

| FACULTY/COLLEGE | College of Business and Economics |
| :--- | :--- |
| SCHOOL | School of Accounting |
| DEPARTMENT | Department of Accountancy |
| CAMPUS | APK |
| MODULE NAME | Tax Planning |
| MODULE CODE | TXP2B01 / TXP02B2 |
| SEMESTER | Second |
| ASSESSMENT OPPORTUNITY <br> MONTH AND YEAR | Last Assessment Opportunity <br> November 2019 |


| ASSESSMENT DATE | 11 November 2019 | SESSION | TBA |
| :--- | :--- | :--- | :---: |
| ASSESSOR | CD Anschutz |  |  |
| MODERATOR | Mrs M Wassermann |  |  |
| DURATION | 150 min | TOTAL MARKS | 100 |

## NUMBER OF PAGES OF QUESTION PAPER (Including cover page) 13

INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
- This paper is printed on 13 (thirteen) pages.
- There are 5 (five) questions which are all compulsory.
- The use of silent non-programmable calculators are permitted.
- Read the questions carefully and answer only what is required.
- Number your answers clearly and correctly as per the question paper.
- Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.

| Question | Topic | Marks | Time |
| :---: | :---: | :---: | :---: |
| 1 | Taxation of a trust | 20 | 30 minutes |
| 2 | VAT calculation for a company | 25 | 37 minutes |
| 3 | CGT | 25 | 38 minutes |
| 4 | Estate duty | 25 | 38 minutes |
| 5 | Estate Planning | 5 | 7 minutes |
|  |  | 100 | 150 minutes |

## QUESTION 1

On 28 February 2016, Mrs Mona Morkel formed The Morkel Family Trust. The trust deed stipulates that the beneficiaries of the trust are:

- Mrs Mona Morkel;
- Mr Albertus Morkel (Mona's husband);
- Celeste aged 25, (Albertus and Mona's daughter)
- Bertie aged 15, ( Albertus and Mona's son)

In terms of the trust deed an annuity of R150 000 (per annum) must be paid to any child (of Albertus and Mona) who has attained the age of 21.

Apart from the annuity all income distributions are at the sole discretion of the trustees.
On the day when the trust was created (28 February 2016), the following assets were donated to the trust:

| Asset | Donor |
| :--- | :--- |
| A building in Cape Town | Mona Morkel (currently 52 years old) |
| South African Listed Shares | Albertus Morkel (currently 56 years old) |
| Money market investment | Joan Johnson (Mona's mother - currently 75 years old |

The income from the trust, for the year ended on the last day of February 2019 was as follows:

| Line Item | $\mathbf{R}$ |
| :--- | :---: |
| Rental (from the building) | 500000 |
| Dividends (gross amount - ignore withholding tax) | 200000 |
| Interest form the money market investment | 300000 |

All dividends were received prior to the vesting date of the discretionary distributions (below). SARS therefore accepted the trust as being the beneficial owner of the shares.

On the last day of February 2019 the trustees paid the R150 000 annuity to Celeste and in addition, they made a discretionary distribution of R80 000 (each) to Celeste and Bertie. All distributions were made from the general pool of income.

All the persons are South African residents. Albertus and Mona are married out of community of property. No trustees' remuneration was paid.

YOU ARE REQUIRED TO calculate the taxable income for the 2019 year of assessment for:

### 1.1 Mona;

1.2 Albertus;
1.3 Joan;
1.4 Celeste;
1.5 Bertie; and
1.6 The Morkel Family Trust.

## QUESTION 2

Otto Stern is a manufacturing jeweller. He manufactures and retails his jewellery from a shop he leases in an up-market shopping centre in Durban. He is a sole proprietor. He is registered for value-added tax on the invoice basis.

After a recent query regarding Otto Stern's value-added tax affairs from the local SARS office, he has requested your assistance in completing his value-added tax return for the two-month period 1 August 2018 to 30 September 2018.

