## edexcel

Mark Scheme (Results)
Summer 2014

Pearson Edexcel GCE
in Economics (6EC03) Paper 01

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

If the key is incorrect then the maximum explanation mark is 2 , i.e. $0+2=2$

## Knockout marks (or rejection marks):

Candidates can be awarded up to 2 marks, 1 per point, for knocking out incorrect answers. This only counts if they have given a valid economic reason to go with their answer, where they have added value to the question.
E.g. for question 1, explaining it's not horizontal integration because that is where you merge/takeover a firm at the same stage in the production process/industry.
Candidates can also receive knockout marks without explicitly selecting a letter, if it's a clear reference is made to a key.

| Question <br> Number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{1}$ | Correct option B (1 mark) <br> Vertical - at a different stage of the same industry or <br> process of production or same final product (1) <br> Backwards - it is previous/earlier/towards raw <br> materials/away from consumer (1) <br> Reasons or benefits of merger (1+1) e.g. rationalisation <br> Application to the dairy industry (1) e.g. Proper Welsh is <br> a primary industry. Only award the application marks if <br> relevant to backward integration. | (4) |
| Knock out examples <br> It cannot be D because conglomerate integration <br> involves merging with a firm in a different industry <br> It cannot be C because forward integration is towards <br> the consumer |  |  |


| Question <br> Number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{2}$ | Correct option E (1 mark) <br> Definition profit satisficing (making enough profit to <br> keep shareholders happy/sufficient/just <br> enough/target/fixed amount) (1) <br> Reasoning, e.g. they may have other objectives (1) <br> It may mean long run profit maximisation (1) <br> Reason why this occurs e.g. divorce of ownership from <br> control, principal agent problem (1) | (4) |
| Diagram to illustrate minimum profit as range of output <br> levels (1) | Application - people may be shareholders for other <br> reasons than profit e.g. winning matches, attendance <br> at matches, brand development (1 + 1) | Example of knock out: <br> It's not C as profit maximising is where MC=MR <br> It's not A as low dividends are likely to make share <br> prices fall (or other logical reasons why share prices <br> change) |


| Question <br> number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{3}$ | Correct option B (1mark) <br> Definition profit satisficing (making enough profit to keep <br> shareholders happy/sufficient/just enough/target/fixed <br> amount) (1) <br> Reasoning, e.g. they may have other objectives (1) <br> It may mean long run profit maximisation (1) <br> Reason why this occurs e.g. divorce of ownership from <br> control, principal agent problem (1) | (4) |
| Diagram to illustrate minimum profit as range of output <br> levels (1) | Application - people may be shareholders for other <br> reasons than profit e.g. winning matches, attendance at <br> matches, brand development (1 + 1) <br> Example of knock out: <br> It's not C as profit maximising is where MC=MR <br> It's not A as low dividends are likely to make share <br> prices fall (or other logical reasons why share prices <br> change) |  |


| Question Number | Answer |  |  |  |  |  | Mark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Correct Option D ( 1 mark) |  |  |  |  |  | (4) |
|  | Output per week | Total revenue (£millions) | Average revenue (£millions) | Total cost (£millions) | Average cost (£millions) | Marginal cost <br> (£millions) |  |
|  | 0 | 0 | - | 10 | - | - |  |
|  | 1 | 40 | 40 | 25 | 25 | 15 |  |
|  | 2 | 60 | 30 | 34 | 17 | 9 |  |
|  | 3 | 78 | 26 | 52 | 17.3 | 18 |  |
|  | 4 | 96 | 24 | 96 | 24 | 44 |  |
|  | 5 | 105 | 21 | 150 | 30 | 54 |  |
|  | Definition sales maximisation $A C=A R$ or $T C=T R$; or selling as much as you can without making a loss (1) <br> Identification that at sales maximisation there are normal profits or no supernormal profits/loss (1) <br> Filling in columns with correct AR, TC, AC, TR-TC or total profit ( 1 mark for each correct column up to 4 units is <br> sufficient): ( $1+1+1$ ) <br> Diagram showing AC=AR (1) <br> Output is at $£ 96$ million TR/TC or $£ 24$ million AR/AC (1) |  |  |  |  |  |  |


