Econ10004
Introductory Microeconomics

SUBJECT GUIDE

Semester 1, 2014

Prepared by
Jeff Borland

Department of Economics
Faculty of Economics and Commerce
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A. Key information

Lecturer:
Professor Jeff Borland
Rm. 428 Business and Economics building (111 Barry street)
Phone: 8344-5294
Email: jib@unimelb.edu.au
Office hours: Monday 10-12

Tutorial coordinator:
Nahid Khan
Rm. 336 Business and Economics building (111 Barry street)
Phone: 8344-3621
Email: n.khan@unimelb.edu.au

Assessment Dates
1. Tuesday March 25 (12 midday) to Thursday March 27 (12 midday) – Multiple-choice exam (on-line).
2. Wednesday April 2 (4.00pm) – Assignment 1.
3. Monday May 12 (4.00pm) – Assignment 2.

Web address:
http://www.lms.unimelb.edu.au
[Use the same username and password that you use to access your University of Melbourne email account.]
B. Subject details

Class times:

a) Lectures – 2 x 1 hour each week –
   Lecture times: Tuesday - 10.00, 11.00, 2.15, 4.15 – Arts West – Fitzpatrick Theatre; and Thursday - 11.00, 12.00, 2.15, 4.15 – Arts West – Fitzpatrick Theatre.

b) Tutorials – 1 x 1 hour each week (Timetable via ISIS – See section G of Subject Guide for details.) Begin in Week 1 – from Monday March 3.

Textbooks:

• Required -
  Principles of Microeconomics – Joshua Gans, Stephen King, and Gregory Mankiw (GKM) [Any of the 5th or earlier editions can be used.]
  Microeconomics: Case Studies and Applications – Jeff Borland [Either the 2nd or 1st editions can be used.]

Readings for each lecture from the current editions of the textbooks are listed in section D of the Subject Guide. Corresponding readings from previous editions of the textbooks are listed in Appendix 1 of the Subject Guide.

These texts are required for the subject. For most lectures they are the only prescribed reading. At some points in the subject however we will move beyond the coverage of the GKM text. For these lectures reading material is provided on-line or in the ‘Reading hand-out’ that will be distributed.

• Recommended –
  The Undercover Economist – Tim Harford (330.90511 HARF).
  [These books provide excellent non-technical introductions to many topics that we will study, and include plenty of useful examples. Either one or both could be read at the start of semester as an introduction to the subject, or during the semester to help you review what we are studying. The books should be thought of as an optional supplement to the texts. Reading them is a way to develop your understanding of microeconomics, and to see a range of applications of key concepts. But material from these books will not be directly examined. Suggestions for other readings on microeconomics are in the ‘Ideas for Extra Reading’ section of the LMS subject site.]

Assessment:

Exercise 1: Multiple choice exam (5%) – On-line - To be completed between Tuesday March 25 (midday) and Thursday March 27 (midday).
Exercise 2: Assignment 1 (10%) – Due: Wednesday April 2 by 4.00pm.
Exercise 3: Assignment 2 (15%) – Due: Monday May 12 by 4.00pm.
Exercise 4: Tutorial participation and attendance (10%).
Exercise 5: Final examination (60%) – Two hour examination.
C. Subject objectives

Students who complete this subject will be able to:

• Describe the main objectives of the study of economics - to seek to understand the operation of the economy, and to guide decision-making by individuals, businesses and government.

• Explain the nature and role of theory and models in economic analysis.

• Explain the concepts of demand, supply, and market equilibrium; and apply the model of demand and supply in a market to explain the determinants of prices and output of goods and services.

• Explain how market and social welfare outcomes are affected by changes in demand/supply and government policy, and explain how and in what circumstances intervention by government in the operation of the economy can improve efficiency and social welfare.

• Explain models of firm behaviour in choosing output, price, and how to produce.

• Identify ‘strategic situations’ in economic activity, and be able to analyse and predict outcomes of strategic situations.

• Identify the main characteristics of different market types such as perfectly competitive and monopoly markets. Describe the nature of competitive behaviour in those markets, analyzing and predicting price and output outcomes in the different markets.

• Use examples to illustrate key concepts – such as the role of demand and supply factors in determining market outcomes, the effects of government intervention on market outcomes, the existence of strategic situations in the economy, and different types of markets.

• Apply economic models of individual behaviour and markets to describe the main features of actual markets, and to explain outcomes in actual markets, including prices and output levels, and business performance and profitability.

• Evaluate and critically analyse government policy, and make an informed contribution to public debate on economic issues.

• Proceed to the study of other economics and commerce subjects that have a knowledge of introductory microeconomics as a prerequisite.
## D. Lecture Outline and Readings

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E. Details on Assessment

Exercise 1: Multiple choice question exam (5%)
The multiple-choice exam will be conducted on-line through the LMS subject webpage. There will be 10 multiple-choice questions (each worth equal marks). You will have 30 minutes to complete the exam. Each student will receive a different set of questions randomly chosen from a much larger set of questions. A sample of the types of questions that might be asked is included as Appendix 2 to this Subject Guide. Review multiple choice questions will be available prior to the test.

Exercise 2: Assignment 1 – 1000 words (10%)
In this assignment you will be required to use economic concepts to answer questions on material that relates to the sections B and C of the subject. Assignment 1 is included as Appendix 3 to this Subject Guide. You should also read ‘Important notes on doing the assignments‘ which is Appendix 5 to this Subject Guide.

Exercise 3: Assignment 2 – 1500 words (15%)
In this assignment you will be required to use economic concepts to answer questions on material that relates to sections C and D of the subject, and also complete a ‘case study’ exercise. Assignment 2 is included as Appendix 4 to this Subject Guide. You should also read ‘Important notes on doing the assignments‘ which is Appendix 5 to this Subject Guide.

Exercise 4: Tutorial participation and attendance (10%)
At the end of semester your tutor will assign you a mark out of 10 for tutorial participation. Your grade for participation will depend on:
• Evidence of preparation for the tutorial;
• Frequency of participation in discussion;
• Relevance and logic of comments in discussion; and
• Evidence of active listening to other students’ contributions.
If you have attended at least 7 tutorials during the semester your final mark for this exercise will be equal to the tutor’s original mark. If you have attended less than 7 tutorials during the semester your final mark for this exercise will be equal to the tutor’s original mark minus 1 for each tutorial less than 7 that you attended. (For example, suppose your tutor gives you 8/10, and that you attended 10 tutorials. Then your final mark is 8. Alternatively, suppose your tutor gives you 8/10, but you only attended 3 tutorials. Then your final mark is 4. That is, you lose 4 marks because you missed 4 tutorials under the threshold of 7, and each of these missed tutorials reduces the mark by 1.) Note that to receive a mark for tutorial participation/attendance, you must have a valid tutorial enrolment.

Exercise 5: Final examination (60%)
Held at the end of semester. Duration – Two hours. Will involve a mix of multiple choice, short answer, and essay type questions. The final examination paper for 2011 is Appendix 6 to this Subject Guide. More details about the exact format of the 2014 exam will be provided later in the semester.
Submitting Assignments 1 and 2
Assignments 1 and 2 will be submitted in electronic format using the Assignment Tool. You can access the Assignment Tool by clicking on ‘Assignment Tool’ in the menu from the LMS subject website. A guide to using the Assignment Tool can be downloaded from:
Please note that you are required to keep a copy of your assignment after it has been submitted, as it may be necessary for you to be able to provide a copy of your assignment at some later date.

Meeting Deadlines
It is very important that you submit Assignments 1 and 2 by the specified times on the due dates. Late assignments, where approval for late submission has not been given, will be penalised at the rate of 10% of the total mark per day, for up to 10 days, at which time a mark of zero will be given. Assignments that exceed word limits may also attract a marking penalty. For information on applying for an extension to the due date for Assignments 1 or 2 see:

Special Consideration
If you are significantly affected by illness or other serious circumstances during the semester you may be eligible to apply for Special Consideration. The following website contains detailed information relating to who can apply for Special Consideration and the process for making an application:
http://fbe.unimelb.edu.au/csc/assistance/special_consideration

F. About tutorials

Pre-tutorial work
Each week in tutorials a ‘blue sheet’ will be distributed. The blue sheet provides a guide to the subject matter of that week’s lectures and the next week’s tutorial. For example, the blue sheet distributed in week 1 covers material that is the subject of lectures in week 1 and will be reviewed in tutorials in week 2. The blue sheet lists the main concepts and readings, and includes review questions. It is an important part of learning in this subject that you should attempt these questions. Usually solutions to the questions will not be covered in tutorials. Instead, solutions are posted on the LMS subject site. This happens at the end of the week following when the blue sheet is distributed.

