

CHAPTER-13 | STATISTICS

QUIZ
PART-10

1. In the neon-lamp table, total number of lamps is:
- A. 300
B. 350
C. 400
D. 450 (C)

Explanation: Adding all frequencies gives 400 lamps.

2. In the neon-lamp table, the median class is:
- A. 2500–3000
B. 3000–3500
C. 3500–4000
D. 4000–4500 (B)

Explanation: Here $n/2 = 200$, and the first cumulative frequency greater than 200 lies in the class 3000–3500.

3. The median life time of a lamp is closest to:
- A. 3306.98 hours
B. 3406.98 hours
C. 3506.98 hours
D. 3606.98 hours (B)

Explanation: Using the grouped-data median formula, the median life time is about 3406.98 hours.

4. In the surnames table, the modal class is:
- A. 4–7
B. 7–10
C. 10–13
D. 13–16 (B)

Explanation: The class 7–10 has the highest frequency, which is 40.

5. The mean number of letters in surnames is:
- A. 7.32
B. 8.32
C. 9.32
D. 10.32 (B)

Explanation: Using class marks and frequencies, the mean comes out to 8.32 letters.

6. The median number of letters in surnames is closest to:
- A. 7.05
B. 8.05
C. 9.05
D. 10.05 (B)

Explanation: Applying the grouped-data median formula gives 8.05 letters.

7. The modal size of surnames is closest to:
- A. 6.88
B. 7.88
C. 8.88
D. 9.88 (B)

Explanation: Using the mode formula for grouped data, the modal size is about 7.88 letters.

8. In the students' weights table, total number of students is:
- A. 25
B. 28
C. 30
D. 32 (C)

Explanation: The total of all frequencies is 30 students.

9. In the weights table, the median class is:
- A. 50–55
B. 55–60
C. 60–65
D. 65–70 (B)

Explanation: Since $n/2 = 15$, the first cumulative frequency equal to or above 15 occurs in the class 55–60.

10. The median weight of the students is closest to:
- A. 55.67 kg
B. 56.67 kg
C. 57.67 kg
D. 58.67 kg (B)

Explanation: Using the grouped-data median formula, the median weight is about 56.67 kg.