Exam Answer Key

Part A - Interface (5 pts)

1- Write the names of the items indicated by the arrow in the following figure.

❶ Title bar

❷ main Menu

❸ comand window

❹ Variable named educ as a time series type

❺ Coefficient vector

❻ Variable named educ as a time series type

❼ option View of workfile window Toolbar

❽ Work Area

❾ Range and Number of observation

❿ wage1 : workfile

Part B – Basic Concepts (5 pts)

1-List three types of data that can be analyzed with EViews.

1- Times series data- panel data- cross sectional data   one point for each type of data (3 pts)

2- Define what a workfile is in EViews. What is its purpose?

   a. A workfile in EViews is basically a project file that contains all of the information, formulas, graphs, and other items you produce while conducting your study. **(1pt)**
   b. The main container for storing and arranging the data, findings, and objects associated with your research in EViews is a workfile. Everything you need to work with and manage your data, equations, models, and other analysis outputs is contained in what is effectively a project file. Your complete analytic session, including the data, approximated equations, and any other objects you created, can be saved and reloaded using workfiles. **(1pt)**

Part C – Practical Application in EViews (10 pts)

You find below a window, a result of an equation estimation.

$$TBILL = -1273.54 - 0.1235*IP - 0.0162*M1 + 0.0017*SERIES01 ....\textbf{(2pt)}$$

a) Try to give an estimated equation from appearing information in window above.

b) Give the name of the estimation.: Multiple Regression   **(1.5pt)**

c) Can you conclude the existence of multicollinearity problem? No, there is not a multicollinearity problem. **(1.5pt)**

d) The **significance of independent variables** in a regression model can also signal the **presence of multicollinearity** which inflates the standard errors of coefficients, while a high residual variance (s-squared) may indicate a poor model fit.

e) **The** purpose of correlation matrix is to check if two (or more) independent variables have a high correlation (e.g. > 0.8 or < –0.8), this may indicate multicollinearity. This can make the regression coefficients unstable, difficult to interpret and statistically non-significant.

f) Give the different steps using EViews, to display the correlation matrix. **(2 pts)**

Step 1: Open your project (workfile)

Launch EViews.

Open a working file (.wf1) containing your data.

Verify that your quantitative variables are present in the workfile.

Step 2: Select variables

In the workfile tree, Ctrl + left click on the variables you want to include in the matrix (e.g. X1, X2, X3).

Once selected, right-click > Open > as Group.

Step 3: Generate the correlation matrix

In the open variable group window:

Click on View (in the group window menu),

Then select Covariance/ Correlation.

In the window that opens, select Correlation.

 This displays the Pearson correlation matrix between variables.

Step 4: Interpret the matrix

Each cell displays the correlation between two variables.