Образовательная програмиа высиего образования
Спечиальность: 12.05 .01 (200401.65) Электронные и оптико-электронные приборы и системы специального назначения
Спечиализацил ․о2: Оптико-электронные ииформационно-измерительные приборы и системыя

|  | VITA | Itorcesa recynapctser-ks strectaut |
| :---: | :---: | :---: |
| 50 | TR-38 |  назначения |
|  | C35.13 | 30, |
|  | C35.15 |  |
|  | c5.n.1 |  |
|  | MTA |  |
| \$1 | 7<. 39 |  <br>  |
|  | C35.13 |  |
|  | C315.15 |  |
|  | Cs.n. 1 |  |
|  | csm. 2 | Преддипиониая приктияа |
| 52 | 7\%-40 | спос6ностьо рения <br>  |
|  | Cus.e |  |
|  | C45. 10 |  |
|  | cs.n. |  |
|  | Mra | Atorcesa racyapetser-isa stтectaLif |
| 53 | 70c-2.1 |  <br>  |
|  | C2,8,04. 1 |  |
| 54 | 7CK-2.2 |  <br>  |
|  | C35.14 |  |
| 55 | 7ck-2,3 |  <br>  |
|  | Cus. 15 |  | приборы и системыя

Приложение B．
Матрица соответствия требуемых компетенций и формирующих составных частей образовательной программы．

