

**TB(3A) Ch. 6 Measures of Central Tendency**

**Multiple Choice Questions**

**1. [14-15 Final Exam #12]**

If the mode of the seven numbers  $a, b, 2, 3, 8, 8, 9$ , is 9, then the median of the seven numbers is

- A. 2.
- B. 3.
- C. 8.
- D. 9.

**2. [14-15 Final Exam #13]**

The following table shows the scores of Mary in an English test.

Paper	I	II	III	IV
Marks	66	72	$x$	78
Weights	50%	25%	20%	5%

If Mary’s weighted mean mark is 70.9, find the value of  $x$ .

- A. 69.08
- B. 70.9
- C. 80
- D. 95.5

**3. [15-16 Final Exam #12]**

The table shows a student’s marks in 5 quizzes.

Quiz	1	2	3	4	5
Marks	8	18	25	22	36
Weight	$x$	0.3	0.2	0.2	0.3

If the weighted mean mark of the student in the 5 quizzes is 24, find  $x$ .

- A. 0.1
- B. 0.2
- C. 0.3
- D. 0.4

**4. [15-16 Final Exam #22]**

Consider the following data:

22	58	49	56	68
38	68	$a$	$b$	$c$

If the mean and the mode of the above data are 50 and 38 respectively, then the median of the above data is

- A. 38.
- B. 49.
- C. 52.5.
- D. 65.

**5. [16-17 Final Exam #12]**

If the median of the integers 4, 12, 5,  $x$  and 9 is  $x$ , which of the following is/are the possible value(s) of  $x$ ?

- I. 5
  - II. 6
  - III. 9
- A. II only
  - B. I and II only
  - C. II and III only
  - D. I, II and III

**6. [16-17 Final Exam #19]**

A group of  $y$  numbers has mean  $x$ . If 3 and 5 are removed from the group, the mean of the remaining numbers remains unchanged. Find  $x$ .

- A. 2
- B. 3
- C. 4
- D. 5

**7. [16-17 Final Exam #20]**

John scored the following marks in the examinations.

Subject	Mark
Chinese	70
English	75
Mathematics	80
Economics	80
Physics	60

If the weights of Chinese, English, Mathematics, Economics and Physics are 6, 6, 5, 3 and 3 respectively, find John's weighted mean mark correct to 3 significant figures.

- A. 13.0
- B. 60.4
- C. 73.5
- D. 338

**8. [17-18 Final Exam #10]**

The following table shows the heights of 20 students.

Height (cm)	Frequency
140 – 149	3
150 – 159	6
160 – 169	8
170 – 179	2
180 – 189	1

Find the mean height of these 20 students.

- A. 160 cm
- B. 160.5 cm
- C. 161 cm
- D. 165.5 cm

**9. [17-18 Final Exam #11]**

The following table shows the number of siblings in different families.

Number of siblings	0	1	2	3	4
Frequency	$n$	12	8	5	2

If the median of the number of siblings of these families is 1.5, find the value of  $n$ .

- A. 5
- B. 4
- C. 3
- D. 2

**10. [17-18 Final Exam #22]**

Consider the following integers:

21    13    7    12    18    14    19    10     $m$      $n$

If both the mean and the median of the above integers are 15, which of the following must be true?

- I.  $m + n = 36$
  - II.  $m > 15$
  - III.  $n < 20$
- A. I and II only
  - B. I and III only
  - C. II and III only
  - D. I, II and III

**11. [18-19 Final Exam #11]**

Joe scored the following marks in the examinations.

Subject	Mark
Chinese	60
English	80
Mathematics	50
Biology	60

If the weights of the marks of Chinese, English, Mathematics and Biology examinations are 3, 4, 2 and 1 respectively, find Joe's weighted mean mark.

- A. 25
- B. 62.5
- C. 66
- D. 165

**12. [18-19 Final Exam #23]**

Consider the data set:

10   12   14   20   21   31    $m$     $n$

If the mean of the data set is 18, which of the following must be true?

- I.  $m + n = 36$
  - II. If the datum '0' is added to the data set, the new mean of the data set is less than 18.
  - III. The median of the data set is 18.
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- A. I and II only
  - B. I and III only
  - C. II and III only
  - D. I, II and III

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