An analysis of Otto Stern's income and expenditure for his two-month tax period ending 30 September 2018 is set out below. Unless otherwise stated, all amounts are inclusive of value-added tax when applicable:

| Description |  | Note |
| :--- | :--- | ---: | R

## Notes:

1. The indemnity payment of R51 750 was awarded for two expensive items of jewellery (trading stock) that was stolen from Otto Stern's shop in June 2018.
2. Otto Stern was voted 'Jewellery Designer of 2018’ by a leading fashion magazine. He was awarded R25 300 by it for this achievement.
3. Otto Stern's bad debts written off of R13 325 comprise the following:

- R10 350 owing by a long-standing customer of his as a result of a credit sale (not being the normal policy of his business). This customer has since emigrated and he has been unable to trace her. Please note: this debt has been outstanding since before April 2018.
- R2 875 was lent to an employee who left town without repaying the loan.

4. Depreciation (for the two-month tax period) is charged for the following assets owned by Otto Stern:

Manufacturing equipment that was purchased in a previous tax period for R276 000 (R240 000 plus VAT of R36 000).

A computer that was purchased on 1 August 2018 for R16 560 (R14 400 plus VAT of R2 160).

A motor car that was purchased on 1 September 2018 for R310 500 (R270 000 plus VAT of R40500). The motor car is used in his business.

TOTAL DEPRECIATION for the TWO MONTHS
R16 560
5. Fresh flowers costing R2 530 in total are purchased twice a week by Otto Stern and displayed in the shop.
6. Insurance premiums were incurred by Otto Stern for the following assets:
Manufacturing equipment ..... 460
Office computer ..... 230
Motor car ..... 1035
Trading stock ..... 1725
Total insurance premium ..... 3450
7. Purchases made by Otto Stern of R160 425 are made up as follows:

Purchases of raw materials (all from registered vendors) 126500
Second-hand jewellery purchased from registered vendors 17250
Second-hand jewellery purchased (and paid for) from non-registered vendors 16675
Otto Stern purchased second-hand jewellery from both registered vendors (for example auctioneers) as well as from non-registered vendors (for example private individuals, deceased estates). He displays and sells second-hand jewellery in his shop.
8. Refreshments cost Otto Stern R1 380 and this amount includes coffee, tea and biscuits are provided to his employees and certain customers. (Otto Stern estimates that roughly 35\% of the coffee, tea and biscuits are consumed by customers and the rest by his employees).
9. Rentals of R13 340 incurred by Otto Stern are for the following items:

- $\quad$ Shop premises
10925
- Cash register 1495
- Coffee machine 920

10. In August 2017 Otto Stern bought jewellery (trading stock) for R23 940 (R21 000 plus VAT at $14 \%$ of R2 940) from a local supplier. He enjoyed an input tax deduction of R2 940 in his tax period 1 August 2017 to 30 September 2017. He then encountered quality problems with this trading stock and paid the supplier only R19 152 (R16 800 plus VAT at $14 \%$ of R2 352) on September 2017. He refused to settle this account until the quality problems were resolved. At 30 September 2018, R4 788 (R4 200 plus VAT at $14 \%$ of R588) was still outstanding despite numerous letters of demand having been received by him from his supplier.

YOU ARE REQUIRED TO calculate the net value-added tax due to, or from the Commissioner for Otto Stern's two-month tax period ended 30 September 2018.

Provide brief reasons if any line item has no effect on the VAT calculation.

## QUESTION 3

Andreas Nelson who is 60 years old decided to reorganise his assets during the 2019 year after he won R25 000000 in the South African National Lottery.

Andreas disposed of the following assets during the 2019 year of assessment:

## Primary residence

Andreas purchased his home on 1 June 2001 for R330 000. In August 2011 he made improvements to the home which cost him R50 000. He obtained a valuation of his home on 1 October 2001 which was R550 000. He sold his home on 1 July 2018 for R3 400000 and moved into a retirement village.

## Aircraft hangar and aircraft

Andreas had purchased an aircraft hangar (this could be described as a garage for an aeroplane) at a private airport in December 2008 at a cost of R240 000. During the 2019 tax year, Andreas decided to sell the hangar, as he was offered an amount of R440 000 by a prospective buyer. At the same time, he sold his private light aircraft for R2 100000 . He had purchased the plane in November 2008 for R1 300 000. The plane weighed 400 kilograms.

## Car

Andreas, in the 2019 tax year, sold his car for a profit. It was a vintage Dart that he purchased for R20 000 in December 2011. He sold it in December 2018 for R35 000.

## Boat

Andreas owned a 15-metre yacht which had cost him R750 000 on 1 November 2007. On 1 May 2018 he sold the yacht for R800 000. He had used the yacht for personal enjoyment.