|  | Hancoticanue | We | ＊apueptuna meunerenyma |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| c1 |  2N以 |  | Ok－1 | Okr－2 | OK－3 | OK－4 | OK－5 | OK－5 | OK．7 | OW－${ }^{\text {a }}$ | Ok－9 | OK－10 | OW－11 | пix－6 |
|  |  |  | nk－13 | กE－17 | ns－29 |  |  |  |  |  |  |  |  |  |
| C1．5： | nerepun Ofetertu | 25 | O\％－1 | O6．2 | OR．4 |  |  |  |  |  |  |  |  |  |
| 5．159 | Prametua | 2 | 0\％－3 | cold | ＊－4 | Ok－15 | ck： |  |  |  |  |  |  |  |
| C1．6． 3 |  | 85 | O\％．4 |  |  |  |  |  |  |  |  |  |  |  |
| 9．5．4． | Exitientia | 19 | пK－17 |  |  |  |  |  |  |  |  |  |  |  |
| C1．6．5 |  | 35 | OK．1 | OW． 2 | © ${ }^{\text {a }}$－ | 7K．6 | nex－13 |  |  |  |  |  |  |  |
| ci．e．e9．9 | \＄torypatema | 3 | 0\％2 | 3－1 | ＊－4 | 0w 5 | cks | OW 7 | ck：11 |  |  |  |  |  |
| Cliecolir |  | 20 | TK： 13 | rixal |  |  |  |  |  |  |  |  |  |  |
| C1．8．as． 1.1 | Counansux | 25 | 0\％2 | OK－4 | ©－6 | OK－10 |  |  |  |  |  |  |  |  |
| Clie．as． 12 | пемитemsur | 5 | Ow：1 | O\％ 3 | O\％ 5 | 0\％ 7 | nex 39 | Ok． 11 |  |  |  |  |  |  |
| $c$ |  чина |  | OK－ | OW－19 | nk－1 | nK－2 | necl | TK．4 | 7 m －5 | nes， | nk． 7 | 71\％－9 | maxa | nk－10 |
|  |  |  | nk－11 | ne－15 | nik－17 | nk－19 | пк－21 | ni－23 | пк－24 | nx－25 | nk－30 | пС¢－2．1 |  |  |
| C2， 1 |  | 23 | 7k－1 | ［50－2 | Or－9 | O＊－10 |  |  |  |  |  |  |  |  |
| e． 5.5 |  | 23 | 7k－2 |  |  |  |  |  |  |  |  |  |  |  |
| Q2．63 |  етатиетика | 23 | nk－2 | ne－5 |  |  |  |  |  |  |  |  |  |  |
| C0．E． 4 |  | 15 | nk－3 | Re－4 | กW－6 | 7k－3 | ne： |  |  |  |  |  |  |  |
| Czi．6． | 3xcmonex | 31 | nke？ | nax－ |  |  |  |  |  |  |  |  |  |  |
| C2．5．5 | ¢пина | 21 | 7k－1 | OR－9 |  | 7k－5 |  |  |  |  |  |  |  |  |
| C0．57 |  | 17 | 76．59 |  |  |  |  |  |  |  |  |  |  |  |
| cu．e．on． |  <br>  | 17 | Ox－9 | ก10－10 | nck－2．1 |  |  |  |  |  |  |  |  |  |
| E．e．con | Wens | 14 | пK．7 |  |  |  |  |  |  |  |  |  |  |  |
| C2．8．09．3 | Tropana moposouss | 15 | 7k－3 | ［00－4 | กe－3 | TK－19 | n®－24 | 7K－25 | nk：30 |  |  |  |  |  |
| 2．8，00．4 |  | 23 | nk－21 |  |  |  |  |  |  |  |  |  |  |  |
| Czeme．as．t．1 |  <br>  | 17 | Tk－11 | n¢M－23 |  |  |  |  |  |  |  |  |  |  |
| e．e．9E1．2 |  | 17 | 7k－3 | ［K－S | ne． 23 | Tk－24 |  |  |  |  |  |  |  |  |
| 828．083．11 |  <br>  | 17 | 70－3 | now | ne：${ }^{\text {a }}$ | 7k－15 | nix－17 | のK：4 | 70．23 |  |  |  |  |  |
| 20．e．as 2.2 |  | 17 | TK：－10 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 31 | 7E411 |  |  |  |  |  |  |  |  |  |  |  |
| C2．e．as 3.2 | Iperpayepsorum | 15 | 7K－30 |  |  |  |  |  |  |  |  |  |  |  |
| Q．8．8．08．3．${ }^{\text {a }}$ | keveranmsntura | ${ }^{2} 7$ | nk－21 |  |  |  |  |  |  |  |  |  |  |  |
| c |  |  | OK5 | Ok， | ow－7 | OK－9 | OK－11 | nk－1 | TE－2 | n10， 3 | пK－4 | 7E．5 | nex 5 | TK． 7 |
|  |  |  | пK－8 | пк．9 | ก\＄－10 | nk－11 | п6－12 | пk－13 | пк－14 | ne－15 | nk－16 | пк－17 | nk－18 | กK－19 |
|  |  |  | กik－20 | п1\％ 21 | nix－22 | пк－23 | пк－24 | пк－25 | กк⿺𠃊 ${ }^{\text {¢ }}$ | nix－27 | пк－24 | пк⿺－29 | nix－30 | nk－ 31 |
|  |  |  | nk－32 | пk－33 | пn\％－34 | пk－35 | пк－36 | пк－37 | пк－38 | п10－39 | пк－40 | пCK－2．2 | пCK－2，3 |  |
| Cl．E． |  | 27 | 7k－21 | nk－2 |  |  |  |  |  |  |  |  |  |  |
| C．E．5 |  | 17 | 7K－28 |  |  |  |  |  |  |  |  |  |  |  |
| C2， 3 |  | 2 | 70．6 | ［ F － 13 | กn¢ 15 | TRE－ 6 | ［10－17 | 76－5 | （nx－11 | nis．2 |  |  |  |  |