In-tutorial work
Each week in your tutorial a ‘pink sheet’ will be distributed. The pink sheet lists the tasks that will be covered in that tutorial. Generally these tasks will be problem-type questions. Your tutor will break you up into small groups where you will work out solutions to the problems. At the end of the tutorial your tutor will bring everyone back together and review solutions. Often this will involve asking the small groups to take turns in presenting their suggested solutions.
G. Tutorial enrolment information

There will be weekly tutorials starting in the week beginning Monday March 3. Allocation to tutorials is determined by the student system ISIS. You must enroll in a tutorial via ISIS as soon as possible. You access ISIS through the Student Portal.

If you have any problems regarding tutorials contact Ms. Nahid Khan (Room 336; 8344-3621; n.khan@unimelb.edu.au).

Note that tutors are not permitted to authorise a transfer from one tutorial to another, not even from one of their own tutorials to another of their own tutorials. Tutors are only permitted to allow you to attend their tutorial if you are not enrolled in that tutorial: (a) Where because of illness you have missed your allocated tutorial in a particular week. In that case a tutor may permit you to ‘sit in’ at a later tutorial for that week only and on no subsequent occasion during the semester; or (b) Where you miss your regular tutorial because of the Good Friday Public Holiday. In this case you may attend any other tutorial in that week. In both these cases you should obtain an attendance form from the tutor to pass on to their regular tutor to be entered into the attendance record.

H. How to study

• **Attend lectures.** Lectures will give you a broad understanding of each topic and where it fits into the subject. You should also read the relevant pages of the textbook and the case study readings.

• **Work outside class contact hours.** Working outside class hours is essential for performing to your full potential in the subject. It is recommended that 5-6 hours per week (on average) should be spent on Introductory Microeconomics. This would consist of about 1 hour per week reading the textbook, 2 hours per week doing the pre-tutorial exercises, 2 hours per week (averaged over the semester) on the assessment tasks, and ½ hour using the on-line revision tools.

• **Learn how to apply the main concepts.** To do well in this subject it is not enough to be able to remember definitions or to provide a summary of lectures. What is most important is to be able to **apply** the concepts and approaches that you’ll learn. The best way to develop this skill is through ‘active learning’ – for example, trying to answer problems and questions, and discussing those answers with your fellow students and with your tutor. Of course, you also need to know things like definitions of concepts – but this should be the start rather than the end of your study for the subject.

• **Practice writing up answers and doing diagrams.** You should attempt to write up answers to each set of pre-tutorial and tutorial exercises, including drawing diagrams that assist with explanations of the answers. This is good practice for the exam.

• **Do the assessment exercises.** Ensure you attend exams, submit essays, and contribute to tutorials.
I. Resources for study

Subject homepage:

You can access the subject homepage at: http://www.lms.unimelb.edu.au
To access the homepage you need to use the same username and password that you use to access your University of Melbourne email account.
It is important to check regularly the subject homepage for any new messages about the subject – Usually these messages would be placed under ‘Announcements’.

A range of information is available on the subject website:
• Subject Guide.
• Announcements about the subject.
• Lecture overheads, audio lectures, and supplementary notes – ‘Economist’ work-outs.
• Tutorial material - Solutions to ‘blue sheet’ questions; ‘Pink’ and ‘blue’ sheets for previous weeks.
• Access to Assignment Tool for submitting Assignments 1 and 2
• Access to multiple-choice question revision modules, and to MCT Assessment exercise.
• Old exam papers and solutions.
• Access to ‘On-line tutor’.
• Ideas for extra reading about economics, and links to economics-related websites.

Audio lectures:

An audio recording of each lecture is made available (This will be a recording of one of the four lecture streams from each day of lectures). Audio recordings of lectures allow you to revise lectures during the semester, or to review lectures in preparation for the end of semester exam. Audio lectures can be accessed from the LMS subject site.

Missed hand-outs:

Copies of missed handouts from tutorials (blue and pink sheets) will be available from the LMS subject site at the end of the week in which those sheets were distributed.

Tutor consultation times:

There are designated consultation times when you will be able to consult with a tutor on an individual basis about questions or problems you have with the subject material or about assessment exercises. A list of available consultation times and locations is on the LMS subject-page.

On-line tutor:

The Online Tutor (OLT) provides the scope to ask questions of a tutor online. It can be accessed via the LMS subject site. One role of the OLT is for you to ask about material covered in lectures or tutorials. The other role is for answering questions about the assessment exercises.
Subject material
The aim of the OLT is to help you understanding key concepts. It needs to be stressed that the OLT is not intended as a substitute for regular tutorials. It is therefore not a facility for providing solutions to tutorial questions. What the OLT is intended to for is to assist you in being able to work out solutions to problems yourself. So if you have a query you need to describe what aspect you do not understand and show that you have made some attempt to resolve the problem yourself. You should also consult the relevant sections of your textbook before asking a question. Definitions, which are readily available in the textbook, will also not be provided by the OLT. It is however appropriate to consult the OLT if you have a question about an aspect of the definition you do not understand. The OLT will inform students directly if a question does not fall within the guidelines for the systems use. Those questions that show some evidence of thinking and work will be given the most thorough response. Each time you access the OLT you will be prompted for keywords that relate to the question you want to ask, and the OLT system will direct you to previously asked questions that relate to these keywords. It is very important to check whether your question has been previously asked – since the OLT will not respond to questions that have already been asked, and are hence already available for viewing.

Assessment exercises
The OLT is available to help point you in the right direction as far as what is expected in an assessment exercise and to provide clarification on aspects of material, which has been read for the exercise that is not fully understood. Clearly OLT will not give answers to questions that relate too directly to a question set for the assessment.

OLT protocols
Answers will in general be provided by the OLT within a 24-hour period. On certain occasions when the system is particularly busy or on weekends a slightly longer period may be taken. The period before the in-semester assessments and end of semester exam is always particularly busy so it is always best to ask questions early at those times. Whilst there is no limit on the number of questions which can be asked of the OLT by an individual student, the service is, like all resources, limited. If too many questions are asked by a student this would also suggest that that student has not spent sufficient time consulting the textbook and others sources for answers. It should be noted that whilst the use of humour is appropriate in relation to your dealings with the OLT insulting and offensive communications will not be tolerated.

Pit-stop tutorials:
Additional pit-stop tutorial sessions may be scheduled prior to the in-semester assessments, and will be conducted prior to the final exam. The pit-stop tutorials provide an additional opportunity to consult face-to-face with a tutor about the assessment tasks.
Exam review sessions:

Solutions to old exam questions will be reviewed in ‘Exam review’ sessions. These sessions will occur in weeks 3, 6, 8, 10, and 12 on Thursdays at 1-2 and with a repeat session at 3.15-4.15. Details of exam questions to be covered each week will be available from the ‘Exam review’ folder in the ‘Assessment’ section of the LMS subject webpage.

Supplementary texts:

A range of alternative textbooks – appropriate for this subject - are available. There is no requirement to read any of these extra texts. However, if you are seeking to improve your understanding by reading alternative explanations of key concepts, or looking for extra examples, those texts may be useful.

Copies of three texts have been placed on reserve at the Baillieu Library:

J. Subject prize

The student who receives the highest marks in Introductory Microeconomics is awarded the State Chamber of Commerce Exhibition (University Regulation R6.19).

K. Plagiarism

It is the policy of the Department of Economics that attention be drawn to the nature and serious consequences of plagiarism and collusion.

