

**Question 1**

A class of 30 students counted the number of books in their bags on a certain day. The number of books in EACH bag is shown below.

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 4 | 6 | 3 | 2 | 1 | 7 | 4 | 5 | 3 |
| 6 | 5 | 4 | 3 | 7 | 6 | 2 | 5 | 4 | 5 |
| 5 | 7 | 5 | 4 | 3 | 2 | 1 | 6 | 3 | 4 |

- (a) Copy and complete the frequency table for the data shown above.

| Number of Books ( $x$ ) | Tally | Frequency ( $f$ ) | $f \times x$ |
|-------------------------|-------|-------------------|--------------|
| 1                       |       | 2                 | 2            |
| 2                       |       | 3                 | 6            |
| 3                       |       |                   |              |
| 4                       |       |                   |              |
| 5                       |       |                   |              |
| 6                       |       |                   |              |
| 7                       |       |                   |              |

(4 marks)

- (b) State the modal number of books in the bags of the sample of students. (1 mark)
- (c) Using the table in (a) above, or otherwise, calculate
- (i) the TOTAL number of books (2 marks)
- (ii) the mean number of books per bag. (2 marks)
- (d) Determine the probability that a student chosen at random has LESS THAN 4 books in his/her bag. (2 marks)

**Total 11 marks**