllf'&\$%-

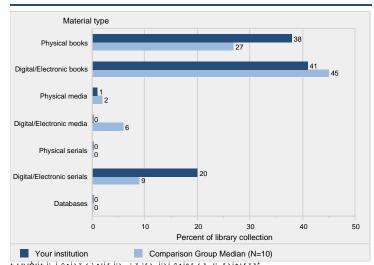


DUVÒKIV@^&&[{]æli*[}Å*'[`]Å{^âiæ}&i*aèæ*^âh[}ko@[*^k{^{à^!*}L-ko@^k&[{]æli*[} *![`]ko@ædi^][!okijæ}&^hâæcæh**i}*ko@^k*æ{^kæ&&[`}ci)***cæ}âæ!å*kæ*ko@^k&[{]æli*[} i}*cic*ci[}Eko[!h{[!^ki}-[!{ædi]}Ek*^^kc@^hT^c@[â[|[*i&æjkÞ[c^*EkÞki*ko@^h}*{à^!h[i}*cic*ci[]*ki}ko@^k&[{]æli*[]}#*![`]E

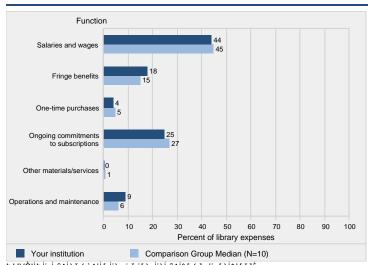


:][ifY'&(" DYfWYbh'X]ghf]Vih]cb'cZ'`]VfUfm'Wc``YWh]cbz'Vm' a UhYf]U`hmdY.`:]gWU``MYUf'&\$%-

:][ifY'&)" DYfWYbh'X]ghf]Vih]cb'cZ'`]VfUfm'YIdYbgYgž'Vm'ZibWh]cb. :]gWU`'MYUf'&\$%-



ÞUVÒKÍÞÁ:•kc@^Á}~{à^iÁ[-Ái}•các~á[}•Ái}kc@^Á&[{]æfi•[}Å*:[]È ÙUWÜÔÒKÁWÈÙĖKÖ^]æfc{^}cl_iÁÒà~&ædí]}ÉkÞædí[}æfkÔ^}c^iÁ-[iÁÒå~&ædí]}ÁÙœæd•cá&•É 0}c^*¦æc^áhÚ[•c•^&[}åæf^kÒå~&ædí]}ÁÖææÁÙ^•c^{AQÚÓÖÙDKÀÙ]fi}*ÁG€G€ÉKŒ&æå^{i& Siàlæfi^•Á&[{][}^}cf



ÞUVÒKÞÁÞÁÞA6@^Á}~{à^iÁ[-Ái}•các~ái]•Ái}ko@^Á&[{]æiē•[}Á*![~]Ė ÙUWÜÔÒKÁWÈÙĖKÖ^]æic{^}cl_-ÁÒà~&æá[}ĚkÞæá[}ækŀÔ^}c^iÁ-[iÁÒà~&æá[}ÀÙœæá•á&•É 0}c^*:æc^áÁÚ[•c•^&[}åæ1^AÒà~&æá[}KÖæœÁÙ^•c^{AQÚÓÖÙDKÁÙ]ii}*ÁG€G€ÉKŒ&æå^{i& Siàlæià^•Á&[{][}^}c



`Ib]jYfg]hm`cZ`Gcih\Yfb`=bX]UbU`

Ib]jYfg]hm'cZ'Gcih\Yfb'=bX]UbU'

FYhYbh]cbz ; fUX i Uh]cb FUhYgz UbX C i hWc a Y AYUg i fYg

Ü^c^}æc^•

U^c^}cia[}Alæc^•Aæi^A { ^æ•`!^•A[-Ac@^Alæc^Aæch_@i&@A•c`å^}ce^A]^!•i•chii Ac@^i!A^ä`&æcia[}æ|A]![*!æ { Aæckæ}Ai}*cic`cia[}Eh^¢]!^••^Alæc^AæA]^!&^}cæ*^E
Ø[!A-[`!Ē^^æ!Ai}*o•cic`cia[]*Eh^@i*Ai*Ac@^A]^!&^}cæ*^A[-A-ii*o•cicia{ ^Aiæ&@^|[!*Ac]^!cic}a{ ^Aiæ*@i}*Ac@^A]^!&^}cda^*!^^E*^^\ii\ai*ac^*cic}a{ ^Aiæ*@i}*Ac@^A]^!&^}cda^*!^^E*^^\ii\ai*ac^*cic}a{ ^Aiæ*Ai*Ac@^Ai}*Ac@^Ai}*Ac@^Ai}*Ac@^Ai*Ai*o•cicia{ ^Aiæ*Cai}*Ac@^Ai}*Ac@^Ai}*Ac@^Ai}*Ac@^Ai}*Ac@^Ai*!*Ai*o•cicia{ ^Aiæ*Cai}*Ac@^Ai}*Ac@^Ai*!^E^}![||^āAi}*Ac@^Ai*!^Ac@^Ai*!^Ac@^Ai}*Ac@^Ai}*Ac@^Ai*!*Bai*ac^Ai*Ac@^Ai*!^Ac@^Ai}*Ac@^Ai**Ac@^A