Спечиализачия ㅊo2: Оптико-электронные информационно-измерительные
M3M

## приборы и системыя

| И4nsame | Hancmaxila | Kap\| |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ce.E. ${ }^{\text {a }}$ | Прнклания епт | 17 | กk: | \|nk-2 |  |  |  |  |  |  |  |  |  |  |
| 0.6 .5 |  rimimatiant | 17 | nker | ${ }^{1 \times 3}-18$ | ne. 2 |  |  |  |  |  |  |  |  |  |
| C3.6.6 |  | 21 | 7k-7 |  | n5:2 |  |  |  |  |  |  |  |  |  |
| 0.59 |  -пtuи, | 17 | 7k-31 |  |  |  |  |  |  |  |  |  |  |  |
| C3E8 |  <br>  | 17 | TK-12 | 75-32 | 7k,35 | пк-37 | re- 40 | $\pi \mathrm{k}$ - |  |  |  |  |  |  |
| 23.5.9 |  eneuniahiono mangueng | 17 | 7k-6 | TK-25 | ก¢.3 |  |  |  |  |  |  |  |  |  |
| CaEs 18 |  | 17 | TK-12 | TK-4 4 | 70:34 | 76.32 | Te-35 | 76-45 |  |  |  |  |  |  |
| en. 61 |  | 17 |  | n-2s | ก633 | 7k.32 | nk-3 | ก6.-31 |  |  |  |  |  |  |
| C,6.12 |  | 17 | 7k-25 | nc-22 | ก6.37 |  |  |  |  |  |  |  |  |  |
|  |  | 17 | пk-E4 | ns-25 | пk.34 | 70.35 | nk-38 | 7k.39 |  |  |  |  |  |  |
| 2.164 |  | 17 | 75.4.4 | 780. 19 | TE. 44 |  | Trach | nex ${ }^{2}$ |  |  |  |  |  |  |
| C3615 |  न- 中 EnETM | 17 | 76. ${ }^{3}$ | 76. 36 | TE. ${ }^{\text {a }}$ | 76. 48 | fore. 1 | 76-1\% |  |  |  |  |  |  |
| C3Ev |  <br>  CNGTen | 17 | 7K-L | ns-22 |  |  |  |  |  |  |  |  |  |  |
| Grabl7 |  | 17 | 7k-25 |  |  |  |  |  |  |  |  |  |  |  |
| 23, 618 |  | 22 | 7k-14 |  |  |  |  |  |  |  |  |  |  |  |
| Ex.0.09. |  | 17 | Ow, | п1\%-1 | cos | O* 11 |  |  |  |  |  |  |  |  |
| Cx.e.0n. 2 |  | 17 | 7k-22 | ก10-27 | пK.5 |  |  |  |  |  |  |  |  |  |
| Cligion 1 |  | 17 | nk-21 | nix-23 |  |  |  |  |  |  |  |  |  |  |
| C3.0014 |  | 17 | 7k-12 | Te-30 |  |  |  |  |  |  |  |  |  |  |
| ce.e.00.5 |  | ${ }^{7}$ | 7kers | nex |  |  |  |  |  |  |  |  |  |  |
| Carone | Cortcwe mmpther | 17 | 7K-11 |  |  |  |  |  |  |  |  |  |  |  |
| ex.e.ge. 1.1 |  | 17 | \#k-11 |  |  |  |  |  |  |  |  |  |  |  |
| Cababiliz |  | 17 | пket |  |  |  |  |  |  |  |  |  |  |  |
| c.e.as ${ }^{\text {a }}$ |  <br>  | 17 | ก¢.9 | กx-15 | 7k:15 | 7k-17 | nk-20 | O*-6 | ©6.7 | 7\%.5 | 7K-23 |  |  |  |
| Cababe 2.3 | Tencangemer | 17 | nkers | 06.9 | ¢0-6 |  |  |  |  |  |  |  |  |  |
| Cze.as 3.1 |  | 17 | 7k-9 |  |  |  |  |  |  |  |  |  |  |  |
| Ca, mas 3.2 | Ituaper | 17 | TK- |  |  |  |  |  |  |  |  |  |  |  |
| Cr. 8.86 .4 .1 |  | 17 | तא-9 |  |  |  |  |  |  |  |  |  |  |  |
| Cle.ane.al |  | 17 | nk-5 | ${ }^{\text {nix-18 }}$ |  |  |  |  |  |  |  |  |  |  |
| C4 | \|owgnecosa nymerypa |  | OK-12 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | OK-6 | Oк-7 | O*-9 | OK-10 | 7K-5 | пK-9 | nk-10] | nk-11 | пK-12 | пk-13 | п\%-14 | пK-15 |
| cs | Opastuen, Hif |  | กк-23 | ппk-24 | nix-25 | กк-26 | nix-27 | пк-29 | ก15-29 | nix-30 | nk-31 | (nk-32 | n5x-33 | nk-34 |

