



W
98
(8916)

Documento de Trabajo

8 9 1 6

YE COMPLEAT OECONOMYST

Roy Trinder



The Plymouth Business School

SIMPOSIO 1.989

PLYMOUTH POLYTECHNIC

FACULTAD DE CIENCIAS ECONOMICAS Y EMPRESARIALES-UNIVERSIDAD COMPLUTENSE

FACULTAD DE CIENCIAS ECONOMICAS Y EMPRESARIALES.- UNIVERSIDAD COMPLUTENSE
Campus de Somosaguas. 28023 - MADRID

Y E C O M P L E A T

O E C O N O M Y S T

A modern chap-book

compiled by

an Old Chap (RMT)

Acknowledgements

This compilation of thoughts about the nature of the teaching, learning and assessment methods available to economics students and staff is the outcome of a Plymouth Polytechnic Fellowship awarded for the Christmas Term of Academic Year 1987/1988. My grateful thanks go to the Fellowship Committee for the award and I hope they will consider the results worth-while. Above all my gratitude goes to my colleagues in the Business School who have had to bear the brunt of my teaching and administrative load. To recompense them it may be that the outcome of my efforts will bring social gains in the form of less drudgery in the future.

I have used the term Chap-Book deliberately for I seek to peddle some specimen ideas, tales etc rather than produce a well-rounded, systematic and probably dull treatise. My ultimate aim is to stimulate debate and change within the economics staff but I do not pretend to possess clear-cut answers. Leaving many open-ends will I hope, invite participation by all those interested in the teaching of Economics.

Table of Contents

<u>Section</u>	<u>Pages</u>
I	Why students may study economics
II	Contents of Courses
III	Learning stages and processes
IV	Teaching and assessment methods
V	Suggestions and Recommendations
	Bibliography
	Appendices

Introduction

The first section of my enquiry concerns itself with the simple issue - why students may be drawn to the study of economics. What is it that they hope to discover by studying economics either within a specialist economics course or as part of some other programme of studies e.g. business studies, environmental science, social policy and administration etc? In addition, what might their future employers expect economics-trained graduates/diplomates to bring to their careers as a result of studying economics.

Given these expectations what should the variety of economics courses comprise? It is not my intention to set down detailed syllabi/objectives etc but rather to point to some general principles for consideration. This area constitutes the theme of section two.

Section three will outline the learning stages in the process of becoming an economist whilst section four looks at the teaching and assessment methods that are available to match against the learning processes.

Finally, a concluding section will outline some suggestions and recommendations for implementation within the variety of courses we provide. Some administrative issues will also be considered.

SECTION I - Why study economics?

The Student

The reason why people may be drawn to economics are various. On reflection I should say that there are five main motivating sources of interest that often overlap and are far from mutually exclusive. Nevertheless, it helps to structure thinking to try and set them out and in the process gain insight into the style and content of the syllabi and teaching methods that might be necessary.

(a) The Philosophical Interest

For some, and they are probably a small minority, the essential fascination of economics is as a logical and highly refined edifice of philosophical thought. It is of minor concern to them whether the subject matter is relevant to the solution of any of the world's problems (though it often is); for them economics is its own justification. Emphasis here is on the elegance with which a proposition is deduced from antecedent assumption, the generality of economic theorems, astringency in assumption, and so on. Such minds are naturally drawn towards economic theory and, in most cases, towards mathematical and economic theory.

Needless to say, economic theory has to form a part of all economists interest and it must be stressed that many of the greatest theoreticians have also made major contributions to policy. Nonetheless, for some, the theory is the thing. They are the future philosophers and frontiersman (and women) of the discipline whose ultimate delight is to actually read the Journal of Economic Theory, Review of Economic Studies etc. They are driven by a sense of excitement and controversy that rests in abstract thinking and

mental gymnastics. I would consider that we have had few students who fit solely into this category. Moreover, I do not believe we should try to cater for this market. There are very few who can cope adequately with the rigours demanded of them and there are more elitist institutions who are better equipped to train such minds.

(b) The Political Economy Interest

Others seek and often find in economics a means of developing their political interest. It is not an accident that the 'birth' of modern economics - 1776 - was the date of the publication of Smith's Wealth of Nations and the American Declaration of Independence and that much of the subsequent history of economic ideas was closely linked with the development of liberal political philosophy. Nor is it an accident that the political philosophy of socialism, both liberal and Marxist, in the nineteenth and twentieth centuries, is inseparable from the development of economic thought.

Many of the traditional questions that have occupied both liberal and socialist political thinkers are at the heart of economic debate. For example, the distribution of wealth and arguments for redistribution, arguments for and against nationalisation of the means of production, workers' control and the role of private property. Economic analysis, per se, cannot tell the student what political values ought to be held. But it is of great help in tracing through some at least of the consequences of alternative values that could be held, and hence of assistance in forming an informed judgement. And a factual knowledge about actual redistributions, evidence about the behavioural consequences of different property arrangements etc, together with an appreciation of the nature of the empirical data and the procedures used in interpreting it, is self-evidently necessary.

It is my view that we are in the business of stimulating this aspect of economic thought and political economy should be a theme that permeates much of what we do.

(c) The 'We see - why?' interest

Others see in the world about them a whole set of puzzles that they seek to understand or 'explain'. Some puzzles are classics of the water/diamonds type. Why do farmers sometimes grow crops and then destroy them? Why are some goods and services provided publically and others privately? This interest seeks behavioural explanations of phenomena and the institutional arrangements to accommodate them. The emphasis is on understanding why what we observe is the way it is. It does not ask if the phenomenon ought to be so, or ought to be changed. A sizeable element of what we teach will incorporate this aspect and satisfy such an interest.

(d) The 'How can we do things better?' interest

This focus of interest in economics reflects a concern with reform and improvement. It is often related to the political economy interest but is usually much more specific and generally concerns the role of government in social and economic problems. The kind of question that reflects this interest is illustrated by the following; how should decisions concerning the rate of depletion of natural resources be taken; should health services be provided free of charge; how is monopoly best regulated etc?

