

# University of Central Punjab

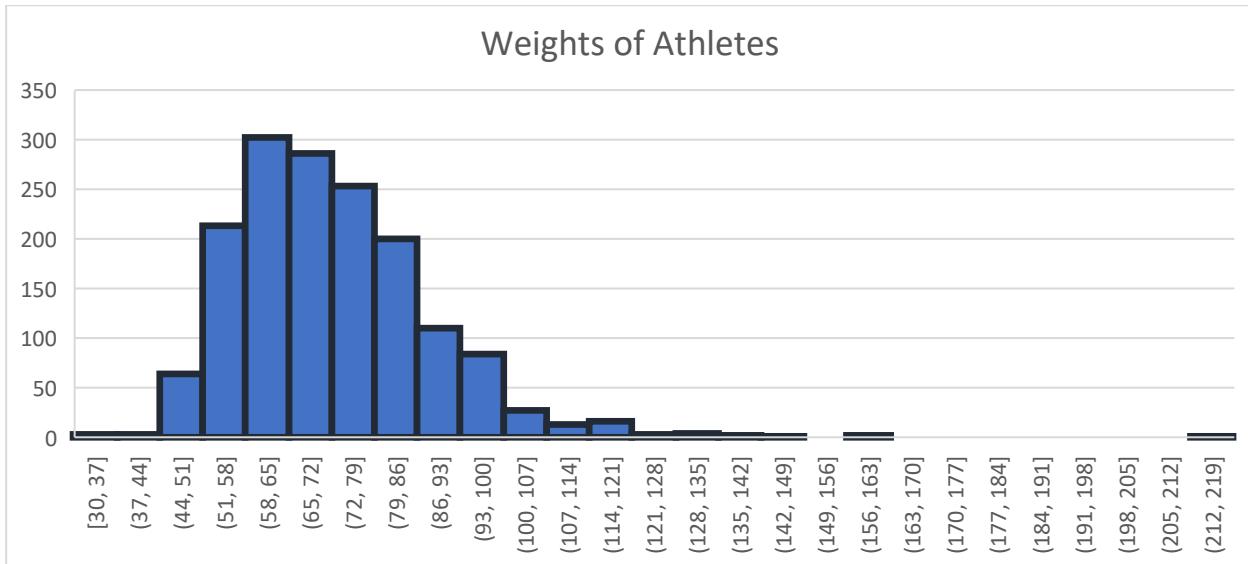
FOIT & CS  
|Assignment 1

Course Title	Probability and Statistics	Course Code	<b>MAT253</b>
Course Instructor		Section	
Time Allowed	1 Week	Total Marks	<b>25</b>
Student Name		Registration No.	

**CLO-1:** Explain the basic concept of Statistics and Probability, and their practical need to explore data.

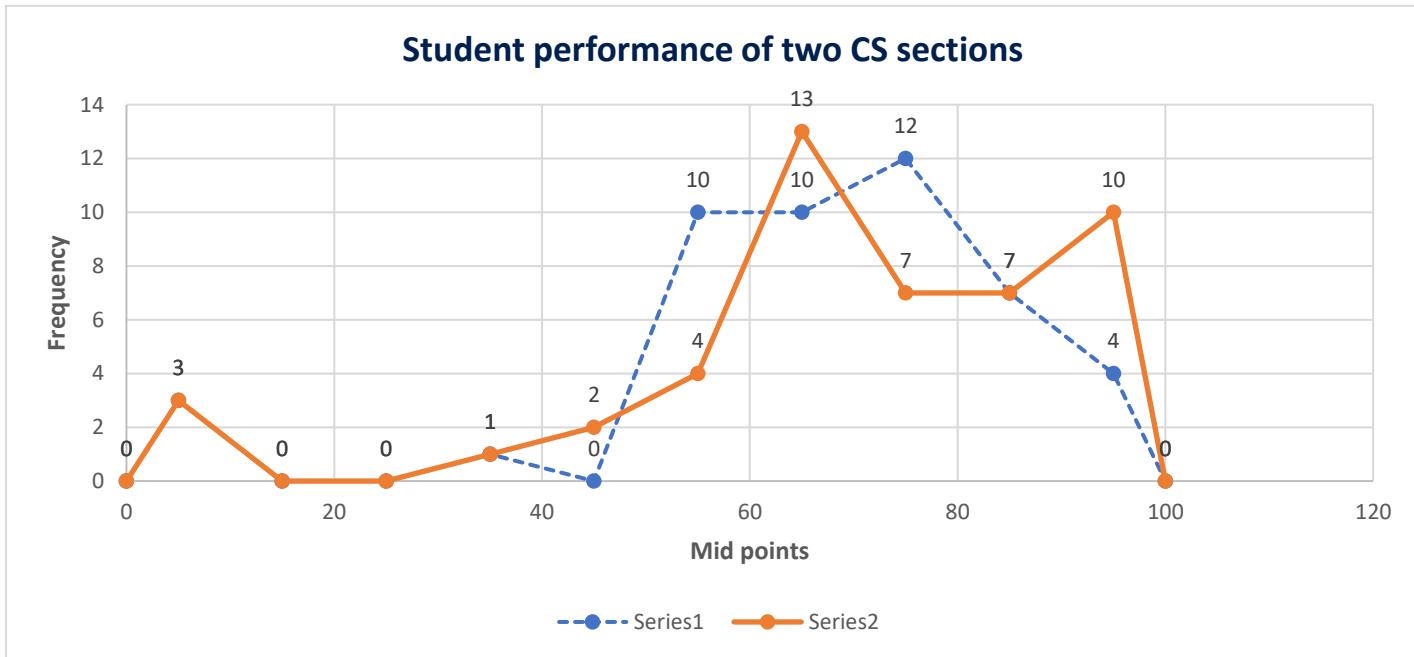
**Question # 1: The following Graph is showing the data of athlete's weights (kg) from different countries:**

**[5]**



- Name the graph.
- What do you think about the average weight of athletes?
- Most of the weights exist within what interval?
- What is the estimated sample size used for this data?
- Comment on the shape of distribution.

**Question # 2: The following graph represents the student's performance of CS students in "probability and statistics" for two different sections with same strength:** [5]



- Name the graph.
- Write the total count of students for both sections.
- What do you think that which section relatively shows a stable result in this subject?
- What are the estimated minimum and maximum marks of both sections?

**Question # 3:**

[5+2+5+3=15]

**The reported high temperatures (in degrees Fahrenheit) for selected world cities on an October day are shown below.**

62, 72, 66, 79, 83, 61, 62, 85, 72, 64, 74, 71, 42, 38, 91, 66, 77, 90, 74, 63, 64, 68, 42

- Find mean. Median and mode.
- Which measure of central tendency do you think best describes these data and why?
- Check the data for outliers.
- Make box and whisker plot and discuss the data distribution.