

## UNE318C3: International Managerial Economics

The January test paper will take the following form. It will be divided into 2 sections:

**Section 1 : Compulsory question –worth 30%**

**Section 2: Answer a minimum of 20 multiple choice questions –worth 70%**

**Duration: 2 hours**

**IMPORTANT: You will need to bring an HB pencil and a rubber to the test. This is for filling in the EDPAC form used for the multiple-choice section.**

The type of questions you can expect are:

### Section A: Compulsory Question:

Worth 30% of the marks

The following results for a consumption function for the UK are from the Microfit package:

```
Ordinary Least Squares Estimation
*****
Dependent variable is GC
31 observations used for estimation from 50 to 80
*****
Regressor          Coefficient          Standard Error          T-Ratio[Prob]
C                   .17962                   .30856                   .58211[.566]
GY                  .49352                   .063938                  7.7187[.000]
GP                  -.15915                  .045708                  -3.4818[.002]
LC(-1)              -.13116                  .13460                   -.97438[.339]
LY(-1)              .11688                   .10961                   1.0663[.296]
LP(-1)              .0055090                .0062041                 .88796[.383]
*****
R-Squared           .88724          F-statistic F( 5, 25)  39.3436[.000]
R-Bar-Squared       .86469          S.E. of Regression     .0061285
Residual Sum of Squares .9390E-3      Mean of Dependent Variable .021620
S.D. of Dependent Variable .016661      Maximum of Log-likelihood 117.2858
DW-statistic        1.7875
*****

Diagnostic Tests
*****
* Test Statistics * LM Version * F Version *
*****
* A:Serial Correlation*CHI-SQ( 1)= .13917[.709]*F( 1, 24)= .10823[.745]*
*
* B:Functional Form *CHI-SQ( 1)= .033271[.855]*F( 1, 24)= .025786[.874]*
*
* C:Normality *CHI-SQ( 2)= 1.1822[.554]* Not applicable *
*
* D:Heteroscedasticity*CHI-SQ( 1)= .32602[.568]*F( 1, 29)= .30823[.583]*
*
```

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* E:Predictive Failure*CHI-SQ( 9)= 34.8489[.000]*F( 9, 25)= 3.8721[.003]*
*
* F:Chow Test *CHI-SQ( 6)= 24.2887[.000]*F( 6, 28)= 4.0481[.005]*
*****
A:Lagrange multiplier test of residual serial correlation
B:Ramsey's RESET test using the square of the fitted values
C:Based on a test of skewness and kurtosis of residuals
D:Based on the regression of squared residuals on squared fitted values
E:A test of adequacy of predictions (Chow's second test)
F:Test of stability of the regression coefficients

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List of Variables and their Descriptions

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C          : Intercept term
CE         : Cons Exp Current Prices
GC         : lc-lc(-1)
GP         : lp-lp(-1)
GY         : ly-ly(-1)
LC         : log(rce-rde)
LP         : log(ce/rce)
LY         : log(rpdi)

```

- Briefly explain what is being estimated here and what the underlying theoretical functional form is.
- Briefly explain why the specification has lags and what the results tell us about the determination of consumption.
- Briefly explain what the R -Squared, the DW-statistic, the Maximum of Log-likelihood and S.E. of the regression are and what they tell us about the regression results.
- Briefly explain the diagnostic tests A, B, C and D and what they tell us about the model.
- Briefly describe how you might proceed with the analysis.

## Section B: Multiple Choice Questions

Answer a minimum of twenty questions

### Question 1.

A firm's production function is given by the expression:

$$Q = -5/6.L^3 + 31.L^2$$

where Q = total output (or total product)

L = units of labour employed

also let AP = average product of labour

and MP = marginal product of labour

Read the following statements carefully:

1.  $AP = L/Q$
2.  $AP = Q/L$
3.  $AP = -5/6.L^2 + 31.L$
4.  $AP = -5/6.L^4 + 31.L^3$
5.  $AP = -L.(-5/6.L^2 - 31)$

Which **ONE** of the following statements is **CORRECT**?

- a. 1 and 4 are correct;
- b. only 1 is correct;
- c. 4 and 5 are incorrect;
- d. 2 and 3 are correct.

### Question 2:

A company in a perfectly competitive industry sells a product for £50 and has total costs:

$$TC = 1,000 + 20Q + 5Q^2$$

The output that maximises profit is:

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5

### Question 3

A firm may be able to deter entry into its market by

- a. building excess production capacity

- b. gaining a reputation for irrational resistance
- c. threatening to resist even though the other firms believe it is not in this firms interest
- d. only a and b
- e. all of the above

**and so on...**