Whilst these questions always need some positive economics if answers are to be forthcoming, since the expected consequences of a proposed action (or non action) will need to be spelled out, they also raise questions requiring value-judgements to be made about what is deemed good or bad.

Again, I believe much of what we should be engaged in should be geared to this interest.

(e) The Vocational Interest

Since the mid-1970's students have, not suprisingly, been more concered than in the past to exploit vocational potential in their studies. Their predecessors (often now their lecturers) were not imbued with the Newman ideas of scholarship as an end in itself. In addition the students of the 50's and 60's had the luxury of not having to be overly concerned about potential employment. There were plenty of jobs and graduates, particularly economists, were highly employable. One important feature of this situation was that academia was itself a highly regarded vocation and to succeed in obtaining a lectureship demanded skills in theory and technique. More on this condition and its significance in later sections.

ASSESSMENT METHODS IN ECONOMICS

Ultimately, students should be examined within the context of the syllabus, which, in effect, sets out the rules of the game.

The syllabus sets out the broad aims of the course and should list the knowledge and abilities to be tested in some detail together with the subject matter which should be covered.

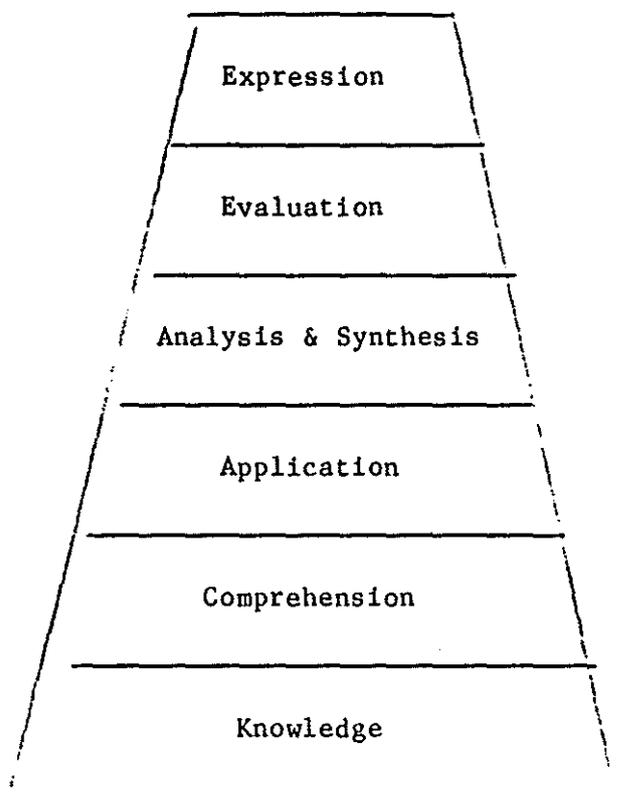
The Aims of the Syllabus (especially 1st Year/introductory courses in Economics)

In general syllabuses aim to give the student an idea of how economists look at the world and how they go about their work. More specifically, courses should provide a factual knowledge of economics and develop a facility for self-expression in writing and in the use of statistics and diagrams, the habit of reading critically and of using data sources, and generally an appreciation of how an economist applies concepts and theories to analyse data about the real world. Any assessment methods purpose is to find ways of testing, as fairly and efficiently as possible, how well these aims have been achieved. Given the variety of necessary abilities and individual approaches to issues it is important to be explicit about what skills are seen as important and how best they might be tested.

The Objectives of the Examination/Course Assessment

The knowledge and abilities to be tested range from basic skills which can be expected of any degree candidate to the more demanding which will help to identify those most competent at Economics.

We can think of the structure of skills in terms of the pyramid below - each skill resting and building on those below.



Obviously, in order to begin we need to know terminology, facts about the real world, and basic concepts and principles - although much of the malaise in the subject has been the result of disagreement as to what these basics are. However, deftly side-stepping this minefield we could illustrate the progression with the following example. At the first level we can know that the concept of price elasticity of demand refers to the responsiveness of demand to a small change in price. It takes a slightly higher level of understanding, however, to be able to translate the concept into numerical form and to calculate a value for elasticity using simple numbers. To recognize that the concept can be applied (to figures or a newspaper/journal article) to make sense of the behaviour of, say, petrol prices or sales requires a degree of insight in addition to knowledge and understanding.

Next, there are the skills of analysis and synthesis.

The former includes the ability to recognize hidden assumptions in arguments. For example, many economic arguments assume that the situation being considered is an equilibrium situation in which all markets are clearing. Admitting the possibility of disequilibrium may alter the analysis dramatically. Analysis also requires us to distinguish statements of fact from value judgements and hypotheses (not easy and full of contentiousness), and to examine the implications of an hypothesis and draw inferences from factual material. In other words, it is the ability to reason some sort of proposition to a valid conclusion. By synthesis we mean the ability to make generalizations and take ideas and facts and put together a new argument - for example, to bring together an analysis of unemployment and a factual description of unemployment to construct an argument about the likely effects of a particular policy measure eg YTS.

The evaluative skills include the ability to make judgements about the reliability of material and the effectiveness of models, to detect fallacious arguments, and to evaluate alternative arguments. For example, can we trust the data on unemployment to give us an accurate picture of what is happening in the economy? Is the monetarist explanation of inflation logical and consistent with the facts as we understand them? Economics is littered with examples of sound logic which are inconsistent with observed facts and examples of unsound logic which lead to very plausible conclusions.

Finally, at the top of the pyramid comes expression:

This is simply (sic) the ability to know what you want to say and to be able to say it in clear, concise and logical terms that clearly communicate your meaning. Obviously you have more chance of formulating a view and making yourself understood if you possess sound knowledge, clear understanding can apply economic principles, are able to analyse arguments and make generalizations and form sound judgements on data and arguments. Usually, economics does not provide clearcut answers, and it is here that clarity of expression is particularly important in displaying a students command of the material. Clear expression is a difficult skill to acquire and ought to have been an essential aspect of 'A' level development. Experience suggests the process may not reach fruition even at the third year of a degree.

