Course No.: CSE 3107 **CT#1** **Time: 30 Minutes** **Marks: 20**

1. Find the geometric mean of the following three numbers: **5**

$$5 \times 10^{15}, \quad 9 \times 10^{15}, \quad 6 \times 10^{40}$$

2. Following incomplete distribution gives the pattern of overtime done by 100 employees. Arithmetic mean of this distribution is 22.6. Calculate the median. **10**

Overtime	10-14	15-19	20-24	25-29	30-34	35-39
No of employee	11	?	35	20	?	6

3. What is inferential statistics? Describe a scenario where median is the most suitable measure of the central tendency. **5**

Course No.: CSE 3107 **CT#2** **Time: 30 Minutes** **Marks: 20**

1. The following data set represents the number of new computer accounts registered during ten consecutive days. **8**

43, 37, 50, 51, 58, 105, 52, 45, 45, 10

(i) Compute the mean, median, quartiles, and quartile deviation.
(ii) Check for outliers using IQR.
(iii) Delete the detected outliers and compute the mean, median, quartiles, and quartile deviation.
(iv) Conclude the effect of outliers on basic descriptive statistics.

2. Why measurement of pH is not considered a ratio variable? Explain. **3**

3. Prove that sum of the deviation of a group of numbers from their mean is equal to zero. **4**

4. Calculate the mean absolute deviation for the following data: **5**

Sales(Lakhs)	10-20	20-30	30-40	40-50	50-60
No of days	3	6	11	3	2