Plagiarism
Plagiarism is the act of representing as one’s own original work the creative works of another, without appropriate acknowledgement of the author or source. (Creative works may include published and unpublished written documents, interpretations, computer software, designs, music, sounds, images, photographs, and ideas or ideological frameworks gained through working with another person or in a group. These works may be in print and/or electronic media.)
Collusion
Collusion is the presentation by a student of an assignment as his or her own which is in fact the result in whole or in part of unauthorised collaboration with another person or persons. Collusion involves the cooperation of two or more students in plagiarism or other forms of academic misconduct. Both the student presenting the assignment and the student(s) willingly supplying unauthorised material (colluders) are considered participants in the act of academic misconduct. There is no objection to assignments being discussed in a preliminary way among students. **What is not permissible is anything in the nature of joint planning and execution of an assignment.**

Where an allegation of academic misconduct involving either plagiarism or collusion is upheld, significant penalties such as deprivation of credit for a subject or component or assessment can be imposed.

I. About microeconomic theory

The objective of economics is to understand the operation of the economy, and to guide decision-making by individuals and organisations such as firms or government in the economy.

Economists seek to achieve this objective by developing ‘theories’. The structure of an economic theory consists of two components: a model and a set of hypotheses that represent the logical consequences of that model. A model is a simplified representation of an aspect of the economy that is to be the subject of theoretical analysis. Having specified a model to characterise the operation of some aspect of the economy, hypotheses or propositions are derived as logical consequences of the specified model. The degree of consistency between the hypotheses and actual market outcomes provides one test of the value of the theory for understanding the operation of the economy.

It is not only economists who use models to seek to understand behaviour and social outcomes. For example, in political science and industrial relations the use of models is also common. A distinction between ‘economic’ and ‘non-economic’ models is generally made on the basis of the specific features of those models. Two types of features identify economic models. First, there is a range of core assumptions common to most modern economic models. Neoclassical economists, for example, have as basic modelling assumptions that all decision-makers are rational and have well-defined objectives they seek to achieve. The assumption of rationality means that in any environment, a decision-maker is aware of the complete set of actions available, can calculate the consequences of each action, and chooses the action which is best for achieving their objective. Second, in developing theories for studying specific economic situations, most economists would draw on the same general set of models. For example, for modelling strategic situations a common approach would be to apply a ‘game theoretic’ model.
An important detail regarding an economic model is that it will necessarily be a simplified and subjective representation of the aspect of the economy it seeks to describe. First, it would never be possible, or indeed useful, to provide a representation of the economy which included every possible detail about the economy. The objective of an economic theory is to identify and highlight the key factors which might explain some economic outcome, and to abstract from inessential details regarding that outcome or the situation from which it arose. In this regard, Keith Whitfield (The Australian Labour Market, 1987, Sydney, Harper and Row, p.7) has noted with reference to labour economists that:

"Some labour economists have likened their work to the making of a map - for the objective is not so much to describe reality as to give a representation which will be useful to those having to plot a course through it. Instead of contours or symbols, the labour economist develops theories and concepts, but the aim is much the same, that is, to develop a representation of a complex phenomenon which allows the main features to be highlighted and the superficial to be ignored."

A second consideration is that each economist will perceive different aspects of the operation of the economy, and different economic outcomes, in very different ways. The historian E.H. Carr (What is History?, 1964, Pelican Books, p.22) has observed that:

"...the facts of history never come to us 'pure', since they do not and cannot exist in a pure form: they are always refracted through the mind of the reader."

The study of economics is no different. There are no objective facts about the operation of the economy or the nature of economic outcomes - only individual economists' perceptions of economic activity. Hence, any representation of the economy, and any choice of what aspects of the economy should be highlighted in a model, will be subjective.

As John Maynard Keynes wrote (in Essays in Biography, pp.207-208, Macmillan, London) in 1933:

"The theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions."

All this suggests that an economist must have two main skills – first, a ‘tool-kit’ of approaches to modelling the economy; and second, knowledge of how to apply those approaches to develop theories which fit the specific situations in which the economist is interested.
The primary objective of this subject is to develop both types of skills. Specifically the subject will:

a) Introduce approaches and concepts fundamental to microeconomics – the concepts of demand, supply and market equilibrium in perfectly competitive markets; game theory; and firm behaviour in competitive and non-competitive markets; and

b) Give you the opportunity to develop the skill to apply microeconomic theory – using case studies, tutorial problem sets, and assessment exercises.

Saying that economics is about applying particular types of theories to understand the operation of the economy of course begs the question – what is the economy? Or put another way, what types of situations does economics seek to understand? There is no simple answer to this question. One response is to say that economics is concerned with situations involving choices about the allocation of scarce resources – and that microeconomics is about situations where individual units such as households and firms must make choices. This definition, however, still includes a wide range of situations. Amongst these situations there will be some where valuable insights can be obtained using economic modelling, and others where economic models seem of less use. For example, the application of economic models to seek to understand what factors influence consumers’ demand for food seems to provide useful insights; on the other hand, economic models seem much less relevant to understanding decisions about household formation (such as marriage). Economists however will disagree about what situations can and cannot usefully be understood using economic models (for example, some economists would disagree with this opinion on using economic models to study marriage). Therefore the decision about what types of situations can be understood using economic models is also a subjective one.

One final issue about economic models concerns the use of mathematics. It is important to know that maths is just another language for describing a model of the economy. Any model expressed mathematically can also be expressed in words. There are a number of reasons though why it is often useful to express a model in mathematical form. First, maths provides a common language for communicating the details or structure of a model. And second, a mathematical representation makes it easy to test the logical consistency of hypotheses or propositions derived from a model, and clarifies the relation between the model and conclusions. (For more discussion of this issue, see Krugman, P. (1998), ‘Two cheers for formalism’, Economic Journal, pages 1829-1836.
Appendices

1. Lecture outline and readings – Earlier textbook editions
2. Sample multiple choice exam questions
3. Assessment exercise no.2 (Assignment 1)
4. Assessment exercise no.3 (Assignment 2)
5. Important notes on doing the assignments
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7. Faculty Code of Conduct – Lectures
### Appendix 1: Lecture outline and readings – Earlier textbook editions

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Appendix 2

Sample multiple choice questions

Note: You will be able to attempt these questions and check your answers at the LMS Introductory Microeconomics subject page.

1. Fred decides to start a flower-growing business. To do this, he works only half-time in his job as a consultant, from which he could earn $100,000 per year as a full-time employee. Hot houses for the flowers cost him $50,000, and if he decides at any time to discontinue his business, he could sell the hot houses for $30,000. Seeds to grow the flowers cost $10,000. There are no other costs. Assume there is a zero rate of interest. Flowers to sell will not be available until one year after the business commences.

The opportunity cost to Fred if he ceased to operate his business at the end of the first year would be:
   a) $50,000  
   b) $160,000  
   c) $80,000  
   d) $130,000  
   e) $110,000

2. Dan the Developer owns a block of land on which he has been thinking of building a new house. He paid $200,000 for the land, and has already spent another $20,000 on building permits and preliminary work. The cost of building the house would be $200,000. Costs of selling either the house and land, or just re-selling the land, would be $10,000. Dan knows that he could re-sell the land for $160,000. He must decide to either sell the land, or to build a house and sell the land/house.

What is the minimum amount for which Dan would need to expect to be able to sell the house and land, in order for him to decide to build the house?
   a) $430,000  
   b) $360,000  
   c) $350,000  
   d) $210,000  
   e) $160,000
3. Tastes of television viewers change towards ‘reality TV’ and away from ‘documentaries’. At the same time there is an increase in consumer income, and watching TV is known to be a normal good.

From the information provided, we can say that the following must occur:

a) Demand for ‘reality TV’ will increase, and demand for ‘documentaries’ will decrease.
b) Demand for ‘reality TV’ will increase, and it is not possible to say what will happen to demand for ‘documentaries’.
c) It is not possible to say what will happen to demand for ‘reality TV’, and demand for ‘documentaries’ will decrease.
d) Supply of ‘reality TV’ will increase, and it is not possible to say what will happen to supply of ‘documentaries’.
e) Demand and supply of ‘reality TV’ will increase, and it is not possible to say what will happen to demand and supply of ‘documentaries’.