The Form of the Examination/Assessment

Although in principle it is possible to test all skills with one type of question, in practice it is clear that some type of questions are more appropriate than others when it comes to testing certain skills. Thus, many examinations have come to include multiple (or objective) tests and a data-response element. Multiple choice is tended to be used at the lower end of the range of skills, but not exclusively so. Data-response questions are intended to test the ability to operate like an economist and to deploy especially the applicative and analytical skills, but again, not exclusively so.

The essay can, therefore, be used to test what it is best at testing - the higher and evaluate skills and the ability to express an argument with clear English. The same arguments hold, a fortiori for the project. It is important to remember that Economics is a controversial subject and therefore no important question, especially in the realm of policy, has a 'correct' answer. What we should be looking for is not simply what students know about economics and economies but how they deploy their knowledge and how good they are at thinking like an economist.

OBJECTIVE QUESTION TESTS

As a method of examining, the multiple choice type of assessment can make use of a large number of questions thereby giving a much more complete coverage of the syllabus. Unlike the essay type of test the student has limited potential for specialization and cannot avoid topics, unless by failing to complete a response.

Whether penalties should be awarded for wrong answers or failure to make an answer is a useful point of discussion. It can be claimed that non-responses may be very revealing of weaknesses/misconceptions in the students armoury.

They also have the considerable advantages to the examiner in that they present a limited marking burden and in many senses the marking is objective.

However, they have limitations and should be used in association with other methods. They can only test analytical skills to a limited extent, and cannot test the higher skills of examination, synthesis etc. There is also the important limitation that they may give the impression that they represent what economics is all about and that there are straightforward answers of a neoclassical positivistic type.

As a guide to learning, however, they aid the students understanding of basic facts, concepts, laws, theories, etc. They may also be used to reduce the barriers of quantitative expression via the inclusion of simple computations etc. If used at correct intervals in the year they can also assist the lecturer to reveal misconceptions and areas of ignorance. Moreover, discussion of test papers may lead to deepening discussions about underlying assumptions etc.

Form and Types of Objective Tests

An objective test is made up of a series of questions each of which has (should!) only one predetermined correct answer. These questions (sometimes called items) may be of several types, but the most common is the multiple choice item. A multiple choice question consists of two parts:

- (a) A stem which poses the questions;
- (b) A number of responses or options, only one of which provides the correct answer. The incorrect responses are known as distractors.

The stem may take the form of a direct question or an incomplete statement. The question asked may be based on a diagram, cartoon, photograph, statistical data or a quotation from published material.

There is no hard and fast rule regarding the number of responses in a multiple choice item. Most examination boards opt for 4 or 5.

Different Formats

There are many different types of question but the most common used in economics are:-

- (a) simple completion
- (b) multiple completion
- (c) classification sets
- and (d) assertion - reason questions

a) Simple Completion

This is the basic type of multiple choice question and the instructions for dealing with it are (should be) very straightforward.

Example

The terms of trade refer to a relationship between:-

- A the total volumes of exports and imports
- B the total values of exports and imports
- C the relative prices of exports and imports
- D the visible trade balance and the invisible trade balance.

Instructions would be of the 'select one of the following'

(b) Multiple Completion

This is a more complex type of item where the responses are grouped together in different combinations. Instructions for dealing with such questions are often more complex and need careful drafting.

E.g. ONE or MORE of the responses are correct. Decide which of the responses is/are correct and then choose ONE of the letters lettered A to E.

Example

Which of the following would a UK Bank regard as a liquid asset?

- 1) Treasury Bills
- 2) Notes and Coin
- 3) Bank Advances

- A 1, 2 and 3
- B 1 and 2 only
- C 2 and 3 only
- D 1 only
- E 3 only

(c) Classification Sets

This is a variation where there are a series of questions all based on the same data. The standard instructions for classification sets are normally of the following type:-

Each of the following questions relate to standard headings in the UK balance of payments accounts. For each numbered question select the heading while you consider to be most closely related to it. Note that each heading may be used once, more than once, or not at all.

Example

The following headings are used in the UK balance of payments.

- A Visible trade
- B Invisible trade
- C Official financing
- D Investment and other capital flows
- E Balancing item

Under which heading will the following transaction appear?

3. The local services consumed by British troops stationed abroad.
4. The export of cars from the American-owned Ford factory at Dagenham.
5. The allocation of a balance of payments surplus to the gold and foreign currency reserves.

(d) Assertion - Reason Questions

In this type of question one is asked to evaluate the truth or falsity of two statements and to decide the nature of the relationship between them. The instructions are usually of the following type:-

Each of these questions consists of a statement in the left-hand column (the assertion) followed by a second statement in the right-hand column (the reason) select

- A if both statements are true and the second statement is a correct explanation of the first
- B if both statements are true, but the second statement is NOT a correct explanation of the first.
- C if the first statement is true but the second statement is false.
- D if the first statement is false but the second statement is true.
- E if both statements are false.

This can usually be reduced to:-

	First Statement	Second Statement
A	True	True
B	True	True
C	True	False
D	False	True
E	False	False

Example

A fall in price will cause demand curve to shift to the right.

Ceteris paribus more is demanded at lower prices than at higher prices.

Obviously the examples chosen are very simple - more 'O' level but I will provide much more complex illustrations on a later occasion.

For those who are struggling:- Answers

Q1*... C	4 ... A
2 ... B	5 ... C
3 ... B	6 ... D

MULTIPLE CHOICE TEST

MCT/1B

MACRO-ECONOMICS I

Duration 50 minutes

Instructions to Candidates

1 DO NOT OPEN THIS BOOKLET UNTIL YOU ARE INSTRUCTED.

2 THERE ARE 25 QUESTIONS IN THIS TEST. FOR EACH QUESTION
* FIVE SUGGESTED ANSWERS ARE GIVEN: YOU ARE TO CHOOSE THE MOST
APPROPRIATE ONE AND INDICATE IT ON A SEPARATE ANSWER SHEET.

