**Практична робота**

Тема:  ***Прогнозування використання природних ресурсів адміністративно-територіальної одиниці (АТО).***

Мета: Розробити прогноз структури використання земельних ресурсів АТО на 5 років

Завдання 1. Побудувати графік динаміки площ сільськогосподарських земель за 1-15 роки (по осі х відкладаються роки, по осі y - площі). Проаналізувати динаміку зміни площ (визначити загальні напрямки зміни, тенденції, при наявності - стадії).

*Інформація:* додаток 2 (рядок 1).

Завдання 2. Розрахувати абсолютний приріст земельних площ по роках за формулою: Δt = St – St-1, де St, St-1 – значення показника площ сільськогосподарських земель відповідно за роки t та t-1. Заповнити таблицю:

**Форма 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Роки (t) | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Абсолютний приріст (Δt) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Побудувати діаграму абсолютних приростів площ сільськогосподарських земель та визначити тип розвитку і його математичний вираз.

Завдання 3. Побудувати кругові діаграми структури використання земель за 5-й та 15-й роки. Проаналізувати структурні зміни у землевикористанні. Виявити причини зміни частки сільськогосподарських земель.

*Інформація:* додаток 3.

Завдання 4. Розрахувати прогнозні значення площ сільськогосподарських земель методами згладжування (декомпозиційна модель) та аналітичного вирівнювання (трендова модель, в якій вид залежності визначається типом розвитку, алгебраїчна формула – за критерієм мінімуму середньоквадратичного відхилення) відповідно за допомогою програми користувача Excel. Заповнити таблицю (стовпчики 2, 3):

**Форма 3**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Роки | Прогнозні значення | | Песимістичні значення | | Оптимістичні значення | |
|  | Декомпозиційна модель (згладжування) | Трендова модель  (аналітичне вирівнювання) | га | % до всіх земель | га | % до всіх земель |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16 |  |  |  |  |  |  |
| 17 |  |  |  |  |  |  |
| 18 |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |
| Вид залежності | |  |  | | | |
| Алгебраїчна формула | | y = | tтабл.. = 2.16 | | | |
| Стандартне відхилення | | Sy = |  | | | |

Проаналізувати варіанти прогнозних значень. Методом експертних оцінок з використанням формули довірчого інтервалу прогнозу обґрунтувати діапазон можливих значень площ сільськогосподарських земель у 16-20 роках (песимістичні та оптимістичні значення). Заповнити таблицю (стовпчики 4, 6).

Розрахувати частку сільськогосподарських земель в структурі використання земель за умови незмінності загальної земельної площі (додаток 3). Заповнити таблицю (стовпчики 5, 7).

Побудувати графік діапазону можливих прогнозних значень площ сільськогосподарських земель у 16-20 роках. Зробити висновки.

Завдання 5. Розрахувати просторову регресію показника частки сільськогосподарських земель в структурі використання земель за допомогою програми користувача STATISTICA. Для цього в якості змінних беруться всі пари координат x та y (незалежні змінні), що знаходяться на перетинах сітки координат в межах території АТО (додаток 1) та значення частки сільськогосподарських земель (залежна змінна) відповідних складових адміністративних одиниць (додаток 4).

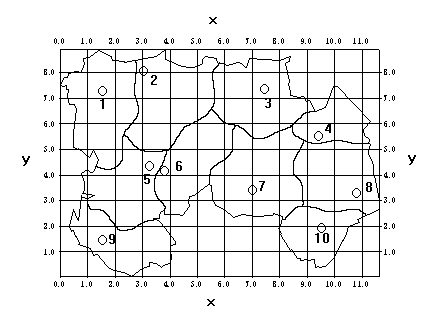
*Інформація:* додаток 1, додаток 4 (стовпчик 2).

Завдання 6. На базі отриманих у завданні 6 трендових та залишкових значень побудувати карти відповідних (трендової та залишкової) поверхонь регресію показника частки сільськогосподарських земель в структурі використання земель за допомогою програми користувача SURFER. Зробити висновки щодо територіальної диференціації показника (визначити загальну тенденцію його зміни по території та аномальні відхилення). Обґрунтувати заходи з розв’язання проблем для територій з аномальними відхиленнями (значенням, нижчим за трендові, відповідає темний колір на карті; вищим за трендові - світлий) на наступні 5 років (16-20 роки).

Завдання 7. Зробити загальні висновки щодо перспективної структури використання земель в досліджуваній АТО.

**Додаток 1**

***Контур АТО та сітка координат***



1-10 – центри складових адміністративних одиниць

**Додаток 2**

***Динаміка основних показників соціально-економічного розвитку АТО (динамічні ряди)***

Показники: 1 - площа сільськогосподарських земель (тис.га); 2 - чисельність населення (тис.чол.); 3 - обсяги виробництва промислової продукції (млн.грн.); 4 - чисельність зайнятих у промисловості (тис.чол.); 5 - основні виробничі фонди у промисловості (млн.грн.); 6 - обсяги виробництва сільськогосподарської продукції (млн.грн.); 7 - чисельність зайнятих у сільському господарстві (тис.чол.); 8 - основні виробничі фонди у сільському господарстві (млн.грн.).

*Варіант 1*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 144 | 146 | 149 | 152 | 154 | 157 | 159 | 161 | 164 | 167 | 169 | 171 | 173 | 176 | 178 |
| 2 | 680 | 686 | 694 | 700 | 701 | 706 | 714 | 718 | 722 | 726 | 749 | 752 | 761 | 786 | 807 |
| 3 | 1275 | 1413 | 1530 | 1581 | 1632 | 1761 | 1770 | 1854 | 1929 | 2055 | 2151 | 2307 | 2538 | 2733 | 2994 |
| 4 | 61,0 | 65,2 | 69,6 | 79,6 | 80,0 | 88,0 | 98,0 | 104,0 | 105,4 | 108,8 | 118,0 | 120,0 | 129,6 | 133,6 | 135,0 |
| 5 | 176 | 194 | 220 | 240 | 270 | 296 | 320 | 348 | 366 | 380 | 430 | 500 | 530 | 562 | 586 |
| 6 | 369 | 417 | 465 | 528 | 594 | 651 | 1083 | 1167 | 1260 | 1350 | 1461 | 1572 | 1638 | 1776 | 1860 |
| 7 | 74.2 | 86.4 | 89.2 | 96.4 | 108.6 | 126.2 | 131.4 | 137.2 | 143.0 | 150.8 | 154.4 | 160.6 | 163.8 | 165.4 | 170.8 |
| 8 | 276 | 300 | 330 | 362 | 396 | 436 | 470 | 480 | 498 | 522 | 560 | 600 | 646 | 662 | 700 |

*Варіант 2*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 132 | 130 | 128 | 124 | 122 | 119 | 115 | 112 | 108 | 108 | 107 | 105 | 104 | 102 | 102 |
| 2 | 688 | 720 | 730 | 740 | 763 | 773 | 789 | 814 | 831 | 857 | 857 | 857 | 866 | 871 | 880 |
| 3 | 1275 | 1413 | 1530 | 1581 | 1632 | 1761 | 1770 | 1854 | 1929 | 2055 | 2151 | 2307 | 2538 | 2733 | 2994 |
| 4 | 45.4 | 51.9 | 53.5 | 58.1 | 66.4 | 74.8 | 77.9 | 79.5 | 83.7 | 91.4 | 99.7 | 107.0 | 110.4 | 112.4 | 113.7 |
| 5 | 119 | 132 | 147 | 161 | 177 | 193 | 204 | 216 | 229 | 243 | 260 | 274 | 318 | 350 | 365 |
| 6 | 1860 | 1776 | 1638 | 1572 | 1461 | 1350 | 1260 | 1167 | 1083 | 651 | 594 | 528 | 465 | 417 | 369 |
| 7 | 96.9 | 95.4 | 93.0 | 89.0 | 84.4 | 82.7 | 81.1 | 78.7 | 74.3 | 69.8 | 61.1 | 54.6 | 46.9 | 41.7 | 38.5 |
| 8 | 437 | 412 | 395 | 377 | 362 | 345 | 337 | 312 | 284 | 257 | 234 | 212 | 15 | 177 | 162 |