| Question <br> Number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{5}$ | Correct Option D (1 mark) <br> Definition of oligopoly e.g. a few firms dominate the <br> market (1) <br> Supermarkets are interdependent (1) <br> Other firms will follow if prices are cut (1) <br> Firms will not follow if prices rise or other asymmetric <br> reaction comments (1) | (4) |
|  | Diagram showing a kinked demand curve with <br> annotation or explanation of inelastic section for <br> downward moving prices or elastic section for upward <br> moving prices (1 +1) - Note kinked demand curve is not <br> required <br> Pay off matrix correctly showing that the firm will not <br> change prices (1 + 1) <br> Application - bread is regularly purchased and therefore <br> easy to spot price changes (1) or often a loss leader (1) <br> Example of a knock out: <br> It's not C as if it is tacit collusion it has not been <br> controlled by the regulator/competition authorities <br> It's not D because supermarkets use non price <br> competition <br> such as loyalty cards and customer service schemes |  |


| Question <br> Number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{6}$ | Correction Option C (1Mark) <br> Definition of contestability e.g. no/low barriers to entry <br> or exit or no sunk costs (1). May be implicit. <br> Reasons why barriers to entry might rise (or reduced exit <br> options) (1 + 1 + 1) e.g. economies of scale, power to <br> advertise, giving firms monopoly power to limit <br> competition or raise prices. The reasons must be linked <br> to contestability not competitiveness. <br> Role of the regulator, e.g. protect consumer <br> interest/welfare (1) <br> Identification that it is horizontal integration (1) | (4) |
| Example of knock out: <br> It's not D because the market size could get bigger or <br> smaller <br> It's not B because consumer surplus is likely to fall if <br> prices rise |  |  |


| Question <br> Number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{7}$ | Correction Option B <br> Definition of allocative efficiency, e.g. the price is equal <br> to the marginal cost (AR=MC or P=MC) (1) <br> Explanation of monopoly - single firm dominates or <br> 25\% + market share (1) <br> Explanation that the price has been set at a point that <br> maximises (consumer/producer) welfare (1); <br> Monopoly may do this as marginal cost pricing has been <br> imposed by the government (1) <br> Annotation of diagram showing consumer/producer <br> welfare(1) | (4) |
| Example of knock outs (can also come from annotating <br> the diagram) <br> It's not C because M is not at the lowest point of AC <br> It's not D because this is revenue maximisation (or the <br> area KLMN represents SNP for a revenue maximising <br> firm) <br> It's not D as shown by a correctly annotated profit <br> maximising area on their diagram (connecting AR and <br> AC at output T - this will involve a new horizontal line <br> meeting the AC curve) |  |  |


| Question <br> Number | Answer | Mark |
| :--- | :--- | :--- |
| $\mathbf{8}$ | Correction Option A <br> Meaning of PFI: major <br> infrastructure/buildings/project/large scale contracts are <br> issued by governments to private firms (1) <br> It is then leased or rented to the public sector (1) <br> over 25-30 years (1) <br> Benefits to the government e.g. - it does not have to <br> borrow this year (off the balance sheet), can spend on <br> current demands, useful in times of fiscal austerity, <br> makes efficient use of specialists, reduces risk for <br> government, leads to more immediate public services, <br> creates competition at point of tendering, "the <br> government's credit card"(1 + 1+ 1) | (4) |
| Costs to the government e.g. - leading to higher overall <br> costs in the long run (1) - these may be incorporated <br> within knock out marks | Application to hospitals, e.g. more specialist hospitals or <br> more up to date technology, better quality service(1) |  |

## Question 9 The chewing gum market

| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 9a | Theory (2): Oligopoly (1) where a few firms dominate the market, or similar explanation (1) <br> OR Monopoly (1) where one firm dominates the market/one firm with more than $25 \%$ market share (legal definition) <br> Application (2): <br> 2 firm concentration ratio of 61\% (2) <br> 3 firm CR of 75\% (2) <br> 4 firm CR 81\% (2) <br> 5 firm CR 83\% (2) <br> Other application $(1+1)$ e.g. - Wrigley has $35 \%$ market share or Cadbury's has $26 \%$ (1) which is greater than the $25 \%$ legal minimum (1) other evidence of oligopoly behaviour e.g. strong brand names, collusive behaviour, barriers to entry, high sunk cost, high cost of research (1) <br> Reserve one application mark for use of Figure 1 | (4) |
| 9b | KAA 4 (may or may not include a definition mark) Definition (1): A patent is a legal protection of a design idea or process (1) or, a kind of copyright (1) <br> Benefits of patents $(2+2$ or $3+1)$ might include: For firms: <br> - Helps to develop a competitive advantage via a unique feature <br> - Provides a source of monopoly power <br> - Barriers to entry <br> - Give firms short/medium term abnormal profits <br> - Enables firms to develop into new market <br> Benefits to economy as a whole: <br> - Encourage Research and Development <br> - Existing firms can take risks with new idea <br> - New ideas from universities will have practical uses <br> - Innovation is encouraged e.g. dynamic efficiency <br> - Macro benefits, e.g. multiplier effects <br> - Investment in research in turn in the long run may benefit society as a whole e.g. cancer <br> - External benefits e.g. less passive smoking <br> Benefits to other stakeholders: <br> - Government benefits e.g. reduced costs of cleaning pavements <br> - Consumer benefits e.g. more choice \& improved quality | (8) |


| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 9b | KAA 4 (may or may not include a definition mark) <br> Definition (1): A patent is a legal protection of a design idea or process (1) or, a kind of copyright (1) <br> Benefits of patents $(2+2$ or $3+1)$ might include: For firms: <br> - Helps to develop a competitive advantage via a unique feature <br> - Provides a source of monopoly power <br> - Barriers to entry <br> - Give firms short/medium term abnormal profits <br> - Enables firms to develop into new market <br> Benefits to economy as a whole: <br> - Encourage Research and Development <br> - Existing firms can take risks with new idea <br> - New ideas from universities will have practical uses <br> - Innovation is encouraged e.g. dynamic efficiency <br> - Macro benefits, e.g. multiplier effects <br> - Investment in research in turn in the long run may benefit society as a whole e.g. cancer <br> - External benefits e.g. less passive smoking <br> Benefits to other stakeholders: <br> - Government benefits e.g. reduced costs of cleaning pavements <br> - Consumer benefits e.g. more choice \& improved quality <br> CAP 3 KAA if only one benefit of patents <br> Evaluation ( $2+2$ or $3+1$ or $4+0$ ): <br> - Patents allow supernormal profits to be made (question of fairness), <br> - Patents stifle competition or innovation by others; <br> - Alternatives to patents might be considered, e.g. subsidies to university research <br> - Crowding out of other innovation <br> - Leading to higher prices or reduced choice <br> - Disadvantages of monopoly <br> - May cause x-inefficiency <br> - Other problems of patents e.g. - cost to achieve, only held for a limited time, not fair to firms who | (8) |


| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 9c | Reserve 2 marks for diagram: <br> Shift showing increasing costs (e.g. legal costs) or falling/insufficient demand (1) and loss area/smaller profit connected with MC=MR (1) <br> Reasons might include ( $2+2$ or $3+1$ ): <br> - Nicotine gum manufacturers are acting in a threatening way (game theory might be used to develop this argument) <br> - Too many competitors for the firm to make supernormal profits <br> - Huge costs of operating in US relative to other countries, and other set up costs, e.g. $£ 500000$ annual cost base in US <br> - It has reached shut down point or not making enough profit <br> - It does not expect demand to grow sufficiently in the future <br> - Demand was not as high as expected. 'Gum market is shrinking' in Extract 2 <br> - Challenge to patent <br> - Nicotine firms might be cross-subsidising in the US, or similar comments on the confectionery market being directly affected by the nicotine market problems <br> - Other things are not equal <br> - Lack of commercial opportunities in US <br> - Better opportunities elsewhere <br> Evaluation 6 marks: ( $3 \times 2$ marks or $2 \times 3$ marks). Points might include: <br> - Not enough information to say as insufficient data provided <br> - Other markets might be more profitable, e.g. Ireland/EU <br> - New products find the US more difficult than other countries to break into - higher marketing barriers <br> - Use of game theory might show how new entrants are deterred <br> - Cost and revenue factors work together to magnify the impact, or other weighing together of the factors <br> - Depends on the degree to which they can cross subsidise losses in the US, the amount of retained profits within Revolymer <br> - In the LR the situation may improve e.gworking with commercialisation partners as in Canada - extract2 line 10 <br> - Comment on the $£ 360000$ cost of closing down. It might have been better to stay in the US. <br> - Prioritisation of the reasons with justification |  |


| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 9d | Award up to 4 strategies ( $4 \times 2$ marks), or ( $3+3+2$ ) or (2x4 marks) <br> Strategies might include: <br> - Pricing policies (may count as more than one strategy): predatory, limit pricing, sales max <br> - Non- pricing strategies, e.g. heavy marketing (may count as more than one strategy) <br> - Cross subsidisation <br> - Existing firms might cut own costs <br> - Collusion <br> - New ideas might be developed to create barriers to entry <br> - Other barriers to entry discussion <br> - Merger \& acquisition activity is likely e.g. new entrants being bought up <br> - Challenge legal patents that have been awarded <br> Award appropriate use of game theory to develop a point <br> KAA CAP 6/8 if no reference to chewing gum manufacturers <br> Evaluation 8 marks ( $4 \times 2$ marks), or ( $3+3+2$ marks) or (2x4 marks): <br> - There might not be a reaction - very small firm, already failing in US, niche market <br> - Other magnitude points, e.g. size of profits of existing firms might mean that new entrants cannot compete in marketing <br> - US market is unlike Europe market. Might be more room for growth in Europe or elsewhere. <br> - Depends on whether we are in recession or growth (is the product a luxury?) <br> - Discussion involving game theory can earn evaluation marks, e.g. the behaviour depends on the size of the payoffs <br> - Size of fines, and magnitude of other legal powers <br> - Critical judgement of strategies set out under KAA <br> - Prioritisation with justification | 16 |

Question 10 Camera retailing

| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 10a | Theory (2) - <br> Price (AR) is less than or equal to AVC OR Price (AR) is less than or equal to AC (long run) - (1) OR TR is less than or equal to TVC (1) <br> Explanation of the above. For example the firm is: <br> - Making less than normal profit (1) <br> - Making a loss which exceeds the VC (1) or making a loss (1) <br> - Not making a contribution (1) <br> - Able to make a smaller loss if it discontinued production (1) <br> - Not covering its day to day costs/running costs/ working capital (1) i.e. an implicit understanding of variable costs, which might be achieved using application <br> A diagram showing price below AVC (1) with loss area shown (1) or other explanation using a valid diagram. Note that the diagram marks are part of the theory. <br> Application (2): Jessops was making a loss of $£ 12$ million (1) despite revenues of $£ 304.6$ million (1) Since $£ 12$ million is greater than the fixed costs ( $£ 8$ million) so the firm is losing $£ 4$ million on variable costs alone ( $1+1$ ) <br> Example of variable costs: Jessops is not even covering the costs of its cameras (1) <br> Example of fixed costs: Jessops is not covering rent (1) | (4) |


| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 10b | KAA 4 marks. Reserve 2 marks for diagram. <br> 2 marks <br> For answers which discuss two difference revenue or costs changes allow up to 4 marks. The answers must be developed in different ways. <br> Diagram 2 marks.: <br> 1 mark for shift (AR and MR shift, or AC shift (Costs had risen ( $\mathrm{n} . \mathrm{b}$. fixed costs must be related to data, and no shift in MC)), 1 mark for loss area correctly linked to $M C=M R$, and cost and revenue curves. <br> Reasons for loss ( 2 marks: $1+1$ or $2+0$ ) might include: <br> - Rising costs, with application <br> - Falling demand for cameras as a whole, with application <br> - Increased competition for cameras meaning smaller market power for each firm <br> - Consumers buying on the Internet <br> - Cameras in mobile phones <br> Evaluation 4 marks: $(2+2$ or $3+1$ or $4+0)$ <br> - Both demand and cost shifts can be shown to magnify the impact <br> - Jones might be over-optimistic about end of recession - losses may continue <br> - Jones is going to cut costs and increase demand - profits will occur in future, but is temporarily suffering losses <br> - Depends on ability of Jones to reduce future losses <br> - Difficult to know - need more information about causes of loss, e.g. how other firms have got on, e.g. London Camera Exchange <br> - Camera phones are not a good substitute for all buyers <br> - A $£ 12$ million loss is very small in comparison to a $£ 304.6$ million revenue <br> - It is a combined effect, compounded by another factor | (8) |


| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 10c | KAA 6 marks Allow up to ( $2 \times 3$ marks) or ( $3 \times 2$ marks) or Diagram (2) plus ( $2+2$ ) or ( $3+1$ ) <br> Answer may relate to price discrimination within Jessops or between firms within any retailing market. <br> Allow 1 mark for clear explanation of price discrimination (selling the same product at different prices) (1) <br> Diagram marks (up to 2 marks) <br> - Inelastic AR or D linked to high price and/ or elastic linked to low price (1) (can be shown through gradient of AR or D) <br> - Profit maximisation output and prices extrapolated from whole firm diagram (1) <br> Reasons why price discrimination is possible: <br> Discussion of fulfilment of conditions for price discrimination: <br> - Different price elasticity of demand, e.g. higher PED online as more competition <br> - Monopoly power. Consideration of the branding within the market, and the ability to retain customers even when prices are raised. The appeal of Jones himself might be considered as a marketing tool. <br> - Separation of the market, e.g. people want to try the product and receive advice in a shop, and online there is a time delay before the goods are received <br> - Low costs of preventing arbitrage, or similar. For people shopping in store they may or may not be prepared to go home and buy the product online. Also can consider the risks or other costs of buying on the internet. <br> Award application: as part of these conditions (up to a maximum of 3 marks for each condition overall), e.g. <br> - Jessops sells accessories at higher prices in the high street stores but the cameras are very similar prices. <br> - Online prices are lower so people are transferring to the online market. <br> - High street stores are closing for this reason <br> - Jones's comments on trying the cameras in the shop, the Apple-ish model, etc. <br> - Jones does not intend to price discriminate on the major lines, but instead have very similar prices to online. He plans to make the money on accessories | (12) |


|  | Evaluation: 6 ( $2 \times 3$ marks or $3 \times 2$ marks) <br> $\bullet$ <br> Discussion of whether price discrimination is in fact <br> possible as a strategy, e.g. in the long term <br> arbitrage will become easy |  |
| :--- | :--- | :--- |
| -It's product discrimination not price discrimination <br> because costs in each market are different <br> - It's product discrimination not price discrimination <br> because 'Try before you buy' and other advice in the <br> shop means that the product in the shop is not the <br> same as the one online (or similar application <br> points) |  |  |
| -Changes in the economic cycle will affect PED, and <br> other determinants of PED |  |  |
| - Jones is willing to stake $£ 4$ million that discrimination |  |  |
| is possible |  |  |
| -Depends on the season, e.g. Christmas, and the PED <br> Depends on other factors, such as ability to park, <br> availability of other retail outlets nearby, as to the <br> willingness of face-to-face shoppers to spend. <br> - Depends on actions of competitors e.g. click and <br> collect <br> - Other criticisms of price discrimination, e.g. it can be <br> illegal in some cases, and might be investigated by <br> the competition authorities |  |  |


| Question Number | Answer | Mark |
| :---: | :---: | :---: |
| 10d | Award up to 4 strategies ( $4 \times 2$ marks), or ( $3+3+2$ marks) or ( $2 \times 4$ marks) <br> Any comments regarding price discrimination are NOT permitted <br> Strategies MUST be linked to profit. These might include: <br> - Pricing policies (may count as more than one strategy): predatory, limit pricing, cost-plus, BOGOF if linked to profit <br> - Non-pricing strategies (may count as more than one strategy) e.g. heavy marketing, loyalty cards, good sales information, after sales service, friendly, photo albums, posters whilst you wait <br> - Existing firms might cut own costs <br> - New ideas might be developed to create barriers to entry <br> - Other barriers to entry discussion <br> - M\&A activity is likely for new entrants being bought up <br> - BOGOF (allowed if not used as a pricing strategy) <br> Award appropriate use of game theory to develop a point <br> KAA CAP 6/8 if no reference to high street retailers <br> Evaluation 8 marks ( $4 \times 2$ marks), or ( $3+3+2$ marks) or (2x4 marks): <br> - It might not be possible to make profits - odds are stacked against high street stores as their costs are higher <br> - Magnitude issues, e.g. size of cuts in number of stores by Jones is a significant shift in fixed costs <br> - Depends on whether we are in recession or growth (camera is luxury, large part of income, YED issues etc) <br> - Discussion involving game theory can earn evaluation marks, e.g. the behaviour depends on the size of the payoffs <br> - Depends on the actions of other firms (game theory might be used) <br> - Some practices are illegal e.g. predatory pricing <br> - Cost of policies, e.g. advertising <br> - The high street retailer can adapt to also become an online retailer <br> - Critical judgement of strategies set out under KAA <br> - Prioritisation with justification | (16) |