Образовательная программа высиего образования
Спечиальность: 12.05 .01 (200401.65) Электронные и оптико-электронные приборы и системы специального назначения
Спечиализачил ㄴo2: Оптико-электронные информачионно-измерительные приборь и системь

| Иhenexe | Hancemenaus | Kaq | dapueprewnt mennerehuma |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | nk-35 | nk-36 | n**-37 | пK-38 | nk-39 | nk-40 |  |  |  |  |  |  |
| Cs.9,1 | хиебная праттика |  | (16)2? | OK= | nk:37 | 10:38 |  |  |  |  |  |  |  |  |
| CSM. |  |  | 7k-11 | [15-39 | CW-10 | O\%-5 | n¢5. 30 | TK.32 | [15.35 | 76.38 | 7k-38 | ก5:39 |  |  |
| C5.0.2 | 7 |  | 750-8\% | 5\%W | CM- | 7\%-44 | nex 3 | $\pi \mathrm{F} \cdot 3$ | ne912 | пk:31 | Tk-11 | ne: 74 | nk:\% | 7k-38 |
|  | предииплочная практиса |  | 76-4 |  |  |  |  |  |  |  |  |  |  |  |
| cr.H.1 |  |  | 7k.5 | O*-19 | Cm-9 | OF-7 | 70.9 | Tk-15 | "40,11 | 75.15 | 71-24 | 74, 35 | п6:\% |  |
| C5 | 11 |  | пik 11 | OLS | OXC4 | OKF 7 | On-2 | OK/12 | ก15-2 | nix. 6 | nev | п¢-24 | nix-23 | กк.27 |
|  |  |  | пK-25 | ก1\%-32 | nix-28 | nk-31 | ก14-37 | пк-34 | п1-38 | n\%-40 | OK-3 |  |  |  |
| 874 | \|कанүльтатнй |  |  |  |  |  |  |  |  |  |  |  |  |  |

