



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examinations (December 2018)

School: School of Information Technology **Program:** B. Tech ITDS

Course: Statistics and Probability - I **Course Code:** COM207

Semester: III **Max Marks:** 30 **Duration (mins):** 60

Note- 1. Figures to the right indicates full marks.

2. Attempt any three questions.

Q1)

a) List the types of data and their application. (5)

b) Calculate the mean for the following frequency distribution: (5)

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Number of Students	6	5	8	15	7	6	3

Q2)

a) Define Variance. (2)

b) The heights of the players (in centimeters) from a basketball team are represented by the table: (8)

Height	[170,175]	[175,180]	[185,185]	[185,190]	[190,195]	[195,200]
No. Of Players	1	3	4	8	5	2

Calculate:

The standard deviation.

How many players are above the mean plus one standard deviation?

Q3)

- a) Explain mean, median, mode. (2)
- b) List advantages of mean, median and mode. (2)
- c) Explain sampling distribution. (6)

Q4)

- a) List the factors and levels in ANOVA. (5)
- b) Explain central Limit Theorem. (5)

Q5)

- a) Briefly explain Apriori Probability. (2)
- b) If $P(A) = 0.25$ and $P(B) = 0.8$, then show that
 $0.05 \leq P(A \cap B) \leq 0.25$. (8)