4. There is a drought in regions in Australia where oranges are grown. At the same time, there is an increase in the number of mango growers. Finally, an increase in income of Australian consumers occurs.

From the information provided, we would expect:

a) An increase in demand for mangos and oranges.
b) An increase in demand and supply of mangos.
c) An increase in demand for mangos, and a decrease in supply of oranges.
d) An increase in supply of mangos, and a decrease in supply of oranges.
e) An increase in supply of mangos, and a decrease in demand for oranges.

5. Assume the market for CDs is perfectly competitive. There is an improvement in production processes for manufacturing CDs.

At the price that was the equilibrium price prior to the improvement in production processes, following the improvement there will be:

a) An excess supply of CDs.
b) Excess demand for CDs.
c) An increase in demand.
d) A decrease in supply.
e) Both a) and d).
6. Consider the following perfectly competitive market for a good:

\[ Q_s = 2P \]
\[ Q_d = 100 - 2P \]

Which of the following is correct?

a) At \( P = 50 \) there will be excess demand for the good.
b) Only at prices below \( P = 30 \) will there be excess demand for the good.
c) The equilibrium quantity traded is 25.
d) At prices above \( P = 25 \) there will be excess supply for the good.
e) The equilibrium price is 50.

7. The price of the first-year microeconomics textbook, ‘Micro Made Easy’ by Al Marshall, has increased. Assume the market for first-year microeconomics textbooks is perfectly competitive.

Which of the following could not explain the price increase?

a) A new first-year microeconomics textbook ‘Micro Matters’ by the world-famous economist Adam Smith has been published.
b) The price of other first-year microeconomics textbooks has increased.
c) Enrolments in first-year microeconomics subjects have increased.
d) The author of ‘Micro Made Easy’, Al Marshall, negotiates a new contract that requires the publisher to pay him a higher royalty per copy sold.
e) There has been a decrease in supply of the type of paper used for ‘Micro Made Easy’.

8. In the world market for cocoa beans there have been two main recent phases:
Phase 1: Pre-early 2001: Decrease price/Increase quantity traded; and
Assume the market for cocoa beans is perfectly competitive.

Which of the following cannot be correct?

a) Supply increased in both phases.
b) Only supply changed in both phases.
c) Only demand changed in both phases.
d) In the first phase there was an increase in supply, and an increase in demand.
e) Both a) and c).
9. Motor vehicles and petrol can be considered to be complements. Crude oil is an input to petrol, and steel is an input to motor vehicles. Assume markets for petrol, motor vehicles, crude oil, and steel, are all perfectly competitive. Suppose that the price of motor vehicles decreases, and the price of petrol increases.

Which of the following could explain these changes?

a) There is a decrease in supply of crude oil.
b) There is an decrease in supply of steel.
c) There is an increase in demand for steel.
d) There is a decrease in demand for crude oil.
e) Either a) or c).

10. Beer is an inferior good, and wine is a normal good. Both goods are traded in perfectly competitive markets. There is a decrease in consumer income. We would expect the direct effect of the change in income to be:

a) A decrease in the equilibrium price of beer, and an increase in the equilibrium price of wine.
b) An increase in the equilibrium price of beer, and an increase in the equilibrium quantity traded of wine.
c) No change in equilibrium price or quantity traded of either good since the decrease in income will have an equal effect on supply and demand of both goods.
d) An increase in equilibrium price of beer, and a decrease in equilibrium quantity traded of wine.
e) A decrease in demand for both beer and wine.
Subject Guide – Appendix 3

Econ10004
Introductory Microeconomics
Semester 1, 2014

Assignment 1 (10%)

Due date: Wednesday April 2 by 4.00pm.
Assignments must be submitted using the ‘Assignment Tool’ via the LMS subject site for Introductory Microeconomics (For further instructions see the notes on ‘Submitting Assignments 1 and 2’ in the Subject Guide.)
Please remember to keep a copy of your assignment.
This assessment exercise will account for 10 per cent of your final grade in the subject.
Limit: 1000 words (Word limit does not include diagrams.)

Examples of assignments from 2011 are available in the ‘Assessment’ section in the folder for assignment 2 on the LMS subject page.

Questions

Question 1
Read attachment 1.
(1 mark) ‘The government’s new tax payment plan does not change the total amount of tax big companies pay, just the timing. So the opportunity cost of paying tax is not affected by the new policy.’
Do you agree with this statement? Briefly explain your answer.

Question 2
Read attachment 2.
(1 ½ marks) Use the concepts of marginal benefit and marginal cost to explain: (i) Why thefts of lambs have increased; (ii) Why thefts of farm equipment have declined; and (iii) Why August is the peak month for stealing lambs.

Question 3
Read attachment 3.
(a)(1/2 mark) Does the article suggest that chicken is a normal or inferior good?
(b) (1/2 mark) What does the attachment suggest about whether chicken, beef and poultry are regarded as substitutes by consumers?

Question 4
Read attachment 4.
Assume the market for oil is perfectly competitive.
(1 mark) Use the demand/supply model to describe how changes to expectations of future prices by consumers could explain the price changes for oil in March and June 2012 that are described in the attachment. For example, how could consumers’ expectations of what might happen to the price of oil after March 2012 explain why the price rose so much in that month?
Question 5
Read attachment 5.
Assume the markets for capture fish and aquaculture fish are perfectly competitive. (1 mark) Use demand/supply models for those markets to explain why ‘...the FAO’s index for wild fish nearly doubled between 1990 and 2012, whereas the one for farmed fish rose by only one-fifth.’

Question 6
Read attachment 6.
Assume the markets for shale gas, electricity and gas-fired turbines are perfectly competitive. (2 marks) Use demand/supply models of these three markets to represent and explain the changes in market outcomes that are described in the attachment.

Question 7
Read attachment 7.
Assume the market for bank deposits is perfectly competitive. (a)(1/2 mark) How would you describe demand and supply in the market for bank deposits? What will be the ‘price’ in this market? (b) (1 mark) Use the demand/supply model to predict what will happen to the equilibrium price and quantity traded in the market for bank deposits when the tax on bank deposits is introduced. (c) (1 mark) In the attachment the ABA and the Commonwealth government are making opposing claims about how the tax will affect the rate of interest paid to depositors. (i) Suppose it is known that the own-price elasticity of demand is more elastic than the own-price elasticity of supply – What does this imply about who is likely to be correct about how the tax affects the interest rate paid to depositors? (ii) Suppose it is known that the own-price elasticity of demand is less elastic than the own-price elasticity of supply – What does this imply about who is likely to be correct about how the tax affects the interest rate paid to depositors?

Attachments

Attachment 1
‘Big business will be forced to hand over company tax payments to the government earlier...Under the changes, companies with annual turnover of more than $1billion will shift to paying their taxes monthly from January 2014, rather than the quarterly system that exists today.’ (Clancy Yeates, ‘Industry angry over monthly tax plan’, The Age Business Day, October 23 2012, page 1)
Attachment 2
‘Between 2010 and 2011 the cost of thefts of farm animals shot up by 170%...August is a particularly bad time for thefts, says Steve Marsh of Dorset Police. Lambs are fat and ready for slaughter. Thieves rarely have land on which to graze large herds so they need animals which are ready to eat...Unlike other easily nickable items, such as DVD players, the price of lamb has risen, making it an appetising option...The nature of modern farming makes livestock rustling fairly easy. Sheep are often grazed in isolated fields far from the farmstead, or on common land where they are vulnerable to raiders...Meanwhile other rural thefts decline. Thieves used to winch tractors onto lorries before taking them to sell in Eastern Europe...But security on tractors has improved. Until recently the same key could be used to start vehicles on different farms. Manufacturers have fixed this and also added engine immobilisers...’
(‘On the lamb’, The Economist, December 7 2013, page 57)

Attachment 3
‘Roasted, fried or served with noodles, chicken is on its way to becoming the world’s favourite meat. Diners currently chomp through more pork – some 114m tonnes a year compared to 106m tonnes for poultry. But chicken consumption is growing faster and is on track to overtake pork before 2020...The growing taste for fowl is a result of increasing prosperity in emerging markets meaning that people can afford to put more meat on the table...And religious strictures that bar beef and pork from cooking pots around the world do not apply to poultry.’
(‘Henmania’, The Economist, September 14 2013, page 73)