Спечиализация №2：Оптико－электроннье информационно－измерительные


| H | －185 |  |  |  |  | ne |  |  |  | fores |  |  |  |  | Luasen |  |  |  |  |  |  |  |  | －usas |  |  |  |  | Mr |  |  |  |  |  | Anser |  |  |  | M ${ }_{\text {N }}$ |  |  |  | Hers |  |  |  |  | He |  |  |  | Hevar |  |  |  |
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|  | $\begin{aligned} & 9 \\ & - \\ & -1 \end{aligned}$ | $\begin{aligned} & 5 \\ & 2 \\ & \hline \end{aligned}$ |  | $\left[\begin{array}{l} 8 \\ 10 \end{array}\right.$ | 5 |  | $5=$ |  |  | \％ | $2$ | $\begin{aligned} & \$ 8 \\ & \frac{1}{2} \end{aligned}$ | 5 |  |  | $\begin{aligned} & \frac{3}{3} \\ & 1 \\ & 6 \end{aligned}$ | $\stackrel{7}{7}$ | 困 | 8 |  |  | $\dot{z}$ |  | 8 | ${ }_{n-1}$ |  |  | 4 |  | $\begin{aligned} & 5 \\ & y \\ & \hline \end{aligned}$ |  | $\frac{8}{8}$ |  | 8 |  | $\frac{1}{6}$ | 6 | ： |  | $=$ | $\frac{8}{4}$ | H | $$ | $\begin{aligned} & 9 \\ & \vdots \\ & \vdots \end{aligned}$ |  | $\begin{array}{\|l\|} \hline \begin{array}{l} 4 \\ 0 \end{array} \\ \hline \end{array}$ | $8$ | 3 | － | \％ |  | $4$ | \％ |  | 7 |
|  | 1 | 2 | 1 | 4 | 5 | 5 | － | 1 | $s$ | 2 | 3 | 12 | alk | 13 | 13 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |  | 2 | 空 | 1 | 3 |  | 2 | 4 | E | S | 怱 | 3 | 3 | 4 | 4 |  | 3 | T | 3 | 3 | ¢ | 41 | 4 | 4 | ＋ | d |  | 4 | ＊ | W | 3 | A | 2 |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 | 3 |  | K | K |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 | $y$ | Y | Y | K | K | K | K | C |
| － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 9 | 3 |  | k | k |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 | $y$ | \％ | $y$ | \＆ | K | K | K | k |
| \＃\＃ | H | H | H | H | H | H | H | H | H | H | H | H | H | H | H | H | H | H | H | 3 | 3 | 3 |  | K | K |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 | ก | ก | K | 4 | $K$ | R | K． | \％ |
| If | H | H | H | H | H | H | H | $1{ }^{1}$ | H | 1 | H | H | H | H | 1 | H | H | H | H | 3 | 3 | 3 |  | K | k |  | H |  | H | H | H |  | H | H | H | H | H |  | H | H | H | H | H | H |  | 3 | $\ni$ | 7 | 7 | K | 8 | K | K | K | E |
| V | H | H | H | H | H | H | H | ， | H | H | H | H | H | H | 1 H | H | H | H | H | 3 | 3 | 3 |  | K | k |  | H |  | H | H | H | H | H | H | H | H | H |  | H | H | H | H | H | H |  | 3 | 9 | 7 | 7 | K | 8 | K | K | K | K |
| 17 | 17 | 17 | 17 | $\square$ | Д | 4 | A | － | ， | 4 | Д | \＃ | 4 | $\square$ | 4 | H | －1 | II | － | ， | I | 退 |  | K | K |  | E | \％ | K | － |  | ＝ | － | ＝ |  | ＝ | ＝ |  | ＝ | － | ＝ | ＝ | $=$ | － | － | $=$ | － | － | ＝ | ＝ | － | ＝ |  |  |  |

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|  | cem： | cmi 2 | 5－5 | ctis | 5－2 | 5－40 | 5－ 1 | 5－2 | Esw | Em－： | ame 1 | Exa | E＋： | ＋4．2 | 5ma | 54． 1 | 5－3 | Emes |  |
| Teoperiquobie obyw | 4 | 4 | 13 | 4 | 4 | 31 | 14 | － | 32 | $\underline{L}$ | $\pm$ | 3 | 12 | 47 | 33 |  |  |  | 158 |
|  | 3 | 1 | 5 | 3 | $\stackrel{3}{5}$ | 5 | 3 | 3 | 6 | 3 | $\because$ | 6 | 1 | 5 | 6 |  |  |  | 3 |
|  |  | 1 | 3 |  | 7 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | ＊ |
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| H Hsp－rownoned．pasors（vorlentp．） |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 4 |  | 4 | 1 | 2 | 5 | 2 | 1 | 3 |  |  |  | 3 |
|  |  |  |  |  |  |  |  | 7 | $\underline{3}$ |  | 3 | $z$ |  | 2 | $z$ | 4 |  | 4 | \％ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| K Fantwimi | 1 | 5 | 7 | 2 | 5 | 7 | 2 | 5 | 5 | 2 | 3 | 1 | 2 | 5 | 1 | 7 |  | 7 | 45 |
| Иitoro | $\pm$ | z | 17 | 13 | 2 | 13 | 71 | 3 | 52 | Z | 2 | 52 | \＃ | s | 52 | 27 |  | 27 | 2 |
| －tymertoe |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 「0ym |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |









Спечиализачил №2：Оптико－электроиные ииформачионно－измерительные

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | \％ |  |  |  |  |  |  | Casers |  |  |  |  |  | Cumpr［［13 mel |  |  |  |  |  | Cawapatamed |  |  |  |  |  |  |  |  |  |  |  |
|  | 5 | yr | Ster | －mes | $1{ }^{1}$ | $\infty$ | $\infty$ | 35 | nus | Tes | $=$ | $\square_{4}$ | $\infty$ | 0 | 石 | － | $\cdots$ | 7 | $\infty$ | \％ | ar | T＊ | nes | 4 | $\infty$ |  | खF | Ster | Ts | 5 | $\infty$ | ＋20 | 2ा | T＊＊ | ns | \％ | $\cdots$ | 5 m | 3T |
| 137 | 3 | 5 | 7 | 72 | \％ | L 12 | 7 | 3 | $1 \times 2$ | 7 | 2 | 123 | in | LS | \％ | 118 | 3 | 13 | 138 | ${ }^{1 \times 2}$ | 17 | BM | 7 | 138 | 730 | 3 S | \％ | 128 | \％ | $\underline{13}$ | 27 | ！ | 13 | LS | Im | 178 | 3 3 | I－4 | \％ |
|  | 3 | 5 |  | $3{ }^{4}$ | 72 | 18 | 3 | 3 | 132 | 72 | 2 | 13 | 327？ | 18 | \％ | 13 | 3 | 123 | 28 |  | \％ | 롱 | 3 | \％ | 13＊ | 万2 | 121 | ${ }^{138}$ | ${ }^{2}$ | 2 | 31： | 18 | 17 | 明 | 72 | 128 | 159 | 56 | $1:$ |
| 133 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 173 |  |  |  | $3{ }^{3}$ | 3 | s | \％ | 4 | 2 |  |  | 4 | z | 3 | 3 |  |  |  |  |  |  |  | － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 124 |  |  |  | \％ | 4 |  |  |  |  |  |  | $\stackrel{1}{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 138 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{18}$ |  | 13 | m |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 43 |  |  |  | ＊ | 3 | ＊ |  | ： | 3 | a | 2 | z | 34 | 3 | ： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140 |  |  |  | 2 | 翌 |  |  |  |  | 4 | ， | $\underline{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 192 |  |  |  |  |  |  |  |  | $s$ | 10 | 18 | 3 | 3 |  | 4 | $\pm$ | 13 | 35 | \％ | 3 | $s$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145 |  |  |  |  |  |  |  |  |  |  |  | $\stackrel{3}{18}$ |  |  |  |  |  | ${ }_{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 448 |  |  |  |  |  |  |  |  | \％ | $\pm$ | 9 | 4 | $\pi$ |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{48}$ |  |  |  |  |  |  |  |  |  |  |  | $\square$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  | $\pm$ | 3 |  | 15 | 18 | 3 | 3 | $\pi$ | 3 | 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  | \＃ | 4 |  |  |  |  |  |  |  |  |  |
| H2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ： | s | $s$ | 7 | 3 | 4 |
| $1{ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 辰 |  |  |  |
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| $1{ }^{18}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{3}$ |  | 18 | 15 | 3 | 1 | $\pm$ | 15 | $3{ }^{3}$ | 3 | $x$ | $s$ |  |  |  |  |  |  |
| 159 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  | 䢒 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  | z | z | 3 | 4 |
| m |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 | z | 7 | z | ： |  |  |  |  |  |  |  |  |  |  |  |  |
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| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \％ |  | 38 | $\pi$ | 8 | 5 |  |  |  |  |  |  |
| 170 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 15 |  |  |  |  |  |  |  |  | s | 18 |  | 15 | s | x | ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 48 |  |  |  |  |  |  |  |  |  | $\pm$ |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\%$ | 18 | 3 | 5 | \％ | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | H |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 318 | 3 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\frac{m a l}{18}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| － |  |  | 1 1 | 年 1 7 | 2 | 154 | $\underline{\|c\|}$ | $+$ |  |  |  |  |  |  |  |  |  |  |  |  |  | 18 | \％ | 3 | 1391 | ｜3｜ | $\bigcirc$ | ｜ 5 | \％ | 38 | 5 | ｜男｜ | ${ }_{6}$ | 78 | ｜类 | 10 | 1991 | ］${ }^{\text {3 }}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{54}$ |  | \％ | ［3\％ | ［3］ | 1 | ［8］ | 19 | 71 | ［3］ |  | 2 | \％ | 1：3 | ［ | ［3］ | ｜ 3 | 4 |