*Варіант 3*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 101 | 101 | 102 | 102 | 103 | 103 | 103 | 103 | 103 | 103 | 104 | 106 | 106 | 106 | 107 |
| 2 | 400 | 407 | 417 | 427 | 437 | 448 | 460 | 471 | 482 | 497 | 503 | 519 | 529 | 539 | 549 |
| 3 | 425 | 471 | 510 | 527 | 544 | 587 | 590 | 618 | 643 | 685 | 717 | 769 | 846 | 911 | 998 |
| 4 | 33.2 | 35.7 | 38.6 | 41.5 | 45.4 | 51.9 | 55.3 | 60.3 | 64.7 | 71.1 | 72.7 | 77.2 | 78.4 | 84.0 | 85.4 |
| 5 | 106 | 118 | 131 | 145 | 162 | 177 | 190 | 204 | 240 | 253 | 268 | 283 | 302 | 322 | 360 |
| 6 | 123 | 139 | 155 | 176 | 198 | 217 | 361 | 389 | 420 | 450 | 487 | 524 | 546 | 592 | 620 |
| 7 | 41.5 | 45.4 | 51.9 | 53.5 | 58.1 | 66.1 | 67.0 | 68.5 | 69.7 | 70.0 | 71.0 | 72.7 | 74.4 | 79.0 | 82.0 |
| 8 | 102 | 115 | 127 | 141 | 157 | 171 | 201 | 213 | 225 | 239 | 255 | 269 | 288 | 300 | 315 |

*Варіант 4*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 213 | 218 | 220 | 222 | 224 | 227 | 230 | 233 | 236 | 239 | 241 | 245 | 250 | 254 | 259 |
| 2 | 705 | 702 | 702 | 688 | 675 | 668 | 657 | 650 | 640 | 630 | 623 | 620 | 612 | 612 | 609 |
| 3 | 1996 | 1822 | 1692 | 1538 | 1434 | 1370 | 1286 | 1236 | 1180 | 1174 | 1088 | 1054 | 1020 | 942 | 850 |
| 4 | 84.5 | 83.1 | 81.8 | 79.0 | 74.4 | 70.1 | 69.4 | 66.1 | 62.2 | 60.0 | 57.1 | 52.5 | 49.0 | 43.5 | 41.0 |
| 5 | 420 | 377 | 362 | 345 | 331 | 322 | 302 | 283 | 277 | 260 | 238 | 200 | 162 | 148 | 121 |
| 6 | 246 | 278 | 310 | 352 | 396 | 434 | 722 | 778 | 840 | 900 | 974 | 1048 | 1092 | 1184 | 1240 |
| 7 | 37.1 | 43.2 | 44.6 | 48.2 | 54.3 | 63.1 | 65.7 | 68.6 | 71.5 | 75.4 | 77.2 | 80.3 | 81.9 | 82.7 | 85.4 |
| 8 | 138 | 150 | 165 | 181 | 198 | 218 | 235 | 240 | 249 | 261 | 280 | 300 | 323 | 331 | 350 |

*Варіант 5*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 157 | 159 | 159 | 158 | 157 | 156 | 155 | 155 | 154 | 154 | 154 | 154 | 153 | 151 | 150 |
| 2 | 890 | 881 | 873 | 859 | 838 | 822 | 799 | 780 | 764 | 752 | 742 | 727 | 711 | 692 | 682 |
| 3 | 1996 | 1822 | 1692 | 1538 | 1434 | 1370 | 1286 | 1236 | 1180 | 1174 | 1088 | 1054 | 1020 | 942 | 850 |
| 4 | 108.2 | 104.6 | 103.2 | 99.7 | 96.3 | 91.9 | 90.3 | 84.1 | 79.6 | 76.9 | 67.5 | 59.0 | 54.4 | 52.7 | 46.1 |
| 5 | 321 | 311 | 291 | 269 | 255 | 239 | 225 | 213 | 201 | 187 | 171 | 155 | 143 | 128 | 115 |
| 6 | 1240 | 1184 | 1092 | 1048 | 974 | 900 | 840 | 778 | 722 | 434 | 396 | 352 | 310 | 278 | 246 |
| 7 | 84.6 | 81.0 | 79.2 | 76.2 | 73.5 | 71.0 | 69.0 | 67.5 | 66.1 | 64.8 | 56.3 | 49.2 | 45.4 | 44.0 | 38.4 |
| 8 | 316 | 304 | 293 | 277 | 257 | 251 | 242 | 238 | 231 | 220 | 195 | 177 | 163 | 148 | 135 |

*Варіант 6*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 114 | 115 | 116 | 117 | 118 | 118 | 119 | 120 | 120 | 120 | 123 | 125 | 125 | 126 | 127 |
| 2 | 712 | 714 | 715 | 717 | 720 | 722 | 717 | 725 | 724 | 724 | 725 | 727 | 728 | 729 | 731 |
| 3 | 1996 | 1822 | 1692 | 1538 | 1434 | 1370 | 1286 | 1236 | 1180 | 1174 | 1088 | 1054 | 1020 | 942 | 850 |
| 4 | 113.7 | 112.4 | 110.4 | 107.0 | 99.7 | 91.4 | 83.7 | 79.5 | 77.9 | 74.8 | 66.4 | 58.1 | 53.5 | 51.9 | 45.4 |
| 5 | 357 | 342 | 330 | 266 | 252 | 231 | 223 | 211 | 199 | 196 | 180 | 163 | 150 | 131 | 123 |
| 6 | 246 | 278 | 310 | 352 | 396 | 434 | 722 | 778 | 840 | 900 | 974 | 1048 | 1092 | 1184 | 1240 |
| 7 | 38.5 | 41.7 | 46.9 | 54.6 | 61.1 | 69.8 | 74.3 | 78.7 | 81.1 | 82.7 | 84.4 | 89.0 | 93.0 | 95.4 | 96.9 |
| 8 | 140 | 153 | 168 | 183 | 202 | 222 | 243 | 255 | 271 | 287 | 296 | 311 | 323 | 331 | 352 |

*Варіант 7*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 191 | 194 | 196 | 197 | 199 | 200 | 202 | 203 | 204 | 206 | 207 | 208 | 209 | 209 | 210 |
| 2 | 563 | 563 | 551 | 543 | 539 | 534 | 530 | 524 | 515 | 508 | 507 | 504 | 501 | 497 | 496 |
| 3 | 425 | 471 | 510 | 527 | 544 | 587 | 590 | 618 | 643 | 685 | 717 | 769 | 846 | 911 | 998 |
| 4 | 30.5 | 32.6 | 34.8 | 39.8 | 40.0 | 44.0 | 49.0 | 52.0 | 52.7 | 54.4 | 59.0 | 60.0 | 64.8 | 66.8 | 67.5 |
| 5 | 111 | 124 | 138 | 156 | 170 | 185 | 215 | 228 | 243 | 255 | 271 | 287 | 301 | 313 | 325 |
| 6 | 123 | 139 | 155 | 176 | 198 | 217 | 361 | 389 | 420 | 450 | 487 | 524 | 546 | 592 | 620 |
| 7 | 39.6 | 44.1 | 50.3 | 51.9 | 56.3 | 64.4 | 65.2 | 66.7 | 68.1 | 71.5 | 72.8 | 74.3 | 75.5 | 77.1 | 78.7 |
| 8 | 135 | 148 | 163 | 177 | 195 | 220 | 231 | 238 | 242 | 251 | 257 | 277 | 293 | 304 | 316 |

*Варіант 8*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 131 | 133 | 133 | 134 | 135 | 136 | 136 | 137 | 137 | 138 | 139 | 142 | 143 | 144 | 145 |
| 2 | 472 | 485 | 500 | 513 | 526 | 539 | 555 | 568 | 580 | 593 | 596 | 598 | 607 | 616 | 626 |
| 3 | 850 | 942 | 1020 | 1054 | 1088 | 1174 | 1180 | 1236 | 1286 | 1370 | 1434 | 1538 | 1692 | 1822 | 1996 |
| 4 | 32.0 | 34.1 | 36.0 | 38.9 | 40.0 | 43.0 | 45.4 | 51.9 | 53.9 | 58.1 | 66.4 | 74.8 | 77.9 | 81.4 | 99.7 |
| 5 | 123 | 131 | 150 | 163 | 180 | 196 | 199 | 211 | 223 | 231 | 252 | 266 | 330 | 342 | 357 |
| 6 | 246 | 278 | 310 | 352 | 396 | 434 | 722 | 778 | 840 | 900 | 974 | 1048 | 1092 | 1184 | 1240 |
| 7 | 47.9 | 49.5 | 53.7 | 61.7 | 69.7 | 77.0 | 79.2 | 80.0 | 81.2 | 82.8 | 84.3 | 85.9 | 87.1 | 90.0 | 90.8 |
| 8 | 162 | 177 | 195 | 212 | 234 | 257 | 284 | 312 | 337 | 345 | 362 | 377 | 395 | 412 | 437 |