3 ATTEMPT ALL THE QUESTIONS. MARKS WILL NOT BE DEDUCTED FOR
WRONG ANSWERS: YOUR TOTAL SCORE ON THIS TEST WILL BE THE
NUMBER OF CORRECT ANSWERS GIVEN.

4 USE A SOFT PENCIL TO COMPLETE THE ANSWER SHEET (B OR HB
ARE RECOMMENDED). A SOFT, CLEAN ERASER IS ESSENTIAL TO
CORRECT ANSWERS. A RULER OR OTHER STRAIGHT EDGE IS ADVISED.

5 PLEASE DO NOT MARK THIS QUESTION PAPER, USE SCRAP PAPER
FOR CALCULATING/DIAGRAMS ETC IF THEY ARE VALUABLE IN SOLVING
QUESTIONS.

- 1 The gross national product of an economy during a year is
- A the value of the total flow of output of final goods and services
 - B the total stock of physical products of the economy
 - C the total output of all the nations firms
 - D the value of goods and services produced within the domestic economy
 - E the total wealth of the nation.

2

	<u>Size of Population</u>	<u>National Income</u>	<u>Index of Prices</u>
Year I	10 m	£500 m	100
Year II	10.5 m	£550 m	110

If the economy experienced the changes shown above, which of the following would be true?

- A Real National Income has fallen
 - B Real National Income has risen
 - C Real National Income per head has fallen
 - D Real National Income per head has remained constant
 - E Real National Income per head has risen
- 3 A closed economy with no government sector is in equilibrium. The average and marginal propensities to consume are 0.85. What will be the level of investment in this country if the National Income is £30,000 m.
- A £3,000 m
 - B £4,500 m
 - C £5,000 m
 - D £6,000 m
 - E £7,500 m

- 4 The following data refer to a closed, no government sector economy.

National Income (Y)	Consumption (C)
0	100
100	160
200	220
300	280
400	340
500	400

Which of the following represents the consumption function?

- A $100 + 0.4Y$
- B $100 + 0.5Y$
- C $100 + 0.6Y$
- D $-100 + 0.4Y$
- E $-100 + 0.6Y$

5 Which of the following statements is likely to be true of a poor country compared with a rich country?

- A $APC_p > APC_r$
- B $MCP_p < MCP_r$
- C $APSp > APSr$
- D $MPSp > MPSr$
- E $APC_p < APC_r$

Where
 APC = average propensity to consume
 MPC = marginal propensity to consume
 APS = average propensity to save
 MPS = marginal propensity to save

6 In an open economy with a government sector $s = 0.1$, $m = 0.2$ and $t = 0.3$, where s , m and t refer to the marginal propensities to save import and to pay taxes respectively.

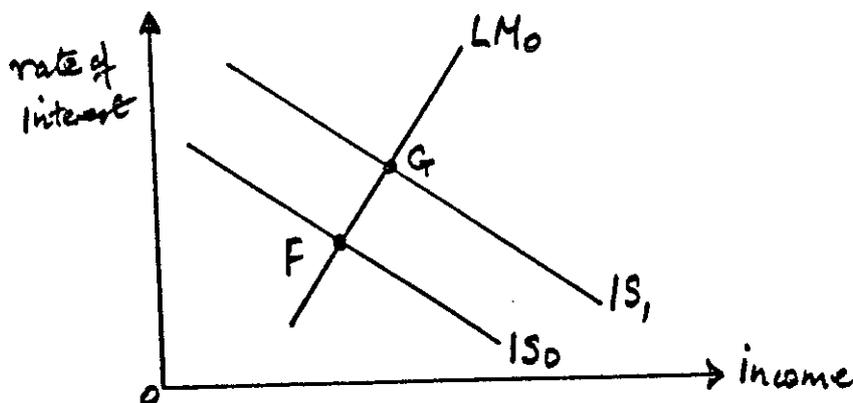
What is the value of the multiplier?

- A 10.00
- B 5.00
- C 3.33
- D 2.50
- E 1.67

7 If the Bank of England buys gilt-edged stock on the open-market it will

- A increase the money supply and increase the National Debt
- B increase the money supply and tend to lower interest rates
- C leave the money supply unaffected but raise interest rates
- D decrease the money supply and tend to raise interest rates
- E leave the money supply unaltered but increase its velocity of circulation

8 In a closed economy with fixed prices the economy is in equilibrium at F.



If the IS curve shifts to IS_1 and a new equilibrium is established at G this can be accredited to all but one of the following:-

- A An increase in business confidence
- B A redistribution of income from rich to poor
- C A reduction in government spending
- D A reduction in taxation
- E An increase in government expenditure

9 Which of the following sets a limit to the real output of an economy in the long run?

- A the supply of money
- B the supply of factors of production
- C the size of the government sector
- D the volume of International trade
- E the level of effective demand

10 According to the Classical (pre-Keynesian) School of economists, unemployment could not persist in the long-run because

- (1) fiscal policies would stimulate aggregate demand
- (2) the price of labour would fall
- (3) interest rates would fall

Select one of the following options

- A 1,2,3 all correct
- B 1,2 only correct
- C 2,3 only correct
- D 1 only correct
- E 2 only correct

11 If the government of an open economy cuts income tax which of the following will ensure?

- A The balance of payments on current account will improve.
- B Aggregate demand will fall and the balance of payments on current account will be in equilibrium.
- C Aggregate demand will rise and the balance of payments on current account will deteriorate.
- D The exchange rate will rise.
- E Government spending on Social Security payments will rise.