Attachment 4
‘Broadly, two factors govern the price of oil. One is actual supply and demand, the other market sentiment about the state of the world. The fundamentals change slowly; the market’s mood is more volatile...In March fears that the Iranians might do something dramatic in the Strait of Hormuz, cutting off supplies to global markets, helped to propel the price of a barrel of Brent crude to over $128. Since then oil has sagged by 30%, to a low of $88 a barrel on June 22nd, as intensifying worries over the Euro-area debt crisis and fears of a sharp slowdown for China’s economy darkened prospects for demand.’
(‘Rollercoaster’, The Economist, July 7 2012, page 63)

Attachment 5
‘There are two types of fish production: ‘capture’ (or wild) and ‘aquaculture’ (or farmed). And they seem to be on different trajectories. Fish such as tuna, the majority of which is caught wild, saw much bigger price increases than salmon, which are easier to farm. Overall, the FAO’s index for wild fish nearly doubled between 1990 and 2012, whereas the one for farmed fish rose by only one-fifth...The amount of wild fish captures globally has barely changed in the past two decades. The ceiling, of about 90m tonnes a year, seems to have been reached at the end of the 1980s. Overfishing is one reason, as is the limited room for productivity growth...In contrast, the farmed-fish industry continues to make productivity improvements. Fish farms have found crafty ways to use lower quantities of fishmeal as feed...’
(‘Different scales’, The Economist, August 10 2013, page 57)
Attachment 6

‘The boom in shale-gas production in America, using ‘fracking’ technology, is becoming a bust for some big drilling firms. On August 3rd BHP Billiton announced a near-$3billion write-down on some of its American gasfields because soaring production has made prices crash. Three days later Chesapeake Energy revealed a slump in quarterly profits because of the glut. However, if gas is cheap and abundant, more of it will be used to generate electricity. This should help the handful of global firms that make the massive turbines used in gas-fired power stations.’

(‘Slow burners’, The Economist, August 11 2012, page 55)

Attachment 7

‘…a new levy on bank deposits is forecast to raise $733 in its first four years…From 2016, Labor plans to introduce a 0.05 per cent levy on government-guaranteed deposits of less than $250,000…Chief executive of the Australian Bankers Association Steven Munchenberg said he had met Mr. Bowen on Thursday to discuss the plan, which was opposed by the banks…He said the higher cost would ultimately be passed onto depositors – but the government is set to argue it would cut income from a $10,000 deposit by just 50c a month.’

**Extra information on doing assignment 1**

**Some general hints**

- The objective in this assignment is to answer questions 1-5. So the most important piece of advice is to do what the questions are asking. For example, some questions ask you to apply the demand/supply model to answer questions about changes in market outcomes. This means that to answer these questions you should explicitly use the concepts of demand and supply, and equilibrium price and quantity traded.

- You don’t need to state definitions of any of the concepts such as demand and supply, or equilibrium. Assume that your tutor knows what these concepts mean. Instead, the assignment is trying to test your knowledge of the concepts by how you apply them in answering the questions.

- To complete the assignment the only reading you should need to do is lecture notes and the relevant sections of the textbook, and the excerpts from the articles included with the questions.

- The examples of assignments that are available on the LMS subject site provide a guide to how economic concepts can be applied in this type of assignment. As well, you can use the tutor consultation sessions and the OLT to answer your questions.

**Marking criteria**

Three main factors will be considered in marking your assignment:

a) **Knowledge of economic concepts** – For example: Has the answer used the appropriate economic concepts? Does the answer show a thorough understanding of those concepts?

b) **Quality of analysis and application of economic concepts** – For example: Is there a logical and thorough supporting argument or description of how conclusions have been drawn? Have economic concepts been applied in an effective manner in the particular application? Are assumptions clearly described? Is an understanding shown of any relevant qualifications to the conclusion?

c) **Presentation** – For example: Are the writing style and organisation of material such that the main ideas and arguments can be understood? Are diagrams presented clearly and effectively integrated with text?
Subject Guide – Appendix 4

Econ10004
Introductory Microeconomics
Semester 1, 2014

Assignment 2 (15%)

Due date: Monday May 12 (By 4.00pm).
Assignments must be submitted using the ‘Assignment Tool’ via the LMS subject site for Introductory Microeconomics (For further instructions see the notes on ‘Submitting Assignments 1 and 2’ in the Subject Guide.)
Please remember to keep a copy of your assignment.
This assessment exercise will account for 15 per cent of your final grade in the subject.
Limit: 1500 words (Word limit does not include diagrams)

Examples of assignments from 2011 are available in the ‘Assessment’ section in the folder for assignment 2 on the LMS subject page.

Part A (10 marks) (1000 words)

Questions

Question 1
Read attachment 1.
Assume that the world market for rice is perfectly competitive and that Thailand is an exporter of rice.
Suppose that in the market for rice in Thailand the initial situation involves no government intervention. Then the government introduces a policy where it: (i) Agrees to pay farmers a price per tonne of rice that is above the world price; and (ii) Supplies the rice it has acquired from the farmers to the world market.
(a) (1/2 mark) Show how you would represent the government intervention in a demand/supply model (with international trade) of the market for rice in Thailand.
(b) (1 mark) Describe and compare the market outcomes before and after the government policy. Are the naysayers correct to claim that the scheme may be ‘impossibly expensive’?
(c) (1 mark) How are consumer surplus, producer surplus and total surplus affected by the government policy?

Question 2
Read attachment 2.
(a) (1/2 mark) Explain why there is likely to be an external effect associated with the decision made by a farmer about how much water to extract from the Ogallala Aquifer.
(b) (1/2 mark) What does the existence of the external effect imply about the amount of water extraction from the Ogallala Aquifer compared to the socially optimal level?
(c) (1/2 mark) Suggest a policy solution that would assist in ensuring that the socially optimal amount of water is extracted from the Ogallala Aquifer.
Question 3
(2 marks) Consider the statements below made by Alan Accountant and Edwina Economist. Say whether you believe each statement is correct or incorrect. Briefly explain your answer. Note that most of the marks will be given for your explanation.

Alan Accountant and Edwina Economist are advising their friend Mardi Manager on operating her business. Mardi sells ice-creams, and because of their distinctive flavours, the business has a high degree of market power. Mardi is trying to decide whether to increase her daily sales as a way of earning higher profits. Alan says: ‘Mardi can produce the extra ice-creams at the same marginal cost as the ice-creams she is already producing. Hence she will definitely earn higher profits by increasing her sales.’ Edwina disagrees. She says: ‘That Mardi has a constant marginal cost of supply does mean that her ATC will decrease when she sells more. But we would need more information to know that her profits would increase when she sells more ice-cream.’

Question 4
Read attachment 3.
(2 marks) Explain why Qantas (as a profit-maximising firm with market power) would choose to increase the price more for first-class passengers than for economy passengers when there is an increase in its costs.

Question 5
Read attachment 4.
(a)(1/2 mark) How are fixed costs and SR marginal costs of supplying radiology services likely to differ between production methods without (‘old method’) and with (‘new method’) computer storage and online transmission of data? Draw a graph showing the SR average cost of production for each production method for different numbers of patients.
(b) (1 ½ marks) Assume that the radiology business is perfectly competitive. Suppose that the industry is initially in long-run equilibrium with all firms using the old method of production. Then the new method of production becomes available.
(i) Describe the process of adjustment in the industry from the initial long-run equilibrium to a new long-run equilibrium where firms are using the new method of production.
(ii) How does the new long-run equilibrium differ from the initial long-run equilibrium? Specifically, what is the effect on the market equilibrium price, market quantity traded, and the quantity supplied per firm.