*Варіант 9*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 282 | 278 | 279 | 280 | 280 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 286 | 287 | 287 |
| 2 | 431 | 430 | 423 | 413 | 405 | 397 | 387 | 377 | 368 | 358 | 349 | 340 | 336 | 334 | 334 |
| 3 | 213 | 236 | 255 | 264 | 272 | 294 | 295 | 309 | 322 | 343 | 359 | 385 | 423 | 456 | 499 |
| 4 | 31.2 | 33.5 | 39.0 | 41.0 | 43.0 | 49.5 | 51.5 | 55.4 | 61.9 | 63.5 | 68.1 | 76.4 | 79.1 | 83.1 | 84.5 |
| 5 | 92 | 100 | 112 | 128 | 143 | 159 | 162 | 177 | 183 | 200 | 238 | 260 | 271 | 290 | 310 |
| 6 | 123 | 139 | 155 | 176 | 198 | 217 | 361 | 389 | 420 | 450 | 487 | 524 | 546 | 592 | 620 |
| 7 | 36.4 | 42.4 | 43.7 | 47.5 | 53.3 | 62.1 | 63.7 | 66.4 | 67.5 | 68.0 | 69.6 | 71.1 | 72.4 | 73.8 | 75.6 |
| 8 | 101 | 113 | 125 | 139 | 155 | 169 | 199 | 211 | 223 | 231 | 252 | 266 | 281 | 301 | 310 |

*Варіант 10*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 125 | 125 | 124 | 124 | 124 | 123 | 123 | 123 | 122 | 122 | 122 | 121 | 121 | 121 | 120 |
| 2 | 134 | 137 | 139 | 141 | 144 | 146 | 149 | 152 | 155 | 158 | 161 | 163 | 164 | 166 | 167 |
| 3 | 213 | 236 | 255 | 264 | 272 | 294 | 295 | 309 | 322 | 343 | 359 | 385 | 423 | 456 | 499 |
| 4 | 28.0 | 31.0 | 32.5 | 36.0 | 40.0 | 42.0 | 45.7 | 48.6 | 51.5 | 55.4 | 61.9 | 64.7 | 67.2 | 71.1 | 72.7 |
| 5 | 88 | 97 | 110 | 120 | 135 | 148 | 160 | 174 | 183 | 190 | 215 | 250 | 265 | 281 | 293 |
| 6 | 620 | 592 | 546 | 524 | 487 | 450 | 420 | 389 | 361 | 217 | 198 | 176 | 155 | 139 | 123 |
| 7 | 75.6 | 73.8 | 72.4 | 71.1 | 69.6 | 68.0 | 67.5 | 66.4 | 63.7 | 62.1 | 53.3 | 47.5 | 43.7 | 42.4 | 36.4 |
| 8 | 350 | 331 | 323 | 300 | 280 | 261 | 249 | 237 | 220 | 207 | 188 | 171 | 157 | 142 | 130 |

*Варіант 11*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 123 | 124 | 124 | 125 | 126 | 126 | 127 | 128 | 129 | 130 | 131 | 133 | 133 | 134 | 135 |
| 2 | 492 | 492 | 487 | 480 | 475 | 470 | 465 | 460 | 457 | 455 | 451 | 446 | 433 | 432 | 431 |
| 3 | 998 | 911 | 846 | 769 | 717 | 685 | 643 | 618 | 590 | 587 | 544 | 527 | 510 | 471 | 425 |
| 4 | 85.4 | 84.0 | 78.4 | 77.2 | 72.7 | 71.1 | 64.7 | 60.3 | 55.3 | 51.9 | 45.4 | 41.5 | 38.6 | 35.7 | 33.2 |
| 5 | 363 | 348 | 335 | 271 | 257 | 241 | 227 | 215 | 202 | 190 | 174 | 158 | 145 | 130 | 117 |
| 6 | 123 | 139 | 155 | 176 | 198 | 217 | 361 | 389 | 420 | 450 | 487 | 524 | 546 | 592 | 620 |
| 7 | 38.4 | 44.0 | 45.4 | 49.2 | 56.3 | 64.8 | 66.1 | 67.5 | 69.0 | 71.0 | 73.5 | 76.2 | 79.2 | 81.0 | 84.6 |
| 8 | 104 | 116 | 129 | 143 | 160 | 174 | 181 | 215 | 254 | 260 | 274 | 288 | 316 | 329 | 343 |

*Варіант 12*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 170 | 170 | 171 | 171 | 172 | 172 | 172 | 172 | 172 | 172 | 174 | 175 | 175 | 175 | 176 |
| 2 | 863 | 860 | 850 | 834 | 822 | 809 | 797 | 782 | 770 | 758 | 753 | 752 | 750 | 750 | 746 |
| 3 | 850 | 942 | 1020 | 1054 | 1088 | 1174 | 1180 | 1236 | 1286 | 1370 | 1434 | 1538 | 1692 | 1822 | 1996 |
| 4 | 41.0 | 43.5 | 49.0 | 52.5 | 57.1 | 60.0 | 62.2 | 66.1 | 69.4 | 70.1 | 74.4 | 79.0 | 81.8 | 83.1 | 84.5 |
| 5 | 101 | 125 | 130 | 138 | 142 | 151 | 162 | 167 | 171 | 193 | 204 | 216 | 229 | 243 | 250 |
| 6 | 246 | 278 | 310 | 352 | 396 | 434 | 722 | 778 | 840 | 900 | 974 | 1048 | 1092 | 1184 | 1240 |
| 7 | 39.1 | 44.8 | 46.2 | 50.1 | 57.3 | 64.5 | 65.7 | 68.6 | 71.5 | 75.4 | 81.9 | 82.7 | 84.7 | 87.2 | 89.9 |
| 8 | 199 | 211 | 223 | 231 | 252 | 266 | 280 | 300 | 323 | 331 | 350 | 363 | 380 | 396 | 411 |

*Варіант 13*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 109 | 112 | 112 | 113 | 114 | 114 | 115 | 116 | 116 | 117 | 117 | 117 | 117 | 117 | 118 |
| 2 | 387 | 408 | 424 | 436 | 453 | 467 | 486 | 500 | 513 | 529 | 530 | 530 | 540 | 546 | 556 |
| 3 | 425 | 471 | 510 | 527 | 544 | 587 | 590 | 618 | 643 | 685 | 717 | 769 | 846 | 911 | 998 |
| 4 | 40.0 | 41.1 | 42.8 | 49.0 | 51.0 | 53.0 | 56.1 | 62.7 | 64.4 | 69.0 | 74.5 | 76.9 | 79.6 | 84.1 | 90.3 |
| 5 | 121 | 148 | 162 | 200 | 238 | 260 | 277 | 283 | 302 | 322 | 331 | 345 | 362 | 377 | 420 |
| 6 | 123 | 139 | 155 | 176 | 198 | 217 | 361 | 389 | 420 | 450 | 487 | 524 | 546 | 592 | 620 |
| 7 | 39.8 | 45.5 | 47.0 | 51.0 | 58.3 | 66.8 | 67.9 | 69.5 | 71.4 | 72.7 | 74.1 | 75.7 | 77.1 | 81.1 | 82.7 |
| 8 | 133 | 145 | 160 | 174 | 191 | 211 | 224 | 238 | 256 | 270 | 285 | 302 | 313 | 325 | 339 |

*Варіант 14*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 147 | 146 | 145 | 145 | 145 | 144 | 143 | 142 | 142 | 142 | 141 | 141 | 141 | 140 | 140 |
| 2 | 352 | 364 | 373 | 382 | 397 | 405 | 416 | 437 | 449 | 470 | 473 | 477 | 487 | 494 | 499 |
| 3 | 998 | 911 | 846 | 769 | 717 | 685 | 643 | 618 | 590 | 587 | 544 | 527 | 510 | 471 | 425 |
| 4 | 99.7 | 81.4 | 77.9 | 74.8 | 66.4 | 58.1 | 53.9 | 51.9 | 45.4 | 43.0 | 40.0 | 38.9 | 36.0 | 34.1 | 32.0 |
| 5 | 323 | 311 | 299 | 296 | 280 | 263 | 250 | 231 | 223 | 200 | 180 | 162 | 149 | 137 | 120 |
| 6 | 620 | 592 | 546 | 524 | 487 | 450 | 420 | 389 | 361 | 217 | 198 | 176 | 155 | 139 | 123 |
| 7 | 79.0 | 77.4 | 75.8 | 74.5 | 73.0 | 71.7 | 69.3 | 67.7 | 66.1 | 65.4 | 57.2 | 52.7 | 51.1 | 44.7 | 40.3 |
| 8 | 315 | 300 | 288 | 269 | 255 | 239 | 225 | 213 | 201 | 171 | 157 | 141 | 127 | 115 | 102 |