12 Which factors are assumed to be constant in order to convert the Fisher equation into the quantity theory of money?

- A M and T
- B V only
- C M and P
- D V and P
- E V and T

13 Which of the following unambiguously will increase the money supply growth rate?

	Change in government spending (£ bill)	Change in taxes (£ bill)	Change in bond sales (£ bill)	Change in privatisation receipts (£ bill)	Change in price of new government bonds paying fixed interest per year (£)
A	+10	+8	-2	+2	-5
B	0	-4	+8	-2	+1
C	-2	-6	+1	+2	0
D	-10	-8	0	0	+4
E	+2	+12	0	+5	-10

14 Which of the following will lower the velocity of circulation?

- A Credit cards
- B Monthly instead of weekly pay packets
- C A stock market crash
- D Shorter banking hours
- E Higher income tax

15 Which of the following will lower interest rates?

- A Higher taxes
- B Lower taxes
- C An increase of an equal amount of both government spending and taxes
- D Lower bond prices
- E Higher government spending

16 The aggregate demand curve is shifted to the right by:

- A Any fall in prices
- B any increase in spending
- C any increase in national income
- D any increase in equilibrium national income
- E any increase in full-employment national income

17 The inertia theory of inflation states that above the natural rate of unemployment the inflation rate will

- A be negative
- B be less than last year's
- C be the same as last year's
- D accelerate by less (i.e. decelerate by more) than it did last year
- E be below the natural rate of inflation

18 Which of the following statements represents the views of the Monetarist (Friedmanite) School of economics?

- (i) the growth of the money supply at a faster rate than the growth of real output is the cause of inflation
- (ii) the value of money rises in step with the rise in its quantity
- (iii) wage cost push cannot produce a sustained inflation
- (iv) incomes policies can be a useful in the fight against inflation

- A if (i), (ii) and (iii) only are correct
- B if (i) and (iii) only are correct
- C if (ii) and (iv) only are correct
- D if (iv) only is correct
- E if (i) and (iv) only are correct

19 Monetarists believe that the natural rate of unemployment

- A is the full employment level
- B is the long-run equilibrium rate
- C only occurs where there is zero inflation
- D varies with the rate of inflation
- E is determined purely by supply-side factors

20 Which of the following can directly explain a change in the money demand functions from

$$\begin{aligned} \text{Md} &= 300 - 5r \\ \text{to Md } &400 - 5r \end{aligned}$$

- A decrease in income
- B fall in interest rates
- C increase in the money supply
- D increase in income
- E a rise in VAT

21 The rational expectations hypothesis states that unemployment can generally be lowered at the expense of

- A higher prices
- B a higher but steady inflation rate
- C permanently accelerating inflation
- D hyperinflation
- E none of these

22 A government bond with a nominal value of £100 provides its holder with an annual interest of £10 to perpetuity. If the long-term rate of interest rises to 12.5% the price at which the bond can be sold is

- A £33.33
- B £50.00
- C £66.67
- D £75.00
- E £80.00

23 Which of the following policy instruments would simultaneously tend to reduce both unemployment and a surplus on the balance of payments?

- A an increase in the level of taxation
- B an increase in government expenditure
- C revaluation of the currency
- D a reduction in tariffs
- E a cut in the money supply

24 The 'natural' rate of unemployment can be reduced by

- 1 expansionist fiscal policies
- 2 retraining schemes
- 3 measures designed to reduce imperfections in the labour market

Select one from

- A 1, 2, 3 all correct
- B 1, 2 only correct
- C 2, 3 only correct
- D 1 only correct
- E 3 only correct

25 A reduction in a country's exchange rate will necessarily improve its balance of payments on current account if, ceteris paribus

- A the demand for its exports is elastic
- B the demand for its imports is inelastic
- C the demand for both imports and exports are elastic
- D its demand for imports and the demand for its exports are inelastic
- E the demand for its exports is elastic and demand for imports is inelastic

MULTIPLE CHOICE TEST

MCT/1A

MICRO-ECONOMICS I

Duration 50 minutes

Instructions to Candidates

- 1 DO NOT OPEN THIS BOOKLET UNTIL YOU ARE INSTRUCTED.

- 2 THERE ARE 25 QUESTIONS IN THIS TEST. FOR EACH QUESTION FIVE SUGGESTED ANSWERS ARE GIVEN: YOU ARE TO CHOOSE THE MOST APPROPRIATE ONE AND INDICATE IT ON A SEPARATE ANSWER SHEET.

- 3 ATTEMPT ALL THE QUESTIONS. MARKS WILL NOT BE DEDUCTED FOR WRONG ANSWERS: YOUR TOTAL SCORE ON THIS TEST WILL BE THE NUMBER OF CORRECT ANSWERS GIVEN.

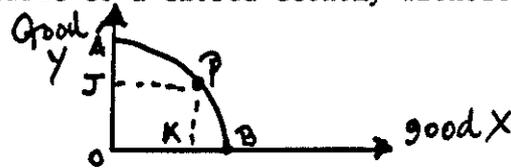
- 4 USE A SOFT PENCIL TO COMPLETE THE ANSWER SHEET (B OR HB ARE RECOMMENDED). A SOFT, CLEAN ERASER IS ESSENTIAL TO CORRECT ANSWERS. A RULER OR OTHER STRAIGHT EDGE IS ADVISED.

- 5 PLEASE DO NOT MARK THIS QUESTION PAPER, USE SCRAP PAPER FOR CALCULATING/DIAGRAMS ETC IF THEY ARE VALUABLE IN SOLVING QUESTIONS.

1 If a young man spends £25 on giving a birthday party for some of his friends, the opportunity cost of the party to him is represented by the:-

- (a) resources he uses to provide the party, ie food, drink etc
- (b) overtime earnings lost by all who attended the party
- (c) extra tax he had to pay to earn the £25
- (d) records on which he would have spend the £25
- (e) enjoyment he gets from the party expressed in monetary terms.

