

KATWA COLLEGE

4th SEMESTER HONOURS INTERNAL ASSESSMENT

EXAMINATION - 2022

DEPARTMENT: ECONOMICS

SUBJECT: Statistics-II (H)

COURSE CODE: CC9

FULL MARKS – 10

TIME: 1.30 hrs

DATE: 21/05/2022

Answer any five (5) questions (5*2=10)

1. State and prove the theorem of conditional probability.
2. Distinguish between parameter and statistics ?
3. Three balls are drawn at random from a bag containing 6 blue and 4 red balls. What is the chance that two balls are blue and one is red?
4. In a binomial distribution with parameters m and p the mean is 3 and variance is 2. Find m and p also $P(x=5)$
5. What is compound probability theorem? State Bayes' theorem.
6. Derive mean and SD of a poisson distribution.
7. Derive Poisson distribution as a limiting case of a Binomial distribution.
8. Show that $\text{Cov}(XY) = E(xy) - E(x).E(Y)$.

Answer-scripts in PDF format to be in the following Email ID only-

Email ID: economicskcd@gmail.com