## Plots of land

Andreas owned two plots of land in Betty's Bay, Cape Town, which he had bought in 2007 for R120 000 each, with the intention that his two sons could each build a holiday house there once they had established themselves in their respective careers. Andreas's eldest son, however, subsequently emigrated to New Zealand, and indicated that as grateful as he was he was unlikely ever to make use of this opportunity. On 22 December 2018 Andreas therefore transferred ownership of one plot to his second son, and donated the second plot to SANParks, for which he received a section 18A certificate. The value of the plots on this date was R650 000 each.

## Kruger Rands

Andreas sold his collection of Kruger Rands during the 2019 tax year, which he had purchased for R65 000. However, since the value of gold had decreased since he acquired them, he was only able to sell them for R47 000.

YOU ARE REQUIRED TO calculate the taxable gain that will be included in Andreas Nelson's taxable income for the year of assessment ended 28 February 2019. Briefly discuss any issues you had to consider during your decision making. And give reasons if a line item has no effect on the final answer.

NOTE: You are NOT required to calculate any donations tax effect, and may ignore any effect that donations tax may have in the determination of capital gains and losses.

## QUESTION 4

Kitty Konstantinis was born on 5 May 1945. She died on 9 September 2018. She was ordinarily resident in South Africa throughout her life.

Her husband, Theo Konstantinis, had died on 31 May 2015. They had been married under an ante-nuptial contract.

Included in the donations that Kitty Konstantinis had made during her lifetime were the following donations:

- On 17 November 2015 (i.e. when she was 70 years old) to her elder son, Aristotle (born 5 April 1971), her house on the island of Mykonos in Greece, subject to her retaining the use of it until she died. The cost of the house in 2012 was the equivalent of R63 000 and its market value on 17 November 2015 was the equivalent of R210 000. Transfer duty paid by Aristotle was the equivalent of R1 290.
- On 18 November 2015 (i.e. when she was 70 years old), to her younger son, Pythaoras (born 27 October 1973), South African listed shares, subject to her continuing to receive the dividends from them until she died. The cost of the shares was R107 000 and their market value on 18 November 2015 was R240 000. Securities transfer tax paid by Pythagoras was R2 400.
- On 9 February 2018, to her cousin Clara (born 16 March 1941), an annuity of R6 000 (payable at the rate of R500 a month) for the remainder of Clara's life.
- On 1 July 2018 to her nice Olga, her jewellery valued at R60 000, subject to her right to take back the jewellery at any time, but on her death, Olga was to have it.

On her death, Kitty Konstantinis left the following property, liabilities and bequests:

- A residence in Kloof, Durban. It was sold for R2 790 000. A company purchased it and paid transfer duty of R222 400. She had inherited this residence from her husband when its value was R2 300000 . In the determination of the dutiable value of her husband's estate, a section 4A abatement of R3 500000 was deducted.
- Furniture, pictures, and other household items, valued at R64 719.
- A fixed deposit of R80 000. Its interest was used to fund the R6 000 annuity payable to Clara (see above).
- $\quad$ Cash of R37 814.
- The market value of the house on the island of Mykonos in Greece donated to Aristotle was the equivalent of R300 000.
- The market value of the shares donated to Pythagoras was R380 000.
- Debts owed by her were R12 400, funeral expenses were R13 800, and the costs of winding-up her estate were R17 500.
- She bequested R20 000 cash to a South African registered political party and the residue of her estate equally to her daughter and her sons.

YOU ARE REQUIRED TO calculate the estate duty payable by her estate.

## QUESTION 5

Jonathan Davies died at the age of 47. At the time of his death he was married (by ante nuptial contract) to Mafusi (43). They had three children, Thandeka (15), Busisani (13) and Donald (10). Both Jonathan's parents (Philip and Mary) are still alive and he also has a brother Andy.

Jonathan had no last will and testament (i.e. he died intestate). Jonathan's estate (available for distribution) amounted to R948 000.

YOU ARE REQUIRED TO calculate how much Philip, Mafusi, Busisani and Andy will receive from the estate.

