

Q4. What is the value of 99 percentile - 2, 2, 3, 4, 5, 5, 5, 6, 7, 8, 8, 8, 8, 8, 9, 9, 10, 11, 11, 12

→ 2, 2, 3, 4, 5, 5, 5, 6, 7, 8, 8, 8, 8, 8, 9, 9, 10, 11, 11, 12

$$\text{No. of values below } 99^{\text{th}} \text{ percentile} = \frac{99}{100} \times (\text{no of data})$$

$$= \frac{99}{100} \times 20 = 19.8$$

∴ 12 lies at 20th place and hence 12 is the 99th percentile of range of data provided.