KATWA COLLEGE

4th SEMESTER HONOURS INTERNAL ASSESSMENT

EXAMINATION - 2021

DEPARTMENT: ECONOMICS

SUBJECT: Statistics-II (H) **COURSE CODE: CC9**

FULL MARKS – 10 **TIME: 1.30 hrs**

DATE: 05/07/2021

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

1. State and prove the theorem of conditional probability.
2. A coin and a die are thrown simultaneously. What are probabilities of occurrence of head and even space?
3. An urn contains 8 white and 3 red balls. If two balls are drawn at random, find the probability that (i) both are white (ii) both are red (iii) one is of each colour.
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 Binomial distribution.
7. Derive Poisson distribution as a limiting case of a Binomial distribution.
8. Show that 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