INCOME TAX: INDIVIDUALS \& SPECIAL TRUSTS - 2019

| Taxable income (R) | Rate of tax (R) |
| :---: | :---: |
| $0-195850$ | $18 \%$ of taxable income; |
| $195850-305850$ | $35253+26 \%$ of taxable income above 195850 |
| $305850-423300$ | $63853+31 \%$ of taxable income above 305850 |
| $423300-555600$ | $100263+36 \%$ of taxable income above 423300 |
| $555600-708310$ | $147891+39 \%$ of taxable income above 555600 |
| $708311-1500000$ | $207448+41 \%$ of taxable income above 708310 |
| 1500001 and above | $532041+45 \%$ of taxable income above 1500000 |

Appendix B

## Travel allowance cost scale

| Value of the vehicle is - | Fixed Cost <br> (R p.a.) | Fuel cost <br> $(\mathrm{c} / \mathrm{km})$ | Maintenance <br> cost <br> $(\mathrm{c} / \mathrm{km})$ |
| ---: | :---: | :---: | :---: |
| $0-85000$ | 28352 | 95,7 | 34,4 |
| $80001-170000$ | 50631 | 106,8 | 43,1 |
| $170001-255000$ | 72983 | 116,0 | 47,5 |
| $255001-340000$ | 92683 | 124,8 | 51,8 |
| $340001-425000$ | 112443 | 133,5 | 60,9 |
| $425001-510000$ | 133147 | 153,2 | 71,6 |
| $510001-595000$ | 153850 | 158,4 | 88,9 |
| Exceeding -595000 | 153850 | 158,4 | 88,9 |

## Withdrawal lump sum benefits



Retirement, Death AND Severance Benefit... lump sum benefits

| Taxable income (R) |  |  | Rate of tax (R) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | - | 500000 |  |  |  | of taxable income |
| 500001 | - | 700000 | 0 | $+$ | 18\% | of taxable income above 500000 |
| 700001 | - | 1050000 | 36000 | $+$ | 27\% | of taxable income above 700000 |
| 1050001 and above |  |  | 130500 | + | 36\% | of taxable income above 1050000 |

Life expectancy and present value tables (Table A)