2 The diagram below shows the production possibilities available to a closed economy without foreign trade



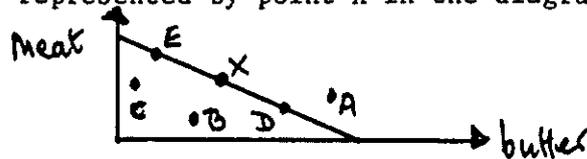
If the economy produces OK of good X then it foregoes:-

- (a) OJ of good Y
- (b) AJ of good Y
- (c) OA of good Y
- (d) KB of good X for OA of good Y
- (e) KB of good X for AJ of good Y

3 A good is defined as an inferior good if it has an income elasticity of demand which is:-

- (a) infinite
- (b) positive but less than unity
- (c) unitary
- (d) zero
- (e) negative

4 A rational consumer initially chooses the combination of goods represented by point X in the diagram below:-

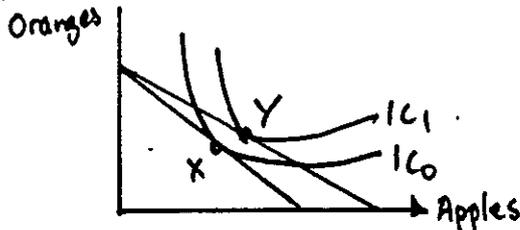


A reduction occurs in both the price of butter and in the consumer's money income. If point X also lies on the new budget line, which one of the points A, B, C, D, or E could represent the combination the consumer would now choose?

5 Mr X had intended to borrow £5,000 at 8% per year for house improvements. When the interest rate rose to 10% he decided to borrow only £4,000. His interest elasticity of demand for loans lies in the range.

- (a) 0.00 to 0.39
- (b) 0.40 to 0.79
- (c) 0.80 to 1.29
- (d) 1.30 to 1.79
- (e) 1.80 to 2.50

- 6 The diagram below shows two indifference curves and two budget lines of a consumer.

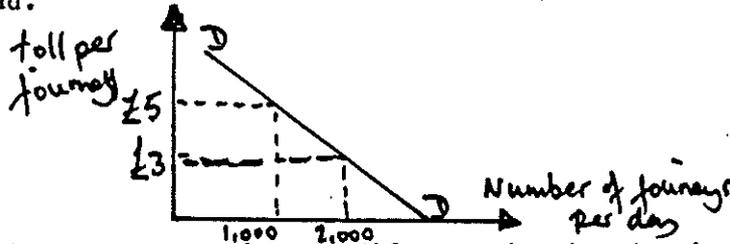


Which of the following combinations of circumstances could cause the consumer's equilibrium to shift from X to Y?

<u>Price of Apples</u>	<u>Price of Oranges</u>	<u>Consumers Money Income</u>
------------------------	-------------------------	-------------------------------

- | | | |
|-------------|----------|----------|
| a) Increase | Constant | Constant |
| b) Constant | Increase | Constant |
| c) Constant | Constant | Increase |
| d) Increase | Constant | Increase |
| e) Constant | Increase | Increase |

- 7 The diagram below depicts a linear demand curve for the journeys on a toll road.



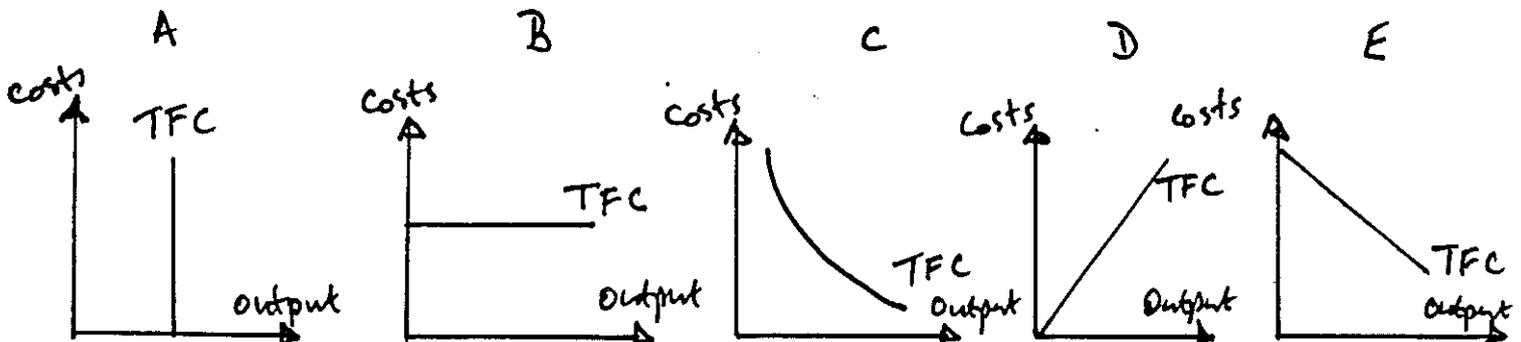
If road improvements make possible a reduction in the toll from £5 to £3, the resulting increase in the daily consumer's surplus is

- a) £1,000
- b) £2,000
- c) £3,000
- d) £4,000
- e) £5,000

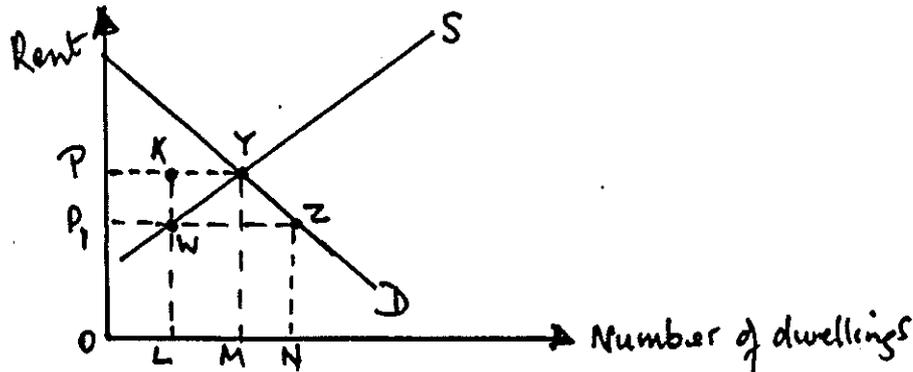
- 8 A firm in a perfectly competitive industry will cease to produce in the short run if

- a) Total revenue is less than total variable cost of production
- b) Total revenue is less than the total fixed cost of production
- c) Average revenue is less than the marginal cost of production
- d) Marginal revenue is less than the average total cost of production
- e) It earns less than normal profits.

- 9 Which of the following diagrams A, B, C, D or E depicts the relationship between a firm's total fixed costs (TFC) and its level of output?