Attachments
Attachment 1
‘The rice subsidy was classic Thai populism. Two-fifths of Thais work in agriculture, most of them as rice farmers. Ms. Yingluck promised that, if she was elected, her government would buy unlimited rice directly from farmers at about twice the market rate, or 15,000 baht per tonne. This would put money into poor farmers’ pockets and stimulate domestic demand. Naysayers warned that the scheme would be impossibly expensive...’
(‘The rice mountain’, The Economist, August 10 2013, page 19)
Attachment 2

‘Mitchell Baalman’ s well is drying up. This is bad news for a farmer of thirsty crops in parched north-western Kansas. Four years ago Mr Baalman and other local farmers realised that unless they started saving water there might not be enough left for their children and grand-children to irrigate the soil...The Ogallala Aquifer runs from South Dakota to Texas. In many places water is pumped far faster than the aquifer can recharge naturally from rivers and rainfall...By 1960 only 3% of the aquifer had gone but by 2010 30% had gone...In the west-central district, which has always had less water, wells are being abandoned and some areas are being converted to dryland farming.’


Attachment 3

‘Qantas will raise fuel surcharges on flights to Europe, parts of Asia and the Middle East...The increases will be steepest for well-heeled travellers...The fee on a one-way economy ticket to destinations in Europe and North Africa will rise by $15 to $270 (6%), while premium economy will increase by $30 to $355 (9%). Business and first-class will rise by $50 to $495 (11%).’


Attachment 4

‘The cost structure in the radiology business has been drastically affected by the growth of computer storage capacity and online transmission of data. MRI, CT and x-ray images are all stored and transmitted digitally now...[This means that] the local radiology group will be able to stop leasing the huge warehouse in which it stores old films;...[also] there is no need for couriers to carry films from the radiologists’ headquarters to the offices of treating physicians (doctors)...’


Part B Case study (5 marks) (500 words)

The objective of the case study is for you to choose some aspect of economic activity, and to show how a concept or theory we’ve studied can be used to understand what happens in that situation, and/or to make policy recommendations on how social welfare could be improved through some type of intervention.

I encourage you to discuss your proposed topic for the case study with your tutor or the Online tutor. Possible topics for case studies might be:

· Using the model of perfectly competitive markets to explain price changes that have occurred, or to analyse the effects of some type of market intervention;
· Using the concept of incentives to explain behaviour by market participants;
· Using the concepts of surplus to analyse the effect on society’s well-being of a government policy; or
· Use the theory of market power to analyse or explain prices.
To show in more detail how to go about doing a case study we’ll post some examples of excellent case studies from previous years. There is also a variety of books that illustrate (in differing amounts of detail) the idea of a case study that you could consult:
The Economic Naturalist by Robert Frank
Freakonomics by Stephen Dubner and Steven Levitt

In the case study you should:
• Introduce the aspect of economic activity that you will analyse;
• Briefly describe the theory or concept you’ll use in the case study;
• (most importantly) Apply the concept or theory to analyse the aspect of economic activity you’ve chosen; and
• Provide any concluding remarks.

Four main factors will be considered in marking your case study:
a) Knowledge of economic concepts – For example: Has the answer used the appropriate economic concepts? Does the answer show a thorough understanding of those concepts?
b) Quality of analysis and application of economic concepts – For example: Is there a logical and thorough supporting argument or description of how conclusions have been drawn? Have economic concepts been applied in an effective manner in the particular application? Are assumptions clearly described? Is an understanding shown of any relevant qualifications to the conclusion?
c) Presentation – For example: Are the writing style and organisation of material such that the main ideas and arguments can be understood? Are diagrams presented clearly and effectively integrated with text?
d) Research – Have examples been chosen that have taken some effort to find? What is the quality of evidence supporting arguments that are made?
Appendix 5

Important notes on doing the assignments

1. Plagiarism

Please be aware of the University policy on plagiarism. There is no problem discussing with other students how you are planning to answer the questions, or sharing ideas about how to complete the assignment. But the writing up of your answers to the assignment MUST be something that is your work alone.

2. Word limit

Remember that there is a word limit. As well, if you can provide a thorough answer in fewer words then that is fine; a precise answer is always preferred to an answer that includes content that is not directly relevant to the question.

3. Diagrams

Use diagrams where you believe this will assist you in giving the most effective answer to a question. (But it’s not required to use diagrams for every question.) For a diagram to contribute to your answer you’ll need to:

Represent the diagram correctly - Each diagram should be titled and all axes and curves should be labeled. The initial point of equilibrium should be identified. Changes in points on the diagram should always be explained with reference to the changes measured along both axes.

Explain the diagram - You should be able to explain the diagram in words and relate it to the point you are making or question you are answering. Remember, a diagram by itself does not constitute an answer.

Relate the diagram to the relevant theory – Make sure your diagram is consistent with the model and theory you are using, and represents them correctly and logically.

Source: Cowie J., Findlay C., McTaggart D., Reading between the lines
Addison-Wesley Sydney, 1994.

4. Referencing

You need to reference any direct quotes or major pieces of evidence you cite, as well as where you are drawing extensively on another work in your own writing. The standard referencing system in economics is the Harvard system, but you can use whatever referencing system you find suits you best.
Example: The Harvard System

How to cite references within the text of your essay
References in the text give the author’s surname, the date of publication and, if a quote or specific fact is referred to, the page number as well.

For example:
Where reference is made in the essay to more than one work by the same author that was published in the same year, the distinction is shown by using letters (both within the text and in the reference list), as follows:
‘As shown in Rockett (1990b), in industries where…’
The abbreviation ‘et al.’ may be used where there are more than three authors, as follows:
See Kamien et al. (1992) for a comparison of optimal…’

When citing several references to support a particular point, list them chronologically and separate them with semi-colons:
‘There exists a vast theoretical literature exploring the reasons for and consequences of this type of policy (Abowd, 1976; Wooden & Dawkins, 1983; Williams et al., 1995).’

How to cite references in your essay reference list or bibliography

A. BOOKS
The following information should be provided in the order stated:

- Author’s name and initials
- Date of publication
- Title, underlined or in italics, with initial letters of first word and of proper nouns in capitals
- Publisher
- Place of publication
- Page numbers, if a specific reference in a long work under the Oxford system.

Authors are cited in the order used on the title page. (All authors should be shown in the reference citation, though, as mentioned above, in the text the name of the first author and ‘et al.’ can be used where there are more than three authors.)

B. JOURNAL ARTICLES
The format for referring to journals and periodicals is as follows:

- Author’s name and initials
- Date
- Article title in lower case
- Journal title, underlined or in italics
- Volume number
- Page numbers.


C. ARTICLES OR CHAPTERS IN BOOKS

D. GOVERNMENT PUBLICATIONS

E. NEWSPAPER ARTICLES

Silkstone, Dan 'Levy on city car parks proposed to cut congestion'. *The Age*, 8 April 2005, p3.

F. WEBSITES
List the author, year of publication, and title of the reference. As well it is necessary to include the address of the site from which the material was accessed, and the date at which it was accessed.
Appendix 6

THE UNIVERSITY OF MELBOURNE
DEPARTMENT OF ECONOMICS
SEMESTER 1 ASSESSMENT, 2011
ECON10004 INTRODUCTORY MICROECONOMICS

Time Allowed: TWO hours
Reading Time: 15 minutes

This examination paper contributes 60% to the assessment in ECON10004.

The Response Sheet for the multiple-choice questions should be inserted in the back of the examination script book at the end of the examination. For the multiple-choice questions, you may use the examination script books to make notes or calculations. These notes will NOT be taken into account for your assessment.

SECTION A: ANSWER ALL QUESTIONS

This section is worth 25% of the total exam marks.
Answer all questions. Fill in the small circle in the appropriate place with a 2B pencil on the Response Sheet. An incorrect answer, no answer, or more than one answer, will receive a zero mark.

SECTION B: ANSWER ALL QUESTIONS

This section is worth 25% of the total exam marks.
Answer all questions. Each question is worth equal marks.

SECTION C: ANSWER ALL QUESTIONS

This section is worth 50% of the total exam marks.
Answer all questions. Questions are worth different marks.

Other Instructions

Foreign/English language dictionaries are allowed into the examination room.
No other materials are allowed.

This exam paper may be removed from the examination room.
A copy of this exam paper will be held in the Baillieu Library.

