

**Paper Reference 8FM0–23**  
**Pearson Edexcel**  
**Level 3 GCE**

**Further Mathematics**  
**Advanced Subsidiary**  
**Further Mathematics options**  
**23: Further Statistics 1**  
**(Part of options B, E, F and G)**

**Thursday 17 May 2018 – Afternoon**

**Data Book**

**In the boxes below, write your name, centre number and candidate number.**

|                             |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|
| <b>Surname</b>              |  |  |  |  |  |
| <b>Other names</b>          |  |  |  |  |  |
| <b>Centre<br/>Number</b>    |  |  |  |  |  |
| <b>Candidate<br/>Number</b> |  |  |  |  |  |

## INSTRUCTIONS

There may be spare copies of some data sheets in case you need them.

**THIS DATA BOOK *MUST* BE RETURNED WITH THE  
ANSWER BOOK AT THE END OF THE EXAMINATION.**

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Question 1

Table 1

| Number of orchids in each square metre | Number of squares |
|--|-------------------|
| 0                                      | 30                |
| 1                                      | 42                |
| 2                                      | 35                |
| 3                                      | 26                |
| 4                                      | 11                |
| 5                                      | 6                 |
| 6                                      | 0                 |

Table 2

| Number of orchids in each square metre | Number of squares |
|--|-------------------|
| 0                                      | 26·07             |
| 1                                      | 45·62             |
| 2                                      | 39·91             |
| 3                                      | 23·28             |
| 4                                      | 10·19             |
| 5                                      | 3·57              |
| More than 5                            | r                 |

Question 3(b)

| w | $P(W = w)$ |
|---|------------|
| 1 | $a + b$    |
| 2 | $a$        |
| 4 | $0.3$      |
| 5 | $a$        |
| c | $b$        |

Question 4

| Outcome                        | Treatment                       |                    |                         |
|--------------------------------|---------------------------------|--------------------|-------------------------|
|                                | No action                       | Plant sprayed once | Plant sprayed every day |
|                                | Plant died within a month       |                    | 17.92                   |
|                                | Plant survived for 1 – 6 months | 18.92              | 13.76                   |
| Plant survived beyond 6 months | 6.24                            | 11.44              | 8.32                    |