*Варіант 15*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 116 | 116 | 116 | 116 | 116 | 116 | 115 | 115 | 115 | 115 | 114 | 114 | 113 | 113 | 112 |
| 2 | 814 | 799 | 789 | 781 | 770 | 756 | 740 | 715 | 701 | 682 | 680 | 672 | 664 | 661 | 657 |
| 3 | 850 | 942 | 1020 | 1054 | 1088 | 1174 | 1180 | 1236 | 1286 | 1370 | 1434 | 1538 | 1692 | 1822 | 1996 |
| 4 | 42.2 | 46.1 | 52.7 | 54.4 | 59.0 | 67.5 | 69.8 | 75.5 | 77.0 | 81.0 | 88.3 | 94.1 | 96.8 | 97.5 | 99.0 |
| 5 | 117 | 130 | 145 | 158 | 174 | 190 | 202 | 215 | 227 | 241 | 257 | 271 | 335 | 348 | 363 |
| 6 | 1240 | 1184 | 1092 | 1048 | 974 | 900 | 840 | 778 | 722 | 434 | 396 | 352 | 310 | 278 | 246 |
| 7 | 90.4 | 89.8 | 88.3 | 86.8 | 85.4 | 82.3 | 81.0 | 77.0 | 76.6 | 75.4 | 69.9 | 67.5 | 59.0 | 54.4 | 52.7 |
| 8 | 352 | 331 | 323 | 311 | 296 | 287 | 271 | 255 | 243 | 222 | 202 | 183 | 168 | 153 | 140 |

*Варіант 16*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 114 | 116 | 117 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 123 | 124 | 124 | 125 | 127 |
| 2 | 453 | 467 | 466 | 467 | 477 | 478 | 479 | 479 | 479 | 481 | 486 | 487 | 487 | 490 | 494 |
| 3 | 998 | 911 | 846 | 769 | 717 | 685 | 643 | 618 | 590 | 587 | 544 | 527 | 510 | 471 | 425 |
| 4 | 67.5 | 66.8 | 64.8 | 60.0 | 59.0 | 54.4 | 52.7 | 52.0 | 49.0 | 44.0 | 40.0 | 39.8 | 34.8 | 32.6 | 30.5 |
| 5 | 310 | 290 | 271 | 260 | 238 | 200 | 183 | 177 | 162 | 159 | 143 | 128 | 112 | 100 | 92 |
| 6 | 123 | 139 | 155 | 176 | 198 | 217 | 361 | 389 | 420 | 450 | 487 | 524 | 546 | 592 | 620 |
| 7 | 40.3 | 44.7 | 51.1 | 52.7 | 57.2 | 65.4 | 66.1 | 67.7 | 69.3 | 71.7 | 73.0 | 74.5 | 75.8 | 77.4 | 79.0 |
| 8 | 130 | 142 | 157 | 171 | 188 | 207 | 220 | 237 | 249 | 261 | 280 | 300 | 323 | 331 | 350 |

*Варіант 17*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 154 | 155 | 155 | 155 | 154 | 153 | 153 | 153 | 152 | 152 | 152 | 152 | 152 | 152 | 151 |
| 2 | 544 | 560 | 574 | 590 | 608 | 620 | 640 | 659 | 677 | 694 | 702 | 723 | 733 | 745 | 758 |
| 3 | 850 | 942 | 1020 | 1054 | 1088 | 1174 | 1180 | 1236 | 1286 | 1370 | 1434 | 1538 | 1692 | 1822 | 1996 |
| 4 | 46.1 | 52.7 | 54.4 | 59.0 | 67.5 | 76.9 | 79.6 | 84.1 | 90.3 | 91.9 | 96.3 | 99.7 | 103.2 | 104.6 | 108.2 |
| 5 | 120 | 137 | 149 | 162 | 180 | 200 | 223 | 231 | 250 | 263 | 280 | 296 | 229 | 311 | 323 |
| 6 | 1240 | 1184 | 1092 | 1048 | 974 | 900 | 840 | 778 | 722 | 434 | 396 | 352 | 310 | 278 | 246 |
| 7 | 89.9 | 87.2 | 84.7 | 82.7 | 81.9 | 75.4 | 71.5 | 68.6 | 65.7 | 64.5 | 57.3 | 50.1 | 46.2 | 44.8 | 39.1 |
| 8 | 350 | 331 | 323 | 300 | 280 | 261 | 249 | 240 | 235 | 218 | 198 | 181 | 165 | 150 | 138 |

*Варіант 18*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 154 | 154 | 154 | 154 | 153 | 153 | 153 | 153 | 152 | 152 | 152 | 152 | 151 | 150 | 150 |
| 2 | 862 | 860 | 847 | 832 | 819 | 799 | 784 | 769 | 746 | 735 | 728 | 722 | 713 | 713 | 702 |
| 3 | 998 | 911 | 846 | 769 | 717 | 685 | 643 | 618 | 590 | 587 | 544 | 527 | 510 | 471 | 425 |
| 4 | 90.3 | 84.1 | 79.6 | 76.9 | 74.5 | 69.0 | 64.4 | 62.7 | 56.1 | 53.0 | 51.0 | 49.0 | 42.8 | 41.1 | 40.0 |
| 5 | 325 | 313 | 301 | 287 | 271 | 255 | 243 | 228 | 215 | 185 | 170 | 156 | 138 | 124 | 111 |
| 6 | 1240 | 1184 | 1092 | 1048 | 974 | 900 | 840 | 778 | 722 | 434 | 396 | 352 | 310 | 278 | 246 |
| 7 | 90.8 | 90.0 | 87.1 | 85.9 | 84.3 | 82.8 | 81.2 | 80.0 | 79.2 | 77.0 | 69.7 | 61.7 | 53.7 | 49.5 | 47.9 |
| 8 | 411 | 396 | 380 | 363 | 350 | 331 | 323 | 300 | 280 | 266 | 252 | 231 | 223 | 211 | 199 |

*Варіант 19*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 150 | 150 | 149 | 148 | 147 | 145 | 144 | 143 | 142 | 142 | 141 | 141 | 141 | 140 | 139 |
| 2 | 333 | 337 | 341 | 346 | 351 | 357 | 364 | 372 | 378 | 385 | 391 | 395 | 396 | 398 | 400 |
| 3 | 425 | 471 | 510 | 527 | 544 | 587 | 590 | 618 | 643 | 685 | 717 | 769 | 846 | 911 | 998 |
| 4 | 33.7 | 36.2 | 39.2 | 42.2 | 46.1 | 52.7 | 55.4 | 61.9 | 63.5 | 68.1 | 69.1 | 71.5 | 75.4 | 81.9 | 83.5 |
| 5 | 115 | 128 | 143 | 155 | 171 | 187 | 201 | 213 | 225 | 239 | 255 | 269 | 291 | 311 | 321 |
| 6 | 620 | 592 | 546 | 524 | 487 | 450 | 420 | 389 | 361 | 217 | 198 | 176 | 155 | 139 | 123 |
| 7 | 78.7 | 77.1 | 75.5 | 74.3 | 72.8 | 71.5 | 68.1 | 66.7 | 65.2 | 64.4 | 56.3 | 51.9 | 50.3 | 44.1 | 39.6 |
| 8 | 310 | 301 | 281 | 266 | 252 | 231 | 223 | 211 | 199 | 169 | 155 | 139 | 125 | 113 | 101 |