|  | ？ |  |  |  |  |  | 978 |  |  |  |  |  |  |  |  |  |  |  | － | $8$ | 荷路 |  |  |  |  | xamenem |
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|  | 5＊ | ne | п¢ | cr | 5 | 27 | Some | $\cdots$ | \％ | $\infty$ | ＊ | zer | Ther | nes | ${ }_{\square}$ | $\cdots$ | $x=0$ | x |  |  |  |  |  |  |  |  |
| 177 | 5 | ！ | I＋4 | 1384 | I ${ }^{\text {＋}}$ | za |  |  |  |  |  |  |  |  |  |  |  |  | － |  | zz | 3 |  |  |  |  |
| 135 | 5 | 91 | 72 | $11{ }^{1}$ | 72 | 迷 |  |  |  |  |  |  |  |  |  |  |  |  | ． |  | 1390 | 震 |  |  |  |  |
| 139 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{3}$ |  |  | 18 |  | 33 | Swamateran | ｜rath 12 |
| 131 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $s$ |  | x | 38 |  | 17 |  | 70：3 |
| 424 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 113 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \％ |  | ma | ： |  | 72 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | z |  | $\underset{\sim}{5}$ | 5 |  | 47 |  |  |
| 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1192 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  | 4 | ${ }_{3}$ |  | 17 |  | 76．73．38．2 |
| 148 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ［145 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $x$ |  | za | $\therefore$ |  | 23 | sama | 70．7，4，38 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} 448 \\ 148 \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\pm$ |  | 44.4 | 3 |  | 17 | atraconemman entwa | \％ 611.3 |
| 样 |  |  | － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 131 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $s$ |  | 53s | 13 |  | 17 | annesmexpmation | 7012323830．0．4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $152$ | 3 | 3 | \％ | n | \％ | 4 |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  | 怱 |  | ${ }^{17}$ |  |  |
| $\begin{gathered} \hline 159 \\ \hline 195 \\ \hline \end{gathered}$ |  | 2 | 逪 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | 515 | 77 |  | 17 |  |  |
| 75 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \％ 19 | 38 | 3 | z | \％ |  | ： |  |  |  |  |  |  |  |  |  |  |  |  | $x$ |  | 4 scos | 3 |  | 17 |  |  |
|  |  | 8 | I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 3 \\ & 192 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\pm$ |  | 23s | s |  | 17 |  | 70．3222 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{184}$ | 13 | 3 |  | $\pm$ | z | 15 |  |  |  |  |  |  |  |  |  |  |  |  | $s$ |  | 230 | s |  | 17 |  |  |
| 197 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  | \％ | 13 |  | 13 |  |  |
| 170 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 478 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{3}$ |  | 23 | 13 |  | 17 | Sandemany |  |
| 479 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 158 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  | z | 15 |  | ${ }^{17}$ | 2ntasammba | 76．4．82 |
| 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 478 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  | ＊ 4 | 13 |  | 17 |  | 70． 18 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{r} 173 \\ 485 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $x$ |  | 2136 | ： |  | 72 |  | 70：4 |
| ＋130 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 72 |  | 77 | ｜14 | ｜731 | ：17 |  |  |  |  |  |  |  |  |  |  |  |  | 1．1 |  | 173\％ | ：${ }^{\text {a }}$ |  |  |  |  |
|  | \％ | $\stackrel{5}{8}$ | 7 | ［楼 | ｜77 | ii |  | 1 |  | － | 1 | I |  | I |  | $\square$ | 1 |  | － 1 |  |  | \％ |  |  |  |  |



