4. Fitting of Poisson distribution by using recurrence method.

Q. After correcting 200 pages of a proof of the book, the proof reader finds that number of printing mistakes in the following table.

|  |  |
| --- | --- |
| No of printing mistakes (x) | f |
| 0 | 122 |
| 1 | 60 |
| 2 | 15 |
| 3 | 2 |
| 4 | 1 |

Fit a Poisson distribution to the above data by using recurrence relation method.

5. Fitting of geometric distribution (direct method).

Q. In the bulb production industry, 250 batches are inspected until the first defective is made and note that the number of non-defectives in the following table.

|  |  |
| --- | --- |
| No of non-defectives(x) | f |
| 0 | 111 |
| 1 | 61 |
| 2 | 35 |
| 3 | 22 |
| 4 | 11 |
| 5 | 5 |
| 6 | 3 |
| 7 | 2 |

Fit a suitable distribution to the given data by using direct method.

6. Fitting of negative binomial distribution (direct method).

Q.Fit a negative binomial distribution to the following data by using direct method.

|  |  |
| --- | --- |
| x | f |
| 0 | 213 |
| 1 | 128 |
| 2 | 37 |
| 3 | 18 |
| 4 | 3 |
| 5 | 1 |