*Варіант 20*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Показ- | Роки | | | | | | | | | | | | | | |
| ники | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | 256 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 263 | 263 | 263 |
| 2 | 661 | 665 | 677 | 686 | 695 | 703 | 714 | 725 | 735 | 744 | 752 | 756 | 763 | 774 | 781 |
| 3 | 1996 | 1822 | 1692 | 1538 | 1434 | 1370 | 1286 | 1236 | 1180 | 1174 | 1088 | 1054 | 1020 | 942 | 850 |
| 4 | 99.0 | 97.5 | 96.8 | 94.1 | 88.3 | 81.0 | 77.0 | 75.5 | 69.8 | 67.5 | 59.0 | 54.4 | 52.7 | 46.1 | 42.2 |
| 5 | 360 | 322 | 302 | 283 | 268 | 253 | 240 | 204 | 190 | 177 | 162 | 145 | 131 | 118 | 106 |
| 6 | 246 | 278 | 310 | 352 | 396 | 434 | 722 | 778 | 840 | 900 | 974 | 1048 | 1092 | 1184 | 1240 |
| 7 | 52.7 | 54.4 | 59.0 | 67.5 | 69.9 | 75.4 | 76.6 | 77.0 | 81.0 | 82.3 | 85.4 | 86.8 | 88.3 | 89.8 | 90.4 |
| 8 | 223 | 239 | 255 | 276 | 298 | 317 | 330 | 353 | 380 | 407 | 427 | 460 | 495 | 500 | 521 |

**Додаток 3**

***Структура використання земельних ресурсів в АТО***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Варіант | Загальна | 5-й рік | | | | 15-й рік | | | |
|  | земельна площа | Сільсько-госпо-дарські землі | Проми-слові землі | Сель-бищні землі | Ліси та лісона-садження | Сільсько-госпо-дарські землі | Проми-слові землі | Сель-бищні землі | Ліси та лісона-садження |
| 1 | 351 | 154 | 98 | 88 | 11 | 178 | 78 | 88 | 7 |
| 2 | 365 | 122 | 141 | 99 | 3 | 102 | 146 | 114 | 3 |
| 3 | 261 | 103 | 65 | 71 | 22 | 107 | 61 | 71 | 22 |
| 4 | 543 | 224 | 195 | 110 | 14 | 259 | 170 | 103 | 11 |
| 5 | 330 | 157 | 86 | 81 | 6 | 150 | 85 | 89 | 6 |
| 6 | 251 | 118 | 45 | 72 | 16 | 127 | 40 | 75 | 9 |
| 7 | 419 | 199 | 115 | 93 | 12 | 210 | 105 | 94 | 10 |
| 8 | 332 | 135 | 94 | 85 | 18 | 145 | 86 | 83 | 18 |
| 9 | 483 | 280 | 54 | 145 | 4 | 287 | 40 | 152 | 4 |
| 10 | 559 | 124 | 240 | 184 | 11 | 120 | 250 | 178 | 11 |
| 11 | 315 | 126 | 98 | 72 | 19 | 135 | 91 | 73 | 16 |
| 12 | 316 | 172 | 64 | 69 | 11 | 176 | 60 | 69 | 11 |
| 13 | 288 | 114 | 86 | 79 | 9 | 118 | 89 | 80 | 1 |
| 14 | 315 | 145 | 43 | 110 | 17 | 140 | 43 | 116 | 16 |
| 15 | 285 | 116 | 79 | 78 | 12 | 112 | 76 | 85 | 12 |
| 16 | 291 | 118 | 63 | 89 | 21 | 127 | 48 | 95 | 21 |
| 17 | 308 | 154 | 52 | 88 | 14 | 151 | 48 | 95 | 14 |
| 18 | 349 | 153 | 92 | 87 | 17 | 150 | 95 | 87 | 17 |
| 19 | 326 | 147 | 48 | 115 | 16 | 139 | 48 | 123 | 16 |
| 20 | 498 | 257 | 92 | 140 | 9 | 263 | 87 | 140 | 8 |

**Додаток 4**

***Основні показники соціально-економічного розвитку АТО в розрізі складових адміністративних одиниць (просторові ряди)***

*Варіант 1*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Складові  адміні-стративні  одиниці | Частка с./г. земель, % | Чисельність населення, тис.чол. | | Частка зайнятих у промисловості, % | | Обсяги  вир-ва с./г. продукції, млн.грн. | Роздріб-ний то-варообіг, млн.грн. | Побутові послуги, тис.грн. | Кому-нальні послуги, тис.грн. |
|  | 15-й р. | 5-й р. | 15-й р. | 5-й р. | 15-й р. | 15-й р. | 15-й р. | 15-й р. | 15-й р. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 62.1 | 86 | 98 | 17.9 | 20.1 | 220 | 24.50 | 1470 | 1372 |
| 2 | 60.2 | 145 | 180 | 19.8 | 26.2 | 450 | 55.80 | 3600 | 2880 |
| 3 | 59.2 | 98 | 102 | 20.8 | 20.9 | 395 | 24.48 | 1836 | 1531 |
| 4 | 59.0 | 30 | 39 | 21.0 | 22.1 | 87 | 7.80 | 195 | 546 |
| 5 | 56.2 | 22 | 25 | 23.8 | 25.3 | 90 | 4.75 | 175 | 353 |
| 6 | 52.1 | 59 | 62 | 27.9 | 25.3 | 57 | 13.64 | 496 | 934 |
| 7 | 49.2 | 116 | 129 | 30.8 | 33.2 | 310 | 38.70 | 2064 | 1935 |
| 8 | 45.2 | 33 | 35 | 34.8 | 39.6 | 100 | 6.30 | 315 | 455 |
| 9 | 40.1 | 24 | 29 | 39.9 | 32.6 | 64 | 4.35 | 292 | 436 |
| 10 | 40.3 | 85 | 104 | 39.7 | 40.1 | 80 | 31.20 | 1564 | 1664 |
| АТО | 50.7 | 701 | 807 | 29.3 | 30.5 | 1860 | 211.52 | 12007 | 12106 |

*Варіант 2*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 15.6 | 29 | 27 | 64.4 | 63.8 | 15 | 5.13 | 297 | 351 |
| 2 | 17.2 | 69 | 75 | 62.8 | 59.2 | 20 | 18.38 | 1203 | 1125 |
| 3 | 25.2 | 75 | 89 | 54.8 | 60.1 | 39 | 14.60 | 1246 | 1335 |
| 4 | 30.4 | 111 | 139 | 49.6 | 50.0 | 75 | 41.01 | 2502 | 2224 |
| 5 | 16.2 | 94 | 115 | 63.8 | 62.3 | 54 | 34.62 | 1725 | 1725 |
| 6 | 20.1 | 213 | 252 | 59.9 | 61.1 | 110 | 81.65 | 4788 | 4032 |
| 7 | 28.2 | 29 | 30 | 51.8 | 45.0 | 5 | 6.78 | 240 | 482 |
| 8 | 35.4 | 68 | 72 | 44.6 | 42.1 | 21 | 17.93 | 576 | 1008 |
| 9 | 13.1 | 31 | 36 | 66.9 | 70.3 | 15 | 7.77 | 324 | 541 |
| 10 | 24.5 | 44 | 41 | 55.5 | 56.8 | 8 | 9.47 | 369 | 533 |
| АТО | 28.0 | 763 | 880 | 52.0 | 59.4 | 369 | 237.34 | 13270 | 13356 |

*Варіант 3*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 49.9 | 11 | 19 | 30.1 | 32.4 | 15 | 4.01 | 286 | 266 |
| 2 | 47.5 | 52 | 78 | 32.5 | 36.5 | 65 | 25.04 | 1482 | 1170 |
| 3 | 40.0 | 36 | 47 | 40.2 | 40.5 | 57 | 11.47 | 752 | 705 |
| 4 | 35.5 | 89 | 101 | 44.5 | 50.2 | 111 | 31.11 | 1717 | 1423 |
| 5 | 48.6 | 78 | 81 | 31.4 | 29.3 | 69 | 15.31 | 648 | 1215 |
| 6 | 42.3 | 41 | 45 | 37.7 | 38.2 | 21 | 10.98 | 405 | 631 |
| 7 | 39.3 | 15 | 18 | 40.7 | 40.6 | 51 | 3.58 | 108 | 198 |
| 8 | 38.7 | 39 | 56 | 41.3 | 45.2 | 83 | 14.73 | 560 | 784 |
| 9 | 41.5 | 71 | 95 | 38.5 | 39.2 | 131 | 17.12 | 1235 | 1519 |
| 10 | 39.1 | 2 | 5 | 40.9 | 41.3 | 10 | 1.00 | 30 | 75 |
| АТО | 41.0 | 437 | 549 | 39.6 | 40.8 | 620 | 134.35 | 7223 | 7986 |