- 10 The diagram below illustrates the market for rented housing which is initially in equilibrium at a rent OP



Subsequently a law fixes the maximum rent at P_1 . Other things being equal, theory predicts

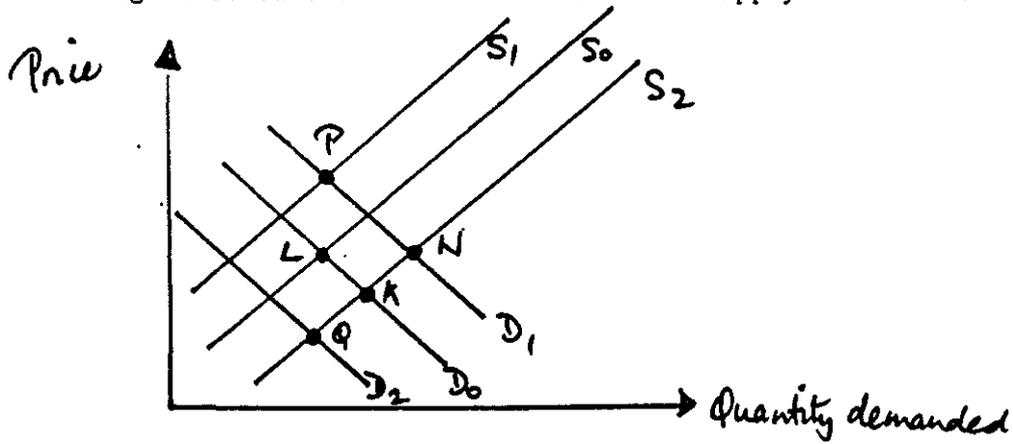
- (a) A decrease in landlords' receipts equal to $KYML$.
 (b) A reduction of MN in the number of tenancies.
 (c) A reduction in the total rent paid by households who retain their tenancies equal to the area $PKWP_1$.
 (d) An increase in consumer surplus equal to area $PYZP_1$.
 (e) A shortage of MN in the number of dwellings.
- 11 If a firm produces under constant returns of scale
- (a) Changes in the quantity produced are determined by the productivity of the variable input.
 (b) Inputs can only be employed in constant proportions.
 (c) Equal proportional changes in all inputs result in the same proportional change in the quantity produced.
 (d) Output remains constant as inputs are increased.
 (e) A proportional change in any output results in the same proportional change in the quantity produced.
- 12 The table below relates to the production of a firm

production (tonnes)	total revenue (£)	total cost (£)
0	0	20
1	10	30
2	20	35
3	30	40
4	40	45
5	50	50
6	60	55
7	70	60
8	80	66
9	90	72
10	100	79

What is the average fixed cost of producing 10 tonnes of output?

- (a) £2.0
 (b) £5.9
 (c) £7.0
 (d) £7.9
 (e) £20.0

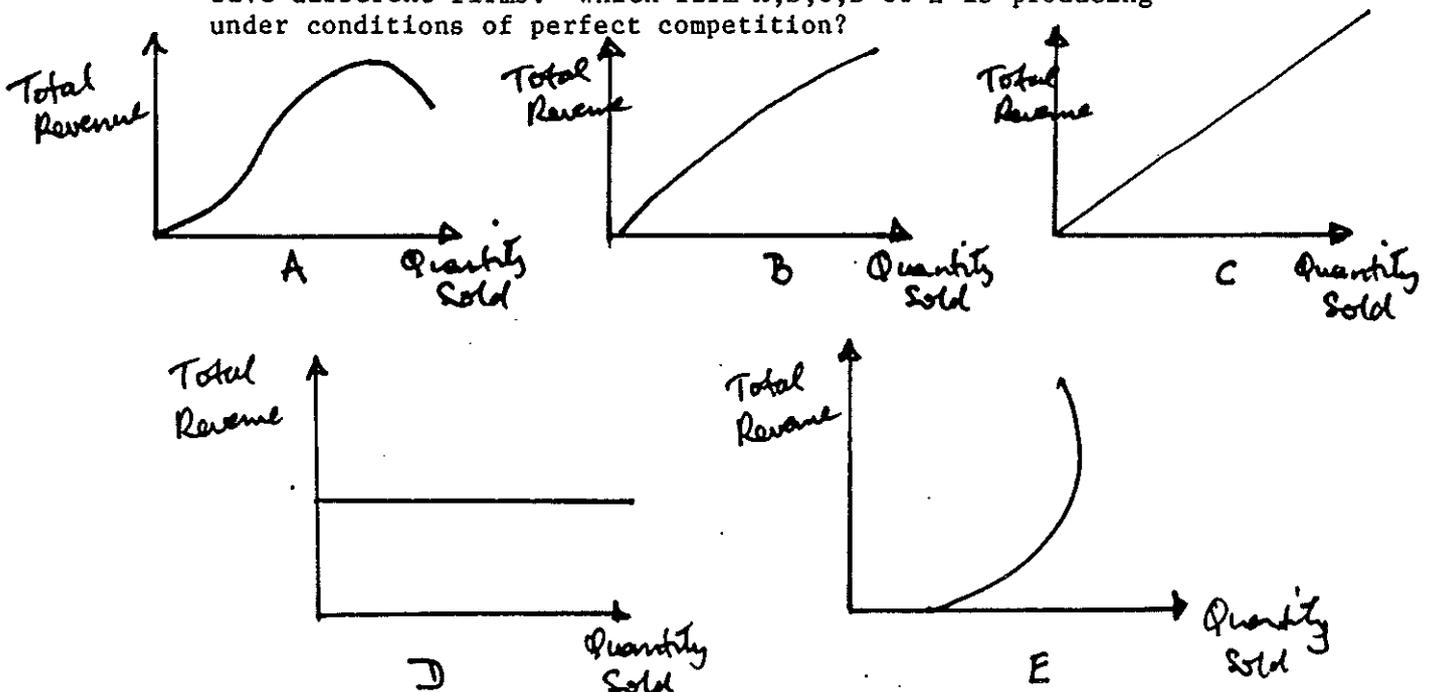
13 The diagram below shows the demand for and supply of butter.



