

**KATWA COLLEGE**  
**6<sup>th</sup> SEMESTER HONOURS INTERNAL ASSESSMENT**  
**EXAMINATION - 2021**

**DEPARTMENT: ECONOMICS**

**SUBJECT: Basic Econometrics (H)**

**COURSE CODE: CC13**

**FULL MARKS – 10**

**TIME: 1.30 hrs**

**DATE: 05/07/2021**

**Answer any five questions 5\*2=10**

1. State the assumption of a Classical linear regression model (CLRM)
2. In a simple linear regression model of the form  $Y_i = \alpha + \beta X_i + u_i$  for  $i = 1, 2, 3, \dots, n$  how can you estimate the regression parameter  $\beta$
3. What is the meaning of the term heteroscedasticity? Explain the possible consequences of the problem of heteroscedasticity.
4. Define multiple coefficient of determination  $R^2$  and adjusted  $R^2$ .
5. Explain Durbin-Watson test in brief for testing the problem of autocorrelation.
6. What is meant by exact multicollinearity? Explain the consequences of exact multicollinearity in terms of a linear regression model with two explanatory variables.
7. Explain briefly the Gold-field and Quandt test for testing the problem of heteroscedasticity.

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

**Email ID: [economicskcd@gmail.com](mailto:economicskcd@gmail.com)**