*Варіант 4*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 40.1 | 141 | 150 | 39.9 | 37.1 | 290 | 49.52 | 3003 | 2400 |
| 2 | 42.2 | 52 | 40 | 37.8 | 35.4 | 82 | 9.44 | 323 | 561 |
| 3 | 39.3 | 34 | 21 | 40.7 | 38.7 | 41 | 4.16 | 105 | 273 |
| 4 | 43.1 | 15 | 9 | 36.9 | 34.2 | 15 | 1.69 | 72 | 117 |
| 5 | 48.0 | 87 | 69 | 32.0 | 30.3 | 190 | 17.04 | 621 | 966 |
| 6 | 46.5 | 180 | 191 | 33.5 | 31.1 | 354 | 59.57 | 3420 | 2674 |
| 7 | 44.1 | 22 | 17 | 35.9 | 34.2 | 28 | 4.47 | 198 | 221 |
| 8 | 39.1 | 19 | 10 | 40.9 | 41.0 | 15 | 2.19 | 83 | 143 |
| 9 | 50.6 | 89 | 70 | 29.4 | 27.6 | 134 | 16.38 | 1124 | 1065 |
| 10 | 44.4 | 33 | 28 | 35.6 | 39.7 | 84 | 6.22 | 252 | 392 |
| АТО | 47.7 | 675 | 609 | 32.3 | 30.1 | 1240 | 170.68 | 9201 | 8812 |

*Варіант 5*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 46.1 | 58 | 39 | 33.9 | 31.0 | 10 | 8.23 | 624 | 585 |
| 2 | 46.0 | 94 | 108 | 34.0 | 33.2 | 35 | 32.29 | 2052 | 1621 |
| 3 | 44.8 | 37 | 31 | 35.2 | 33.7 | 12 | 6.26 | 217 | 465 |
| 4 | 43.1 | 45 | 39 | 36.9 | 34.6 | 21 | 8.31 | 390 | 571 |
| 5 | 45.5 | 91 | 65 | 34.5 | 32.2 | 32 | 15.93 | 715 | 974 |
| 6 | 45.0 | 301 | 305 | 35.1 | 38.8 | 84 | 104.05 | 6405 | 4887 |
| 7 | 43.8 | 28 | 11 | 36.2 | 35.4 | 5 | 2.54 | 67 | 164 |
| 8 | 41.0 | 65 | 21 | 39.0 | 37.1 | 13 | 4.66 | 168 | 317 |
| 9 | 44.8 | 44 | 33 | 35.2 | 34.5 | 11 | 8.28 | 297 | 498 |
| 10 | 39.9 | 72 | 26 | 40.1 | 40.9 | 16 | 4.91 | 234 | 388 |
| АТО | 45.5 | 838 | 682 | 34.4 | 32.4 | 246 | 195.46 | 11169 | 10470 |

*Варіант 6*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 44.5 | 42 | 40 | 35.5 | 37.1 | 75 | 9.92 | 560 | 602 |
| 2 | 45.0 | 38 | 35 | 35.0 | 36.2 | 64 | 8.89 | 523 | 525 |
| 3 | 46.9 | 59 | 55 | 33.1 | 30.2 | 110 | 14.36 | 881 | 823 |
| 4 | 55.9 | 99 | 130 | 24.1 | 22.1 | 278 | 38.74 | 2340 | 1941 |
| 5 | 44.6 | 101 | 98 | 35.4 | 30.5 | 195 | 27.54 | 1764 | 1468 |
| 6 | 48.1 | 32 | 33 | 31.9 | 29.6 | 63 | 7.95 | 462 | 497 |
| 7 | 50.2 | 88 | 87 | 29.8 | 27.3 | 120 | 24.45 | 1731 | 1218 |
| 8 | 60.0 | 49 | 41 | 20.8 | 19.8 | 81 | 9.18 | 328 | 613 |
| 9 | 41.1 | 38 | 30 | 38.9 | 40.1 | 12 | 6.00 | 264 | 447 |
| 10 | 54.6 | 171 | 178 | 25.4 | 24.2 | 235 | 55.18 | 3204 | 2670 |
| АТО | 50.6 | 720 | 731 | 29.6 | 27.9 | 1240 | 202.21 | 12057 | 10804 |

*Варіант 7*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 55.5 | 40 | 33 | 24.5 | 25.6 | 42 | 7.62 | 561 | 497 |
| 2 | 52.1 | 86 | 86 | 27.9 | 28.0 | 110 | 25.80 | 1634 | 1291 |
| 3 | 48.9 | 37 | 31 | 31.1 | 32.6 | 47 | 6.14 | 434 | 465 |
| 4 | 47.6 | 54 | 42 | 32.4 | 30.8 | 42 | 9.37 | 504 | 629 |
| 5 | 55.6 | 32 | 28 | 24.4 | 24.6 | 41 | 4.82 | 308 | 422 |
| 6 | 50.0 | 14 | 10 | 30.0 | 29.9 | 21 | 1.80 | 90 | 150 |
| 7 | 47.6 | 27 | 24 | 32.4 | 35.8 | 13 | 6.02 | 216 | 363 |
| 8 | 45.2 | 186 | 171 | 34.8 | 36.2 | 237 | 56.77 | 3078 | 2736 |
| 9 | 50.9 | 44 | 62 | 29.1 | 30.1 | 55 | 15.19 | 558 | 934 |
| 10 | 30.2 | 7 | 5 | 49.8 | 50.0 | 5 | 0.99 | 27 | 74 |
| АТО | 50.1 | 530 | 496 | 29.9 | 30.7 | 620 | 134.52 | 7410 | 7561 |

*Варіант 8*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 50.2 | 74 | 98 | 29.8 | 30.2 | 210 | 29.50 | 1764 | 1470 |
| 2 | 51.1 | 39 | 37 | 28.9 | 29.8 | 63 | 7.81 | 370 | 554 |
| 3 | 50.3 | 65 | 89 | 29.7 | 33.5 | 181 | 23.85 | 1602 | 1336 |
| 4 | 49.2 | 28 | 31 | 30.8 | 31.2 | 62 | 7.47 | 496 | 467 |
| 5 | 46.1 | 115 | 95 | 33.9 | 38.4 | 174 | 27.36 | 1425 | 1425 |
| 6 | 48.2 | 65 | 61 | 31.8 | 30.2 | 112 | 16.71 | 671 | 914 |
| 7 | 45.1 | 33 | 45 | 34.9 | 35.6 | 93 | 10.39 | 540 | 676 |
| 8 | 43.2 | 60 | 108 | 36.8 | 37.1 | 226 | 34.56 | 2268 | 1621 |
| 9 | 35.6 | 24 | 38 | 44.6 | 45.0 | 51 | 9.54 | 304 | 569 |
| 10 | 34.6 | 20 | 20 | 45.4 | 50.1 | 61 | 4.26 | 161 | 300 |
| АТО | 43.6 | 526 | 626 | 36.2 | 39.8 | 1240 | 171.45 | 9601 | 9332 |

*Варіант 9*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 55.6 | 33 | 21 | 24.4 | 25.1 | 55 | 5.36 | 210 | 314 |
| 2 | 54.2 | 26 | 24 | 25.8 | 28.1 | 20 | 6.26 | 264 | 358 |
| 3 | 53.1 | 87 | 91 | 26.9 | 29.3 | 114 | 24.48 | 1092 | 1366 |
| 4 | 53.9 | 61 | 35 | 26.1 | 30.2 | 62 | 8.26 | 280 | 524 |
| 5 | 57.2 | 22 | 19 | 22.8 | 26.8 | 36 | 4.07 | 95 | 283 |
| 6 | 56.2 | 14 | 12 | 23.8 | 26.4 | 25 | 2.35 | 72 | 177 |
| 7 | 54.3 | 31 | 24 | 25.7 | 24.9 | 66 | 6.17 | 144 | 360 |
| 8 | 58.9 | 49 | 48 | 21.1 | 23.0 | 91 | 13.73 | 336 | 722 |
| 9 | 60.2 | 69 | 51 | 19.8 | 24.2 | 150 | 14.13 | 459 | 765 |
| 10 | 51.3 | 10 | 5 | 28.7 | 30.1 | 6 | 0.96 | 24 | 71 |
| АТО | 59.4 | 405 | 334 | 20.6 | 24.5 | 620 | 85.77 | 2975 | 4940 |