| Age | Expectation of life |  | Present value of R1 per annum for life |  | Age | Expectation of life |  | Present value of R1 per annum for life |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |  | Male | Female | Male | Female |
| 0 | 64,74 | 72,36 | 8,327 91 | 8,331 05 | 46 | 24,58 | 30,14 | 7,819 24 | 8,059 56 |
| 1 | 65,37 | 72,74 | 8,328 28 | 8,331 14 | 47 | 23,79 | 29,27 | 7,771 09 | 8,031 19 |
| 2 | 64,50 | 71,87 | 8,327 76 | 8,330 91 | 48 | 23,00 | 28,41 | 7,718 43 | 8,000 26 |
| 3 | 63,57 | 70,93 | 8,327 14 | 8,330 64 | 49 | 22,23 | 27,55 | 7,662 36 | 7,966 17 |
| 4 | 62,63 | 69,97 | 8,326 44 | 8,330 33 | 50 | 21,47 | 26,71 | 7,602 01 | 7,929 50 |
| 5 | 61,69 | 69,02 | 8,325 67 | 8,329 99 | 51 | 20,72 | 25,88 | 7,537 13 | 7,889 67 |
| 6 | 60,74 | 68,06 | 8,324 80 | 8,329 61 | 52 | 19,98 | 25,06 | 7,467 48 | 7,846 46 |
| 7 | 59,78 | 67,09 | 8,323 81 | 8,329 18 | 53 | 19,26 | 24,25 | 7,393 87 | 7,799 65 |
| 8 | 58,81 | 66,11 | 8,322 71 | 8,328 69 | 54 | 18,56 | 23,44 | 7,316 31 | 7,748 34 |
| 9 | 57,83 | 65,14 | 8,321 46 | 8,328 15 | 55 | 17,86 | 22,65 | 7,232 34 | 7,693 55 |
| 10 | 56,85 | 64,15 | 8,320 07 | 8,327 53 | 56 | 17,18 | 21,86 | 7,144 14 | 7,633 63 |
| 11 | 55,86 | 63,16 | 8,318 49 | 8,326 84 | 57 | 16,52 | 21,08 | 7,051 78 | 7,568 96 |
| 12 | 54,87 | 62,18 | 8,316 73 | 8,326 08 | 58 | 15,86 | 20,31 | 6,952 25 | 7,499 27 |
| 13 | 53,90 | 61,19 | 8,314 80 | 8,325 22 | 59 | 15,23 | 19,54 | 6,850 04 | 7,423 21 |
| 14 | 52,93 | 60,21 | 8,312 65 | 8,324 27 | 60 | 14,61 | 18,78 | 6,742 06 | 7,341 35 |
| 15 | 51,98 | 59,23 | 8,310 29 | 8,323 20 | 61 | 14,01 | 18,04 | 6,630 10 | 7,254 57 |
| 16 | 51,04 | 58,26 | 8,307 70 | 8,322 03 | 62 | 13,42 | 17,30 | 6,512 32 | 7,160 20 |
| 17 | 50,12 | 57,29 | 8,304 89 | 8,320 71 | 63 | 12,86 | 16,58 | 6,393 01 | 7,060 46 |
| 18 | 49,21 | 56,33 | 8,301 80 | 8,319 26 | 64 | 12,31 | 15,88 | 6,268 22 | 6,955 37 |
| 19 | 48,31 | 55,37 | 8,298 41 | 8,317 64 | 65 | 11,77 | 15,18 | 6,137 89 | 6,841 61 |
| 20 | 47,42 | 54,41 | 8,294 71 | 8,315 84 | 66 | 11,26 | 14,51 | 6,007 26 | 6,723 93 |
| 21 | 46,53 | 53,45 | 8,290 61 | 8,313 83 | 67 | 10,76 | 13,85 | 5,871 65 | 6,598 93 |
| 22 | 45,65 | 52,50 | 8,286 13 | 8,311 61 | 68 | 10,28 | 13,20 | 5,734 03 | 6,466 35 |
| 23 | 44,77 | 51,54 | 8,281 17 | 8,309 12 | 69 | 9,81 | 12,57 | 5,591 82 | 6,328 18 |
| 24 | 43,88 | 50,58 | 8,275 64 | 8,306 33 | 70 | 9,37 | 11,96 | 5,451 65 | 6,184 66 |
| 25 | 43,00 | 49,63 | 8,269 59 | 8,303 26 | 71 | 8,94 | 11,37 | 5,307 75 | 6,036 07 |
| 26 | 42,10 | 48,67 | 8,262 74 | 8,299 81 | 72 | 8,54 | 10,80 | 5,167 44 | 5,882 78 |
| 27 | 41,20 | 47,71 | 8,255 16 | 8,295 95 | 73 | 8,15 | 10,24 | 5,024 37 | 5,722 22 |
| 28 | 40,30 | 46,76 | 8,246 77 | 8,291 71 | 74 | 7,77 | 9,70 | 4,878 76 | 5,557 43 |
| 29 | 39,39 | 45,81 | 8,237 37 | 8,286 97 | 75 | 7,41 | 9,18 | 4,734 90 | 5,388 93 |
| 30 | 38,48 | 44,86 | 8,226 94 | 8,281 70 | 76 | 7,07 | 8,68 | 4,593 54 | 5,217 27 |
| 31 | 37,57 | 43,91 | 8,215 38 | 8,275 83 | 77 | 6,73 | 8,21 | 4,446 63 | 5,046 79 |
| 32 | 36,66 | 42,96 | 8,202 57 | 8,269 30 | 78 | 6,41 | 7,75 | 4,303 09 | 4,870 92 |
| 33 | 35,75 | 42,02 | 8,188 36 | 8,262 10 | 79 | 6,10 | 7,31 | 4,158 98 | 4,693 89 |
| 34 | 34,84 | 41,07 | 8,172 62 | 8,254 00 | 80 | 5,82 | 6,89 | 4,024 40 | 4,516 47 |
| 35 | 33,94 | 40,13 | 8,155 36 | 8,245 09 | 81 | 5,55 | 6,50 | 3,890 51 | 4,343 99 |
| 36 | 33,05 | 39,19 | 8,136 47 | 8,235 17 | 82 | 5,31 | 6,13 | 3,768 02 | 4,17315 |
| 37 | 32,16 | 38,26 | 8,115 58 | 8,224 26 | 83 | 5,09 | 5,78 | 3,652 76 | 4,004 82 |
| 38 | 31,28 | 37,32 | 8,092 74 | 8,211 99 | 84 | 4,89 | 5,45 | 3,545 46 | 3,839 88 |
| 39 | 30,41 | 36,40 | 8,067 81 | 8,198 66 | 85 | 4,72 | 5,14 | 3,452 32 | 3,679 21 |
| 40 | 29,54 | 35,48 | 8,040 30 | 8,183 86 | 86 | 4,57 | 4,85 | 3,368 64 | 3,523 71 |
| 41 | 28,69 | 34,57 | 8,010 67 | 8,167 62 | 87 | 4,45 | 4,58 | 3,300 66 | 3,374 26 |
| 42 | 27,85 | 33,67 | 7,978 44 | 8,149 83 | 88 | 4,36 | 4,33 | 3,249 07 | 3,23175 |
| 43 | 27,02 | 32,77 | 7,943 44 | 8,130 12 | 89 | 4,32 | 4,11 | 3,225 97 | 3,102 96 |
| 44 | 26,20 | 31,89 | 7,905 47 | 8,108 81 | 90 | 4,30 | 3,92 | 3,214 38 | 2,989 12 |
| 45 | 25,38 | 31,01 | 7,863 80 | 8,085 27 |  |  |  |  |  |

