R. J. Tibrewal Commerce College, Vastrapur, Ahmedabad.
Department of Statistics

Semester – 5   **(Year – 2020-21)**

Assignment 1: Integration and its application

Q.1. Define integration and Solve the followings.

(i) $\int \left(\dfrac{5x+1}{x+3} \right) dx$ **(ii)** $\displaystyle\int_{5}^{8} \dfrac{2}{3x-5} dx$

Q.2 What is definite Integration? State its properties.

Assignment 2: Poisson and Hyper-geometric Distribution

Q.1 Write the probability mass function of Poisson distribution.
In a particular hospital five percent of the patients require emergency treatment. On a particular day one hundred patients are admitted in the hospital. Find the following probabilities.
    (i) None of the patient needs emergency treatment.
    (ii)   **At most three requires emergency treatment.**
    (iii)   **More than five requires emergency treatment.**   **(e=2.7183)**

Q.2
If 4 cards are selected at random from a pack of 52 cards then find the probability of selecting at most 2 diamond cards.