*Варіант 10*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 19.8 | 25 | 28 | 60.2 | 60.4 | 18 | 8.74 | 308 | 419 |
| 2 | 20.6 | 10 | 12 | 59.4 | 59.8 | 10 | 3.05 | 108 | 178 |
| 3 | 21.5 | 24 | 21 | 58.5 | 58.7 | 25 | 5.54 | 147 | 313 |
| 4 | 22.9 | 8 | 9 | 57.1 | 57.6 | 7 | 1.68 | 45 | 133 |
| 5 | 20.1 | 33 | 36 | 59.9 | 60.0 | 26 | 12.42 | 432 | 540 |
| 6 | 20.9 | 9 | 10 | 59.1 | 59.2 | 11 | 2.00 | 47 | 151 |
| 7 | 22.2 | 7 | 7 | 57.8 | 58.4 | 3 | 1.32 | 35 | 102 |
| 8 | 24.6 | 3 | 4 | 55.4 | 56.3 | 3 | 0.85 | 17 | 57 |
| 9 | 18.5 | 18 | 26 | 61.5 | 63.4 | 10 | 7.46 | 234 | 389 |
| 10 | 23.0 | 4 | 10 | 57.0 | 58.0 | 3 | 2.44 | 62 | 136 |
| АТО | 21.5 | 144 | 167 | 58.9 | 59.1 | 123 | 45.50 | 1435 | 2418 |

*Варіант 11*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 41.8 | 65 | 61 | 38.2 | 35.4 | 71 | 19.76 | 1098 | 916 |
| 2 | 42.5 | 44 | 33 | 37.5 | 33.6 | 48 | 8.51 | 396 | 494 |
| 3 | 43.9 | 35 | 29 | 36.1 | 34.2 | 39 | 6.79 | 377 | 435 |
| 4 | 42.8 | 84 | 90 | 37.2 | 35.8 | 210 | 30.69 | 1710 | 1353 |
| 5 | 41.1 | 41 | 35 | 38.9 | 39.5 | 17 | 9.21 | 315 | 527 |
| 6 | 42.3 | 52 | 42 | 37.7 | 35.4 | 55 | 10.25 | 462 | 624 |
| 7 | 42.5 | 51 | 49 | 37.5 | 33.0 | 61 | 12.54 | 491 | 736 |
| 8 | 41.0 | 11 | 10 | 39.0 | 40.5 | 22 | 1.98 | 93 | 150 |
| 9 | 40.8 | 9 | 5 | 39.2 | 38.6 | 3 | 0.97 | 40 | 69 |
| 10 | 40.9 | 80 | 73 | 32.9 | 31.2 | 87 | 21.90 | 1241 | 1099 |
| АТО | 42.7 | 475 | 431 | 37.3 | 34.6 | 620 | 122.60 | 6223 | 6403 |

*Варіант 12*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 53.1 | 74 | 75 | 26.9 | 30.5 | 132 | 19.73 | 1200 | 1125 |
| 2 | 52.0 | 33 | 31 | 28.1 | 32.6 | 57 | 6.98 | 403 | 463 |
| 3 | 54.6 | 61 | 52 | 25.4 | 29.7 | 84 | 13.68 | 676 | 778 |
| 4 | 50.2 | 28 | 19 | 29.8 | 33.2 | 36 | 3.69 | 152 | 284 |
| 5 | 51.9 | 65 | 66 | 28.1 | 31.6 | 158 | 15.25 | 726 | 991 |
| 6 | 58.2 | 79 | 59 | 21.8 | 23.7 | 110 | 12.63 | 826 | 882 |
| 7 | 55.0 | 65 | 48 | 25.0 | 26.4 | 86 | 10.94 | 672 | 720 |
| 8 | 52.1 | 84 | 85 | 27.9 | 29.2 | 168 | 22.87 | 1445 | 1275 |
| 9 | 57.1 | 285 | 299 | 22.0 | 24.1 | 396 | 93.29 | 6279 | 4486 |
| 10 | 59.0 | 45 | 8 | 21.8 | 24.0 | 6 | 1.42 | 63 | 119 |
| АТО | 55.7 | 822 | 746 | 24.5 | 26.8 | 1240 | 200.48 | 12442 | 11123 |

*Варіант 13*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 45.2 | 70 | 84 | 34.8 | 36.6 | 101 | 23.94 | 1176 | 1259 |
| 2 | 44.0 | 54 | 71 | 36.3 | 37.5 | 85 | 18.74 | 994 | 1065 |
| 3 | 43.1 | 26 | 35 | 36.9 | 42.1 | 22 | 8.09 | 385 | 526 |
| 4 | 40.0 | 94 | 125 | 40.1 | 40.8 | 164 | 39.00 | 2251 | 1878 |
| 5 | 45.2 | 21 | 21 | 34.0 | 35.6 | 19 | 4.47 | 189 | 313 |
| 6 | 41.9 | 35 | 43 | 38.1 | 39.2 | 32 | 10.71 | 431 | 645 |
| 7 | 42.5 | 18 | 26 | 37.5 | 38.4 | 15 | 5.56 | 208 | 390 |
| 8 | 42.2 | 94 | 89 | 37.8 | 34.2 | 75 | 25.19 | 1335 | 1337 |
| 9 | 45.4 | 33 | 41 | 34.6 | 35.7 | 54 | 9.88 | 451 | 612 |
| 10 | 40.0 | 5 | 17 | 40.1 | 44.2 | 46 | 3.04 | 119 | 254 |
| АТО | 41.0 | 453 | 556 | 39.5 | 41.8 | 620 | 148.62 | 7539 | 8279 |

*Варіант 14*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 41.0 | 28 | 30 | 39.2 | 38.4 | 11 | 7.23 | 390 | 450 |
| 2 | 41.6 | 21 | 22 | 38.4 | 36.4 | 18 | 5.06 | 242 | 328 |
| 3 | 42.8 | 15 | 19 | 37.2 | 35.8 | 5 | 4.58 | 228 | 281 |
| 4 | 46.3 | 49 | 58 | 33.0 | 31.9 | 12 | 16.24 | 812 | 872 |
| 5 | 42.1 | 32 | 47 | 37.9 | 36.4 | 16 | 10.95 | 517 | 704 |
| 6 | 46.2 | 20 | 25 | 33.8 | 30.0 | 14 | 4.98 | 225 | 375 |
| 7 | 44.1 | 95 | 89 | 35.9 | 39.9 | 11 | 25.90 | 1068 | 1337 |
| 8 | 45.5 | 12 | 10 | 34.5 | 31.0 | 2 | 2.31 | 70 | 151 |
| 9 | 40.2 | 18 | 25 | 39.8 | 34.7 | 10 | 6.25 | 271 | 372 |
| 10 | 45.1 | 104 | 170 | 34.9 | 31.0 | 17 | 55.25 | 3231 | 2561 |
| АТО | 44.4 | 397 | 499 | 35.6 | 33.2 | 123 | 138.75 | 7054 | 7431 |

*Варіант 15*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 42.0 | 65 | 58 | 38.4 | 39.2 | 20 | 12.88 | 928 | 871 |
| 2 | 41.8 | 42 | 31 | 38.2 | 38.9 | 9 | 6.87 | 341 | 465 |
| 3 | 39.9 | 290 | 298 | 40.1 | 41.1 | 124 | 89.70 | 5662 | 4470 |
| 4 | 31.0 | 35 | 31 | 49.1 | 50.4 | 5 | 6.51 | 279 | 463 |
| 5 | 42.2 | 98 | 75 | 37.8 | 38.6 | 22 | 19.80 | 900 | 1120 |
| 6 | 41.6 | 44 | 31 | 38.0 | 38.7 | 8 | 6.63 | 248 | 431 |
| 7 | 39.0 | 28 | 20 | 41.0 | 44.2 | 1 | 4.26 | 157 | 299 |
| 8 | 38.5 | 65 | 42 | 41.5 | 41.8 | 13 | 10.67 | 546 | 631 |
| 9 | 39.2 | 44 | 31 | 40.8 | 42.0 | 9 | 7.07 | 464 | 470 |
| 10 | 35.6 | 56 | 36 | 44.4 | 43.1 | 28 | 8.68 | 541 | 504 |
| АТО | 39.3 | 770 | 657 | 40.7 | 42.0 | 246 | 173.07 | 10066 | 9724 |