This exam paper has 9 pages.
SECTION A

ANSWER ALL QUESTIONS IN THIS SECTION

This section is worth 25% of the total exam marks.
All questions in this section are worth the same number of marks.
For each question select the one BEST answer. Incorrect answers, multiple answers, or no answer, will receive zero.
Mark your answer on the Response Sheet.

1. The market for wheat is in equilibrium. Then a new technology is developed that improves production efficiency for wheat. We should expect that:
   a) Supply of wheat will decrease, so that at the original equilibrium price there is excess demand which will cause the price to decrease towards a new equilibrium price.
   b) Supply of wheat will increase, so that at the original equilibrium price there is excess supply which will cause the price to decrease towards a new equilibrium price.
   c) The quantity supplied of wheat will increase, and this will cause a decrease in equilibrium price and an increase in demand.
   d) Demand for wheat will increase, so that at the original equilibrium price there is excess demand which will cause the price to increase towards a new equilibrium price.

2. Suppose that Australian and US dollars are traded in a perfectly competitive market. Treat the price in this market as the amount of $US that can be traded for $1AUS (referred to as the US/AUS exchange rate), and the quantity traded as the quantity of $AUS traded. Suppose that the expected future profitability of US businesses improves so that the expected future return earned on owning shares in US businesses increases. The predicted effect would be:
   a) A decrease in the US/AUS exchange rate.
   b) An increase in the US/AUS exchange rate.
   c) A decrease in the supply of $AUS in the US.
   d) An increase in the demand for $AUS in the US.

Q3 The government introduces a price ceiling on the price of a litre of milk. Assume that the price ceiling is less than what the equilibrium price would be if there was no government intervention in the market. We would expect that the effect of the price ceiling would be to:

   a) Decrease the quantity traded of milk.
   b) Cause no change in the equilibrium price of milk.
   c) Increase the total surplus to society in the market for milk.
   d) Increase the well-being of producers, and lower the well-being of consumers.
Q4 Steph Social Planner knows that the PMB for acquiring a university degree is $250 - Q$ (where $Q$ is the total number of persons obtaining a university degree). The SMB is $500 - Q$. Also PMC = SMC = 100. Steph knows that to have the efficient number of persons obtain a university degree it will be necessary to:

a) Set a maximum limit on the number of persons obtaining a university degree equal to 400.
b) Impose a tax of 250 on each individual who obtains a university degree.
c) Provide a subsidy of 250 to each individual who acquires a university degree.
d) Require that at least 150 persons obtain a university degree.

Q5 Daniel’s Deepdish Pizza has costs as follows:

<table>
<thead>
<tr>
<th>Quantity of pizzas per day</th>
<th>FC</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

Daniel knows that – over the range from 1 to 10 pizzas per day – his ATC will:

a) Continuously increase.
b) Continuously decrease.
c) Increase and then decrease.
d) Decrease and then increase.
Q6 Joy’s Superwash Carwash can use two alternative methods of production. The FC and VC of each of these methods are shown below:

<table>
<thead>
<tr>
<th>Output</th>
<th>Method 1 FC</th>
<th>VC</th>
<th>Method 2 FC</th>
<th>VC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>6</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>21</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>28</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>36</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

In the long-run Joy should choose:

a) To only use production method 1  
b) To use production method 1 if output is less than or equal to 4 units, and production method 2 if output is 5 units and above  
c) To use production method 2 if output is less than or equal to 4 units, and production method 1 if output is 5 units and above  
d) To use production method 1 if output is less than or equal to 5 units, and production method 2 if output is 7 units and above

Q7 Mac’s Luxury Boat Co. has to decide on the profit maximising price to charge for its boats, and on whether to operate. Mac knows that demand for his firm’s luxury boats is:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

The MC of making each boat is $1m, and there is a fixed cost of $10m. Mac should decide:

a) To set a price of $4m, and that the business should operate both in the SR and LR.  
b) To set a price of $5m, and that the business should only operate in the SR.  
c) To set a price of $4m, and that the business should only operate in the SR.  
d) To set a price of $5m, and that the business should operate both in the SR and LR.
Q8 The potential market for going to Sam’s City Cinema includes 30 adults each of whom has a willingness to pay of $20, 20 seniors each of whom has a willingness to pay of $15, and 10 children each of whom has a willingness to pay of $10. The FC of supplying the service of watching movies at the cinema is $10, and the MC is $5 for each person who attends the movies. The cinema is able to charge a maximum of two different prices (but not three different prices). The profit maximising set of prices for Sam to choose will be:

a) $15 for seniors, and $20 for adults  
b) $10 for children and seniors, and $20 for adults  
c) $10 for children, and $15 for seniors and adults  
d) $10 for children, seniors and adults.

Q9 Consider the following game table:

<table>
<thead>
<tr>
<th>Player 2</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Player 1</td>
<td>Up</td>
<td>0,10</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>0,5</td>
</tr>
</tbody>
</table>

Which of the following statements is correct?

a) Player 1 has a strict dominant strategy, and player 2 does not have a dominant strategy.  
b) Player 1 has a weak dominant strategy, and player 2 does not have a dominant strategy.  
c) Player 1 does not have a dominant strategy, and player 2 has a strict dominant strategy.  
d) Player 1 does not have a dominant strategy, and player 2 has a weak dominant strategy.

Q10 Consider the following game table which describes a simultaneous game where two banks must decide whether to change their interest rates charged for home loans:

<table>
<thead>
<tr>
<th></th>
<th>SouthPac</th>
<th>OzBank</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase</td>
<td>Don’t change</td>
<td>Decrease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>10,10</td>
<td>5,10</td>
<td>0,15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t change</td>
<td>10,5</td>
<td>5,5</td>
<td>10,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease</td>
<td>15,0</td>
<td>5,10</td>
<td>-5,-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What are the set of Nash equilibria for this game? (In each strategy combination the strategy for OzBank is listed first.)

a) (Increase; Increase), (Don’t change; Don’t change), (Decrease; Decrease)  
b) (Increase; Don’t change), (Don’t change; Decrease)  
c) (Decrease; Don’t change), (Don’t change; Decrease)  
d) (Increase; Decrease), (Decrease; Increase)
SECTION B

ANSWER ALL QUESTIONS IN THIS SECTION

This section is worth 25% of the total exam marks.
All questions in this section are worth the same number of marks.
For each of the following questions:
Consider the statements made by Alan Accountant and Edwina Economist. Say whether you believe each statement is correct or incorrect. Briefly explain your answer. Note that most of the marks will be given for your explanation.

Question B1

Alan Accountant and Edwina Economist are discussing the government’s recent decision to stop paying subsidies to home-owners who buy solar panels to provide a source of power to their homes. Alan says: ‘This change in policy will not have a big effect. Because supply of solar panels is price-elastic, therefore removing the subsidy only causes a small decrease in the quantity of panels sold.’ Edwina disagrees. She says: ‘The fact that supply is price-elastic means that the change in policy will cause a relatively large decrease in the quantity of panels sold.’

Question B2

Alan Accountant and Edwina Economist are advising their friend Mardi Manager on operating her business. Mardi sells ice-creams, and because of their distinctive flavours, the business has a high degree of market power. Mardi is trying to decide whether to increase her daily sales as a way of earning higher profits. Alan says: ‘Mardi can produce the extra ice-creams at the same marginal cost as the ice-creams she is already producing. Hence she will definitely earn higher profits by increasing her sales.’ Edwina disagrees. She says: ‘That Mardi has a constant marginal cost of supply does mean that her ATC will decrease when she sells more. But we would need more information to know that her profits would increase when she sells more ice-cream.’

Question B3

Alan Accountant and Edwina Economist are advising their friend Gerry Gameplayer who is going to play in the World Championship of ‘Scissors, Paper, Rock’. Gerry will be playing a sequence of games against each opponent in the contest. Edwina Economist says: ‘My advice is to choose randomly between the three strategies in each game you play.’ Alan Accountant disagrees. He says: ‘If you choose randomly you will only have a one-third chance of winning each game. But I have a better strategy. Noone ever makes the same choice two games in a row. So I advise you in each game to choose the best response to one of the two strategies that your opponent did not choose in the last game. That way you will always have at least a one-half chance of winning each game.’
ANSWER ALL QUESTIONS IN THIS SECTION

This section is worth 50% of the total exam marks.