## Annuity table (Table B)

| Year | Amount |  | Year | Amount |  | Year | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0,8929 | 26 | 7,8957 | 51 | 8,3076 | 76 | 8,3318 |
| 2 | 1,6900 | 27 | 7,9426 | 52 | 8,3104 | 77 | 8,3320 |
| 3 | 2,4018 | 28 | 7,9844 | 53 | 8,3128 | 78 | 8,3321 |
| 4 | 3,0374 | 29 | 8,0218 | 54 | 8,3150 | 79 | 8,3323 |
| 5 | 3,6048 | 30 | 8,0552 | 55 | 8,3170 | 80 | 8,3324 |
| 6 | 4,1114 | 31 | 8,0850 | 56 | 8,3187 | 81 | 8,3325 |
| 7 | 4,5638 | 32 | 8,1116 | 57 | 8,3203 | 82 | 8,3326 |
| 8 | 4,9676 | 33 | 8,1354 | 58 | 8,3217 | 83 | 8,3326 |
| 9 | 5,3282 | 34 | 8,1566 | 59 | 8,3229 | 84 | 8,3327 |
| 10 | 5,6502 | 35 | 8,1755 | 60 | 8,3240 | 85 | 8,3328 |
| 11 | 5,9377 | 36 | 8,1924 | 61 | 8,3250 | 86 | 8,3328 |
| 12 | 6,1944 | 37 | 8,2075 | 62 | 8,3259 | 87 | 8,3329 |
| 13 | 6,4236 | 38 | 8,2210 | 63 | 8,3267 | 88 | 8,3330 |
| 14 | 6,6282 | 39 | 8,2330 | 64 | 8,3274 | 89 | 8,3330 |
| 15 | 6,8109 | 40 | 8,2438 | 65 | 8,3281 | 90 | 8,3330 |
| 16 | 6,9740 | 41 | 8,2534 | 66 | 8,3286 | 91 | 8,3331 |
| 17 | 7,1196 | 42 | 8,2619 | 67 | 8,3291 | 92 | 8,3331 |
| 18 | 7,2497 | 43 | 8,2696 | 68 | 8,3296 | 93 | 8,3331 |
| 19 | 7,3658 | 44 | 8,2764 | 69 | 8,3300 | 94 | 8,3331 |
| 20 | 7,4694 | 45 | 8,2825 | 70 | 8,3303 | 95 | 8,3332 |
| 21 | 7,5620 | 46 | 8,2880 | 71 | 8,3307 | 96 | 8,3332 |
| 22 | 7,6446 | 47 | 8,2928 | 72 | 8,3310 | 97 | 8,3332 |
| 23 | 7,7184 | 48 | 8,2972 | 73 | 8,3312 | 98 | 8,3332 |
| 24 | 7,7843 | 49 | 8,3010 | 74 | 8,3314 | 99 | 8,3332 |
| 25 | 7,8431 | 50 | 8,3045 | 75 | 8,3316 | 100 | 8,3332 |

