## Numerical Analysis Practice Test 1

Instruction: Choose the one correct answer from the 5 options given for each question.
Time allowed: Ten minutes.
Calculator: You may use any calculator you wish.

The data required to answer questions 1-5 is given in the pie charts below which provide information about the total male/female balance in a college, and about the distribution of students throughout the various faculties.

1.

How many more male students are there than female students?

| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | E |
| :--- | :--- | :--- | :--- | :--- |
| 1400 | 480 | 1680 | $14 \%$ | cannot say |

2 .
How many female students are there in the Education faculty ?

| $\mathbf{A}$ | $\mathbf{B}$ | C | D | E |
| :--- | :--- | :--- | :--- | :--- |
| 1728 | 2500 | 3000 | 1800 | cannot say |

How many female students are there in the Performing Arts Faculty if the proportion of males and females is the same for this faculty as for the whole college ?

| A | B | C | D | E |
| :--- | :--- | :--- | :--- | :--- |
| 2560 | 3346 | 1610 | 1498 | 2678 |

4. 

These figures were projections. In actual fact half of the Education faculty students and all of the Social Sciences Faculty students were female. How many females were there altogether in the three remaining faculties?

| A | B | C | D | E |
| :--- | :--- | :--- | :--- | :--- |
| 1240 | 1680 | 960 | 840 | cannot say |

## 5.

Next year it is intended to double the number of places available in the Engineering Faculty, keeping the total number in the college the same by reducing the student numbers in Performing Arts and Education equally. How many places will be available in the Education Faculty ?

| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | E |
| :--- | :--- | :--- | :--- | :--- |
| 3120 | 2680 | 2960 | 3125 | cannot say |

Solutions.

1. B
2. E
3. D
4. B
5. A
