**Department of First Year B.Tech**

Foundations of Data Analytics

Unit Test Questions Unit I

Q1. What are the differences between supervised and unsupervised learning?

Q2.What is Data Science?

Q3.What is [Role of Data Science in Health Research?](https://www.researchgate.net/post/Role_of_Data_Science_in_Health_Research)

Q4.What information is show in the info graphics?

Q5.What is the difference between Analytics and analysis (data analytics)?

Q6.What are the industry applications of big Data Analytics?

Unit Test Questions –Unit II

Q1.The following is the heart rate for 10 randomly selected patients on the unit. Find the mean, variance, and standard deviation of the data using the descriptive statistics.

75, 80, 62, 97, 107, 59, 76, 83, 84, 69

Q2.Evaluate the following values for given population

145, 136, 198, 115, 128, 154 (Sample)

a. Mean

b. Median

c. Sum of squares

d. Variance

e. Standard deviation

Q3. Explain Concept in short

1. Skewness,
2. Variance
3. Standard Deviation
4. Correlation.

Unit Test Questions –Unit III

### Q1.Which of these measures can be used to present an average for data?

### a.Mean, median and mode

### b. Standard deviation, range and mean

### c. Median, range, normal distribution

### Q2. What is probability?

### a.The integrity of the data

### b. The dispersion of the data

### c. The likelihood that something occurs due to chance

### Q3. If there is a probability of 5% in how many cases would a result arise solely due to chance?

### a. 50/50

### b. None of these

### c. 5/100

### d. 0.0005

### e. 1/50

### Q4. Explain Central Limit Theorem.

### Q5. What is Estimators and Estimates in statistics?

### Q6. What is the difference between Normal Distribution and Standard Normal Distribution?

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