## Appendix E

## The a (55) life mortality tables

| The a(55) tables for annuitants (published in 1953 by the University Press, Cambridge) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male |  |  |  | Female |  |  |  |
| Age |  | Age |  | Age |  | Age |  |
| 20 | 53,379 | 60 | 17,520 | 20 | 57,496 | 60 | 21,144 |
| 21 | 52,341 | 61 | 16,773 | 21 | 56,562 | 61 | 20,330 |
| 22 | 51,405 | 62 | 16,041 | 22 | 55,630 | 62 | 19,526 |
| 23 | 50,469 | 63 | 15,323 | 23 | 54,696 | 63 | 18,733 |
| 24 | 49,531 | 64 | 14,622 | 24 | 53,761 | 64 | 17,9 53 |
| 25 | 48,593 | 65 | 13,936 | 25 | 52,827 | 65 | 17,185 |
| 26 | 47,656 | 66 | 13,268 | 26 | 51,892 | 66 | 16,430 |
| 27 | 46,717 | 67 | 12,617 | 27 | 50,955 | 67 | 15,690 |
| 28 | 45,778 | 68 | 11,984 | 28 | 50,020 | 68 | 14,965 |
| 29 | 44,839 | 69 | 11,370 | 29 | 49,084 | 69 | 14,256 |
| 30 | 43,900 | 70 | 10,774 | 30 | 48,148 | 70 | 13,563 |
| 31 | 42,961 | 71 | 10,199 | 31 | 47,211 | 71 | 12,887 |
| 32 | 42,023 | 72 | 9,643 | 32 | 46,275 | 72 | 12,229 |
| 33 | 41,085 | 73 | 9,107 | 33 | 45,339 | 73 | 11,590 |
| 34 | 40,149 | 74 | 8,592 | 34 | 44,404 | 74 | 10,9 70 |
| 35 | 39,214 | 75 | 8,098 | 35 | 43,470 | 75 | 10,370 |
| 36 | 38,281 | 76 | 7,622 | 36 | 42,537 | 76 | 9,788 |
| 37 | 37,349 | 77 | 7,166 | 37 | 41,605 | 77 | 9,226 |
| 38 | 36,420 | 78 | 6,731 | 38 | 40,674 | 78 | 8,686 |
| 39 | 35,495 | 79 | 6,317 | 39 | 39,745 | 79 | 8,167 |
| 40 | 34,572 | 80 | 5,923 | 40 | 38,818 | 80 | 7,669 |
| 41 | 33,654 | 81 | 5,547 | 41 | 37,894 | 81 | 7,192 |
| 42 | 32,739 | 82 | 5,192 | 42 | 36,972 | 82 | 6,736 |
| 43 | 31,829 | 83 | 4,856 | 43 | 36,053 | 83 | 6,302 |
| 44 | 30,925 | 84 | 4,539 | 44 | 35,137 | 84 | 5,890 |
| 45 | 30,026 | 85 | 4,241 | 45 | 34,225 | 85 | 5,500 |
| 46 | 29,133 | 86 | 3,961 | 46 | 33,316 | 86 | 5,131 |
| 47 | 28,247 | 87 | 3,698 | 47 | 32,411 | 87 | 4,782 |
| 48 | 27,368 | 88 | 3,453 | 48 | 31,511 | 88 | 4,455 |
| 49 | 26,496 | 89 | 3,223 | 49 | 30,615 | 89 | 4,147 |
| 50 | 25,632 | 90 | 3,009 | 50 | 29,724 | 90 | 3,859 |
| 51 | 24,776 | 91 | 2,818 | 51 | 28,838 | 91 | 3,596 |
| 52 | 23,929 | 92 | 2,640 | 52 | 27,957 | 92 | 3,352 |
| 53 | 23,091 | 93 | 2,477 | 53 | 27,082 | 93 | 3,126 |
| 54 | 22,263 | 94 | 2,326 | 54 | 26,212 | 94 | 2,916 |
| 55 | 21,445 | 95 | 2,186 | 55 | 25,349 | 95 | 2,723 |
| 56 | 20,636 | 96 | 2,058 | 56 | 24,492 | 96 | 2,544 |
| 57 | 19,839 | 97 | 1,941 | 57 | 23,643 | 97 | 2,379 |
| 58 | 19,054 | 98 | 1,832 | 58 | 22,801 | 98 | 2,228 |
| 59 | 18,280 | 99 | 1,731 | 59 | 21,968 | 99 | 2,087 |