*Варіант 16*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 41.8 | 51 | 56 | 38.2 | 36.1 | 81 | 14.84 | 784 | 841 |
| 2 | 42.1 | 28 | 29 | 37.9 | 35.1 | 25 | 6.70 | 319 | 435 |
| 3 | 43.8 | 59 | 65 | 36.2 | 34.2 | 48 | 15.86 | 910 | 977 |
| 4 | 44.6 | 64 | 69 | 35.4 | 31.3 | 61 | 17.59 | 966 | 1034 |
| 5 | 40.2 | 35 | 31 | 39.0 | 35.9 | 45 | 6.79 | 279 | 466 |
| 6 | 42.5 | 36 | 40 | 37.5 | 33.4 | 31 | 9.12 | 442 | 600 |
| 7 | 43.5 | 87 | 91 | 36.5 | 31.0 | 138 | 27.39 | 1638 | 1365 |
| 8 | 43.7 | 43 | 40 | 36.3 | 40.2 | 70 | 9.84 | 480 | 583 |
| 9 | 40.9 | 12 | 11 | 39.1 | 36.8 | 29 | 2.21 | 97 | 164 |
| 10 | 41.7 | 59 | 58 | 38.3 | 35.9 | 85 | 16.18 | 580 | 872 |
| АТО | 43.6 | 477 | 494 | 36.4 | 34.7 | 620 | 126.52 | 6495 | 7335 |

*Варіант 17*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 47.6 | 48 | 55 | 32.4 | 34.6 | 5 | 13.15 | 715 | 825 |
| 2 | 48.9 | 121 | 181 | 31.1 | 33.5 | 75 | 56.29 | 3439 | 2714 |
| 3 | 50.2 | 65 | 67 | 29.8 | 31.7 | 13 | 17.35 | 1072 | 1005 |
| 4 | 50.0 | 48 | 55 | 30.2 | 33.6 | 5 | 13.48 | 660 | 813 |
| 5 | 44.4 | 112 | 129 | 35.6 | 40.2 | 78 | 37.02 | 2322 | 1937 |
| 6 | 46.1 | 25 | 31 | 33.0 | 29.6 | 1 | 5.89 | 341 | 463 |
| 7 | 50.1 | 89 | 92 | 29.9 | 31.1 | 44 | 22.91 | 1196 | 1387 |
| 8 | 49.2 | 44 | 51 | 30.8 | 32.0 | 13 | 11.68 | 612 | 765 |
| 9 | 48.8 | 32 | 36 | 31.2 | 33.1 | 4 | 8.28 | 324 | 542 |
| 10 | 47.5 | 21 | 57 | 32.5 | 34.8 | 1 | 13.68 | 570 | 855 |
| АТО | 49.0 | 608 | 758 | 31.1 | 33.7 | 246 | 199.73 | 11251 | 11306 |

*Варіант 18*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 43.0 | 58 | 44 | 37.1 | 35.2 | 12 | 10.30 | 616 | 660 |
| 2 | 42.1 | 82 | 65 | 37.9 | 40.0 | 15 | 15.53 | 910 | 375 |
| 3 | 41.9 | 36 | 31 | 38.1 | 36.6 | 10 | 6.88 | 341 | 464 |
| 4 | 42.0 | 312 | 341 | 38.2 | 37.1 | 124 | 109.46 | 6138 | 5111 |
| 5 | 45.1 | 45 | 24 | 34.9 | 33.2 | 9 | 4.75 | 312 | 359 |
| 6 | 45.0 | 165 | 104 | 35.0 | 34.1 | 25 | 29.95 | 1768 | 1554 |
| 7 | 42.6 | 44 | 30 | 37.4 | 34.6 | 9 | 6.84 | 270 | 480 |
| 8 | 41.6 | 28 | 21 | 38.0 | 39.2 | 11 | 4.16 | 168 | 313 |
| 9 | 46.1 | 36 | 36 | 33.9 | 31.1 | 17 | 9.00 | 361 | 538 |
| 10 | 39.9 | 10 | 2 | 40.4 | 35.4 | 7 | 0.34 | 16 | 30 |
| АТО | 43.0 | 819 | 702 | 37.3 | 35.0 | 246 | 197.21 | 10900 | 10484 |

*Варіант 19*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 43.8 | 26 | 28 | 36.2 | 36.8 | 5 | 6.58 | 336 | 420 |
| 2 | 43.7 | 65 | 72 | 36.3 | 37.2 | 26 | 19.08 | 1152 | 1077 |
| 3 | 41.6 | 18 | 15 | 38.4 | 39.2 | 9 | 3.17 | 120 | 224 |
| 4 | 41.8 | 44 | 51 | 36.2 | 40.1 | 13 | 11.73 | 714 | 765 |
| 5 | 42.0 | 12 | 12 | 38.1 | 37.4 | 4 | 2.28 | 84 | 179 |
| 6 | 41.3 | 35 | 40 | 39.7 | 40.0 | 19 | 9.24 | 440 | 602 |
| 7 | 44.6 | 29 | 31 | 35.4 | 36.4 | 11 | 6.20 | 279 | 467 |
| 8 | 44.8 | 64 | 86 | 35.0 | 37.2 | 12 | 24.94 | 1462 | 1290 |
| 9 | 40.3 | 54 | 59 | 39.7 | 43.1 | 16 | 15.40 | 944 | 888 |
| 10 | 45.1 | 1 | 2 | 34.9 | 36.1 | 1 | 0.36 | 15 | 27 |
| АТО | 42.6 | 351 | 400 | 37.7 | 39.4 | 123 | 98.98 | 5546 | 5939 |

*Варіант 20*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 51.1 | 52 | 55 | 28.9 | 36.1 | 84 | 12.93 | 495 | 821 |
| 2 | 52.0 | 28 | 50 | 28.1 | 34.0 | 99 | 11.30 | 400 | 742 |
| 3 | 53.5 | 31 | 29 | 26.5 | 23.2 | 21 | 6.12 | 203 | 433 |
| 4 | 52.2 | 44 | 46 | 27.8 | 30.3 | 51 | 10.58 | 414 | 678 |
| 5 | 51.6 | 38 | 39 | 28.0 | 25.4 | 60 | 8.89 | 351 | 585 |
| 6 | 51.3 | 61 | 68 | 28.0 | 26.1 | 118 | 17.48 | 748 | 974 |
| 7 | 51.9 | 29 | 45 | 28.1 | 26.4 | 97 | 10.83 | 405 | 674 |
| 8 | 53.0 | 98 | 150 | 27.4 | 25.4 | 341 | 43.95 | 2700 | 2246 |
| 9 | 51.6 | 245 | 210 | 28.4 | 23.2 | 210 | 68.24 | 3992 | 3150 |
| 10 | 51.8 | 66 | 85 | 28.2 | 28.9 | 152 | 14.52 | 1021 | 1272 |
| АТО | 52.8 | 695 | 781 | 27.2 | 24.8 | 1240 | 204.84 | 10729 | 11575 |

**Додаток 5**

***Забезпеченість АТО закладами соціальної інфраструктури (15-й рік)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Варіант** | **Торгова площа, тис.м2** | **Кількість лікарняних ліжок, тис.ліжок** | **Кількість місць у школах, тис.місць** | **Кількість місць у клубах та б/к, тис.місць** |
| 1 | 110.8 | 9.69 | 136.6 | 27.6 |
| 2 | 115.5 | 9.94 | 151.6 | 30.0 |
| 3 | 70.4 | 5.98 | 96.8 | 19.2 |
| 4 | 79.9 | 6.68 | 110.3 | 21.4 |
| 5 | 88.1 | 8.43 | 123.6 | 23.9 |
| 6 | 101.1 | 8.21 | 126.7 | 24.9 |
| 7 | 60.1 | 5.39 | 89.4 | 17.4 |
| 8 | 81.0 | 7.88 | 111.0 | 21.6 |
| 9 | 44.1 | 3.76 | 60.5 | 11.7 |
| 10 | 20.2 | 2.06 | 28.8 | 5.7 |
| 11 | 58.7 | 4.25 | 78.1 | 15.1 |
| 12 | 97.1 | 10.11 | 134.5 | 26.9 |
| 13 | 70.2 | 7.04 | 98.5 | 19.0 |
| 14 | 68.0 | 6.26 | 87.4 | 17.3 |
| 15 | 86.9 | 7.47 | 118.3 | 23.6 |
| 16 | 64.8 | 6.84 | 87.1 | 16.9 |
| 17 | 91.9 | 9.37 | 135.4 | 25.9 |
| 18 | 94.9 | 9.05 | 127.1 | 24.7 |
| 19 | 49.7 | 5.36 | 71.7 | 13.6 |
| 20 | 109.0 | 10.03 | 140.6 | 26.5 |