The market is initially in equilibrium at point L. The government then grants a subsidy to butter producers while at the same time the price of margarine falls considerably. The new market equilibrium will be at point:

- (a) K
 - (b) M
 - (c) N
 - (d) P
 - (e) Q
- 14 Under perfect competition if it produces at all, a profit maximising firms output will be such that Marginal Cost is not less than average variable cost. This ensures that:
- (a) marginal revenue is equal to marginal cost
 - (b) marginal revenue is equal to price
 - (c) total revenue is at least equal to total variable cost
 - (d) average total cost is minimized
 - (e) average revenue is at least equal to average total cost

15 The following diagrams show the total revenue curves for five different firms. Which firm A, B, C, D or E is producing under conditions of perfect competition?



16 Which one of the following facilities made available by a railway company acknowledges a divergence between private and social costs?

- (a) restaurant cars
- (b) cheap day return tickets
- (c) waiting rooms
- (d) sleeping compartments
- (e) non-smoking compartments.

17 The table below shows how a firm's sales and production costs vary in response to different levels of advertising.

<u>Monthly advertising outlay/£ thousands</u>	<u>Monthly production Costs (exclusive of advertising)/£ thousands</u>	<u>Monthly sales/ thousands</u>
100	100	10
150	250	25
200	385	35
250	500	40
300	620	47

If fixed costs are zero and the product in question sells for £20 per unit, the advertising outlay yielding the maximum monthly profit is

- A) £100,000
- B) £150,000
- C) £200,000
- D) £250,000
- E) £300,000

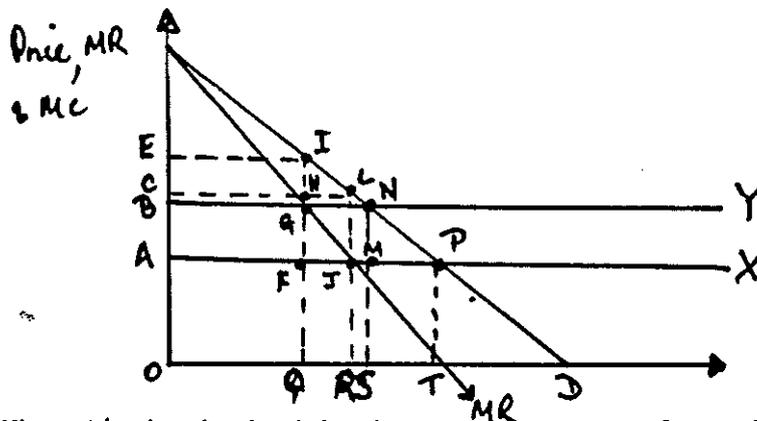
18 A distinguishing feature of oligopoly is that:

- a) the firms do not attempt to maximize profits
- b) the firms are faced by perfectly inelastic demand curves
- c) the firms pricing or output decisions are interdependent
- d) no firm can raise price above long-run average cost
- e) the firms short-run and long-run marginal cost curves differ

19 If the state provides higher education free of direct charges to users, it follows that higher education

- a) involves no opportunity cost
- b) is available to all
- c) has a perfectly elastic demand at zero price
- d) cannot be provided by private enterprise
- e) is likely to be allocated by some form of direct rationing

- 20 If the figure below DD represents the market demand for a commodity. If organized as a competitive market, BY would represent the long-run marginal cost curve. However, a monopolist would face the long-run marginal (and average) cost curve AX



What is the deadweight loss to consumers from the monopoly as compared with the Competitive Industry?

- a) KLN
 b) CLNB
 c) BNPA
 d) DEI
 e) CLKB
- 21 A factory emits smoke during the production process which imposes an external diseconomy upon the environment. The following data describe the situation:

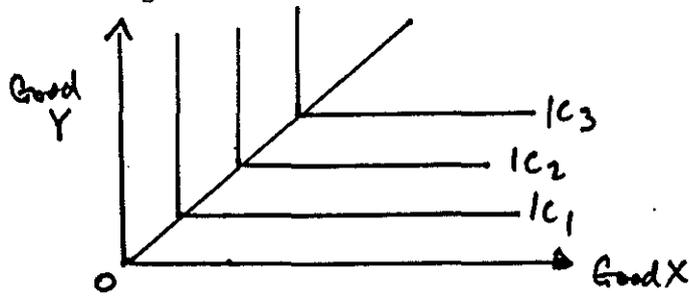
Output (Unit)	Marginal Private Cost (£)	Marginal Revenue (£)	Marginal Social Cost of Air Pollution (£)
1	12	24	4
2	12	22	6
3	12	20	8
4	12	18	10
5	12	16	12
6	12	14	14
7	12	12	16
8	12	10	18

Initially the firm maximizes profits without regard to the social cost of air pollution. If subsequently the authorities levy a pollution tax on the firm equal to the marginal social cost, which of the following describes what happens to output.

- (a) fall by 4 units
 (b) fall by 2 units
 (c) fall by one unit
 (d) remain constant
 (e) rise by one unit

22 The indifference curve map below illustrates the situation where the relationship between goods X and Y is one of:-

- (a) Two bads
- (b) One good and one bad
- (c) Substitute goods
- (d) Complementary
- (e) Griffen goods



23 A proposed merger may be referred to the Monopolies and Mergers Commission if the combined share of the market of the two firms is:-

- (a) greater than 50% :
- (b) greater then 25%
- (c) greater than 30%
- (d) greater or equal to 25%
- (e) greater or equal to 30%

24 If the income elasticity of demand for new cars is 1.5 then this implies that

- (a) a 10% increase in income will result in a 15% decrease in demand.
- (b) 1.5% of any increase in income is spent on new cars.
- (c) 15% of any increase in income is spent on new cars.
- (d) a 10% increase in income will result in a 1.5 increase in the demand for new cars.
- (e) a 10% increase in income will result in a 15% increase in the demand for new cars.

25 Which one of the following curves correctly depicts the average cost of operating an under-utilized bus service between Plymouth and Exeter. A, B, C, D or E?