**Question C1 (15% of total marks)**

In the market for bananas in Australia demand for and supply of bananas are as follows:

\[ QD = 12,000 - 6000P \]
\[ QS = 2,000 + 4000P \]

(where \( QD \) = Kilograms of bananas demanded by Australian consumers, \( QS \) = Kilograms of bananas supplied by Australian suppliers, and \( P \) = price (in dollars) per kilogram of bananas).

a) (2 marks) What will be the equilibrium price per kilogram of bananas and total kilograms of bananas traded?

Suppose now that Australian consumers can buy bananas from international suppliers at a price of 50 cents per banana.

b) (5 marks) What will be the effect of introducing the possibility of buying bananas from international suppliers on:

i) The equilibrium price of bananas in Australia?

ii) The total quantity of bananas supplied by Australian suppliers?

iii) The total quantity demanded by Australian consumers?

iv) The quantity of bananas imported?

Now suppose that there is a cyclone that adversely affects supply of bananas by Australian suppliers. The supply becomes:

\[ QS = -3,000 + 4000P \]

c) (2 marks) In the case where there is no international trade, what will be the effect on the equilibrium price per kilogram of bananas and total kilograms of bananas traded?

d) (3 marks) In the case where international trade is allowed (still at the price of 50 cents per kilogram of bananas) is there any effect on the equilibrium price of bananas? What about on the total quantity demanded by Australian consumers, and total quantity supplied by Australian suppliers?

e) (3 marks) Will the effect of the cyclone on the well-being of Australian consumers be worse where there is international trade or no international trade? What about the effect on the overall well-being of society in Australia?
Question C2 (20% of total marks)

Part A (10 marks)

‘Many Victorian private schools will raise their fees by more than four times the rate of inflation with principals claiming that a boost to government teacher salaries has forced independent schools to play catch-up [with their own teachers’ salaries]. The average fee increase at private schools was about 5 per cent, compared to 8 per cent last year, with the impact of the economic downturn tempering fee rises.’


Use the model of a profit-maximising firm with market power to explain why private schools would want to increase school fees in response to an increase in teacher salaries.

Part B (10 marks)

Stanley has begun planning for selling hamburgers at the 2012 Grand Final. He thinks that there are two types of consumers, StKilda fans who are willing to pay $5 for a hamburger, and Collingwood fans who are willing to pay $3. The MC of making a hamburger is $2. At the same time, Theonie, who is planning to sell Pepsi and chips at the Grand Final, suggests to Stanley that they should form a partnership. Preferences of StKilda and Collingwood fans for these items are described in the table below. There are 200 StKilda fans and 50 Collingwood fans who are potential customers. Pepsi costs $1 for Theonie to obtain, and hot chips cost her $1 to make.

<table>
<thead>
<tr>
<th></th>
<th>Hamburger</th>
<th>Pepsi</th>
<th>Hot chips</th>
</tr>
</thead>
<tbody>
<tr>
<td>StKilda fans</td>
<td>$5</td>
<td>$3</td>
<td>$2</td>
</tr>
<tr>
<td>Collingwood fans</td>
<td>$3</td>
<td>$2</td>
<td>$3</td>
</tr>
</tbody>
</table>

a)(5 marks) Suppose Stanley and Theonie were to sell hamburgers, Pepsi and hot chips as separate items. What would be the profit maximising price to charge for each item?

b) (5 marks) Could Stanley and Theonie choose to bundle just two items and make higher profits? What explains this result?
Question C3 (15% of total marks)

Part A (7 marks)

‘To spruik or not to spruik, that is the question…The spruikers of Carlton’s Little Italy have long been considered a blight by many Melburnians, and recently the restaurant owners who employ them have come to think they might have a point…So on Tuesday afternoon the owners of eight Italian restaurants on the eastern side of Lygon street…met to discuss what to do about a practice that is both a tradition and a millstone. The informal gathering decided unanimously to put an end to spruiking. But by yesterday afternoon, one restaurant, Sale e Pepe, was back on the street, selling its own merits.’


[Note: A spruiker is a person who stands outside a restaurant and advertises for customers.]

Suppose that there are two restaurants in Lygon Street. On each day they operate they must each make a choice between ‘Spruik’ or ‘Not spruik’. Neither restaurant observes the choice made by the other restaurant prior to making its own choice.

a) (3 marks) Draw a game table showing this game including payoffs so that it is a strict dominant strategy for each restaurant to choose to ‘Spruik’.

b) (2 marks) Suppose the restaurants planned to be in operation for two days. (So that they therefore need to play the game you have shown for part (a) twice.) Is it possible that this would lead to a different outcome on either day?

c) (2 marks) Suppose the restaurants think it is possible they will be operating indefinitely. Why might it be an equilibrium of the ‘infinitely repeated’ version of this game that each restaurant would choose to ‘Spruik’ on every day it operates?

Part B (8 marks)

In the Envelope game there are 2 players and 2 envelopes. One of the envelopes is marked ‘player 1’ and the other is marked ‘player 2’. At the beginning of the game, each envelope contains $1. The game has three stages. In the first stage player 1 must decide whether to ‘Stop’ or ‘Continue’. If he chooses ‘Stop’ then each player receives the money in their own envelope and the game stops. If he chooses ‘Continue’ then the $1 is removed from his envelope, and $2 is added to player 2’s envelope. In the second stage, player 2 must continue whether to ‘Stop’ or ‘Continue’. If she chooses ‘Stop’ then each player receives the money in their own envelope and the game stops. If she chooses ‘Continue’ then $1 is removed from her envelope, and $2 is added to player 1’s envelope. In the third stage, player 1 must again decide whether to ‘Stop’ or ‘Continue’. If he chooses ‘Stop’ then each player receives the money in their own envelope and the game stops. If she chooses ‘Continue’ then $1 is removed from her envelope, and $2 is added to player 2’s envelope. After this the game ends.

a) (4 marks) Draw the game tree that represents the Envelope game.

b) (4 marks) What is the rollback equilibrium of the game?

End of Examination
Appendix 7

University of Melbourne
Faculty of Business and Economics

Code of Conduct – Lectures

Lectures are a core element of teaching and learning in the Faculty of Business and Economics. They provide a forum in which your lecturer can guide you through technical content and scholarly perspectives on the subject material. Lectures also enable you to structure your learning of a subject.

Success in the Faculty of Business and Economics is strongly related to engagement with lectures and tutorials. Engagement means being well-prepared for classes, regularly attending lectures and tutorials, and participating whenever there is an opportunity for active learning.

This Code of Conduct for Lectures has been prepared in response to the demand by students for an environment where their learning experience in lectures is not disrupted by the behaviour of other students.

What can you expect of us?
All staff conducting lectures in the Faculty of Business and Economics undertake to:
• Deliver thoroughly prepared and well-structured lectures.
• Be responsive to your learning needs.
• Commence lectures on time.
• Attend all lectures and notify you of any changes in the timetable.
• Ensure that the appropriate lecture materials and associated learning resources are available throughout the semester.

What do we expect of you?
• Be attentive to the lecturer.
• Do not talk during the lecture. Lecture theatres are designed with very effective acoustics. Even if you sit in the back row and whisper your conversation will detected as noise by the lecturer and by many of your fellow students in the theatre. If you require clarification of a point or want a point you missed repeated please ask your lecturer. More complex queries should be addressed to your lecturer immediately after the lecture, or in the lecturer’s consultation time.
• Arrive on time and stay for the full lecture. Lectures commence 5 minutes after the scheduled start time and finish 5 minutes prior to scheduled finish time. If you do find yourself arriving late or needing to leave early please sit at the end of an aisle towards an exit door.
• Turn mobile phones off. This removes a potential source of disruption for other students, and will mean you can avoid the temptation to receive and send text messages during the lecture.
• Bring required materials to the lecture.

We appreciate your cooperation in ensuring a productive learning environment.