Õ/æå ~æd [}ÁÜæc^•Áæ }åÁV/æ} •~^!Ë[~cÁÜæc^

Õ!æå~æɑi[}h!æc^•hæ!^hc@[•^hå^ç^|[]^åhc[h•æci•-^hc@^h!^~~i!^{^}c•h[-hc@^h\uc*a^}ch\ui*@cĒc[ËS}[_hŒ&chæ}åhPi*@^!h\undowa*aci[}hŒ&cĒkæ•hæ{^}å^åE æ}åhæ!^hå^-i}^åhæ•hc@^hc[cæ|h}~{a^!h[-hi}åiçiå~æl•h-![{hæh*iç^}h&[@[!ch[-h-~]|Ēci{^hh-i!•cĒci{^hå^*!^^b&^!ci-i&æc^Ē•^^\i}}*h^*}ån'!*!æå~æc^•h_@[&[{]|^c^åhæhå^*!^^h[!h&^!ci-i&æc^h_ic@i}hæh*iç^}h]^!&^}ch[-h][!{æ|hci{^hc[h&[{]|^c^haha^*!^^h[-hc@^hå^*!^^h[!h&^!ci-i&æc^h]![*!æ{L

Ib]jYfg]hm'cZ'Gcih\Yfb'=bX]UbU'

O [| Λ| ΛςΛ | ΛοΛ-[| Λ| | Ιάςæc^ÉΛ | [cΕ-[| Ε] | [-ācλā | -ācλæ | ΔΑΔΑΦ | ΑΒ|Λ | Καλω | Κ

Œchả^*¦^Ē*!æ}ci} *Ái} •cic~ci[} •ĒÁ&[¦^Á¦^ç^}~^•Á^¢&|~å^Á!^ç^}~^•Á-![{Áæ~¢i|iæ¦^Á^}c^!]!ā•^•ÁÇ^Ē*ĒÉÁà[[\•c[¦^•Áæ}åÁå[¦{ic[!ā^•DĒÁ@[•]icæ|•ĒÁæ}å ā}å^]^}ch[]^!æci[}•ĒÁÞ[}ĒĀ^*¦^ŌĒ*!æ}ci}*Ái}•cic~ci[}•Áa[Á}[ich!^ç^}~^Å-![{Áæ~¢i|iæ¦^A^}c^!]!ā•^•Ái}ÁæÁ•^]æ¦æc^Á&æc^*[¦^ĒÁæ}åÁc@~• {æ^Ái}&|~å^Ác@^•^Áæ{[~}c•Ái}Ác@^Á&[;^Á!^ç^}~^•Á-![{Á[c@^!Á•[~!&^•È

Ô[¦^ÁÒ¢]^}•^•

Ô[¦^Á^¢]^}•^•Ái}&|~å^Á^¢]^}•^•Á-[¦Ái}•ci~&ci[}ÉÁ¦^•^æ¦&@ÉÁ]~à|i&Á•^¦çi&^ÉÁæ&æå^{i&Á•~]][¦cÉÁ•c~å^}cÁ•^¦çi&^•ÉÁi}•ci~&ci[}æ|Á•~]][¦cÉ •&@[|榕@i]•Áæ}åÁ-^|[[¸•@i]•ÁçŌŒÙÓDÁ[¦Á}^cÁ*!æ}cÁæiáÁc]][^}c Ô[}äÁ^¢]^}[}åÁi}&|~}]}åÁ^¢]^}[}åÁ|;

Ib]jYfg]hm'cZ'Gcih\Yfb'=bX]UbU'

5XX]h]cbU`FYgcifWYg

Όåici[]æ|Åå^-i}ici[]•Á[-Áçæ!iæà|^•Áˇ•^åÅi}Ác@i•Á!^][!cÁ&æ}Áà^Á-[ˇ}åÅi}Ác@^ÁQÚÒÖÙÁ[}|i}A**|[••æ!^Áæçæi|æà|^ÁæcÁc@i•Á]![çiå^åÁ|i}\
@cc]•KĐĐ•ˇ¦ç^^•É}&^•É^åÈ*[çĐi]^å•ĐXi•Õ|[••æ:|^Œ||Ěæ•]¢È

Xi•iaka@^AQÚÒÖÙÁÖæcæÁØ^^åàæ&\ÁÜ^][!cÁ!^•[`!&^Á]æ*^Ác@æcÁ]¦[çiå^•Ái}•c|`&ci[}•Á[}Á&!^æci}*ÁæÁ&`•c[{Á&[{]æ¦i•[}Á!^][!cÉÁ،ەÉÁæ}åÁçiå^[c`c[¦iæ|•Á@c]•KB}&^•É^åÉ*[çDQ]^å•BP^|]DXi^_BGÉ