

# Economics

## Timezone 1

*To protect the integrity of the examinations, increasing use is being made of time zone variants of examination papers. By using variants of the same examination paper candidates in one part of the world will not always be taking the same examination paper as candidates in other parts of the world. A rigorous process is applied to ensure that the papers are comparable in terms of difficulty and syllabus coverage, and measures are taken to guarantee that the same grading standards are applied to candidates' scripts for the different versions of the examination papers. For the May 2023 examination session, the IB has produced time zone variants of Economics HL and SL Paper 1.*

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## Grade boundaries

### Higher level overall

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 12	13 - 25	26 - 34	35 - 46	47 - 60	61 - 72	73 - 100

### Standard level overall

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 10	11 - 23	24 - 38	39 - 50	51 - 61	62 - 73	74 - 100

### Higher level / standard level internal assessment

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 6	7 - 12	13 - 20	21 - 25	26 - 31	32 - 36	37 - 45

### Higher level paper one

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 3	4 - 6	7 - 8	9 - 11	12 - 14	15 - 17	18 - 25

### Standard level paper one

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 2	3 - 5	6 - 9	10 - 12	13 - 14	15 - 17	18 - 25

### Higher level paper two

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 5	6 - 11	12 - 13	14 - 18	19 - 24	25 - 29	30 - 40

### Standard level paper two

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 40

### Higher level paper three

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 6	7 - 13	14 - 18	19 - 25	26 - 32	33 - 39	40 - 58

## Higher/Standard level internal assessment

### The range and suitability of the work submitted

The vast majority of centres had embraced the new IB Economics syllabus and IA criteria, first examined in 2022. The majority of candidates assessed had completed 3 commentaries and addressed three different syllabus areas using three different sources. The choice of articles was usually suitable, although some were too short and contained insufficient information for the writing of a comprehensive commentary. Some articles were studies or opinions and these are not actually news items so they are not the best choice. Some candidates seemed to have searched for other articles related to the selected article to write their commentaries on and then used the extra information to write their analyses and evaluations, which again is not appropriate or the intention of the IB. The IA is not a research assignment; marks cannot be awarded for any work using additional resources. There was a wide range of ability seen.

The three rubric requirements were nearly always adhered to, which was very pleasing. The maximum time lapse allowed between the date the source article was published and the writing of the commentary is one year and this was occasionally not applied. Also, occasionally the same source for the chosen article was used more than once.

Highlighting of long articles was variable and a few centres highlighted short articles, which is unnecessary. Also, the amount of highlighting varied; a few words or sentences is not effective at all, so full sentences and paragraphs relevant to the commentary should be highlighted if the article is long.

### Candidate performance against each criterion

#### Criterion A: Diagrams

Most candidates included at least one relevant diagram, although these were fairly often not well explained or just generic. Some candidates used an excessive number of diagrams, often some of these irrelevant or unsupported which does not make up for limited explanations. Occasionally diagrams had been copied from textbooks or websites and labelling of axes and application was purely generic and theoretical. It is preferable that candidates produce their own diagrams, either by hand or using computer skills. Neatly hand drawn diagrams are very much preferable to copied ones. Although this criterion does say 'diagrams' in the plural, students are able to gain full marks if they use only one diagram. However, where the article lends itself to more than one diagram it was usually the case that students did not attain full marks for this criterion if they only included one. Also graphs that have been adapted to the article using the correct product and actual prices (if known) were more likely to gain full marks than generic labelling.

#### Criterion B: Terminology

Appropriate terminology for the chosen article was used by the majority of candidates but was not always used consistently or correctly with understanding throughout the whole commentary. There was sometimes incorrect terminology used too, such as devaluation instead of depreciation. Some students avidly defined every single term they used and referenced the definitions with footnotes or the author of the text in brackets, which is unnecessary. If precise definitions are cited, they must be in quotation marks and referenced as to the source. However, this is really not necessary as there is no mention of the word 'definition' in this criterion's descriptors. The aim of this criterion is an implication that the student understands the terminology used in relation to the chosen article. Some students used far too many

acronyms, often ones not recognized by the IB syllabus and sometimes the full words were never given or explained. The majority of candidates did use appropriate terminology so it was rare to see 0 marks awarded for this criterion.

### Criterion C: Application and analysis

The application of relevant economic theories and concepts usually was satisfactory, and this mostly gained 1 mark out of the 3 possible marks for this criterion. However, now application and analysis are addressed in one criterion, rather than two as in the old syllabus, some attempt at analysis is needed to attain a higher mark. Analyses, when attempted, were sometimes very limited and mostly descriptive of the article. More commonly an analysis was attempted but it was just theoretically correct and lacked connection with the article, sometimes more like an essay on the theory, which gained 2 marks. To attain the full 3 marks for this criterion candidates had to apply and analyse the theory effectively based upon the chosen article and this was seen in the higher attaining students reasonably often.

### Criterion D: Key concept

This criterion addresses the new element of the IB Economics syllabus. Most students were aware of the key concepts, although there were a few examples of concepts chosen which were not one of the nine key concepts selected for the IB syllabus and as such these could not be rewarded. The explanation of the links between the chosen key concept and the article varied greatly and this was rewarded by marks ranging from 0 to 3. Where the key concept was only given on the coversheet, but never referred to in the commentary, a mark of 0 was awarded. Occasionally the key concept was explained incorrectly, such as 'sustainability', or used in a non-economic way, such as 'change', and again low or no marks were awarded in these cases. However, a full explanation of the link of the key concept to the chosen article was able to attain the full 3 marks. Some candidates chose the same key concept more than once and for the second one this was awarded 0 marks in this criterion.

### Criterion E: Evaluation

The mark range for this criterion was reduced from 4 marks in the old syllabus to 3 marks and it was good to see that quite a number of the higher attaining students did have balance and effectiveness in their evaluations. It was also very pleasing to see that most students did attempt to evaluate, although quite frequently this was limited, unsupported, theoretical or just copied from what had been written in the article. Quite a few candidates had researched other related articles and used these for their evaluations, but they could not achieve top marks as the commentary must be written on the article selected. Some articles selected had already been analysed and evaluated, so the students did not actually synthesize their own analysis to evaluate and thus they could not attain top marks. Many just described what was happening and thus the evaluation was more like a conclusion. Too many students used their own opinions as an evaluation, but this was frequently unsupported. Sometimes students give their own personal opinion as to the suitability of policies, but without support from the article these can not be rewarded. Too often students thought they should offer suggestions as to policies a government should use when the article was about a 'problem' or suggest alternatives when they were actually not mentioned at all in the article or they were inappropriate for the article content, and again these tended to receive low marks.

### Criterion F: Rubric requirements

With the new syllabus there are now only three rubric requirements and these were usually adhered to. The three requirements being that the article chosen must not be older than 1 year when the commentary

is written, the source of each chosen article must be different for each of the three commentaries and each article and commentary must address a different section of the syllabus. The word limit is now 800 words and any words written above this number are not penalized in Criterion F, but the examiner does not read beyond 800 words. Also, incomplete or missing articles are not penalized in Criterion F, but the examiner marks on the part of the article sent, or if no article, then the title of the article. Both these problems were seen by examiners, but not very frequently.

## Recommendations and guidance for the teaching of future candidates

For the teaching of future candidates, it is recommended that the students take at least 6-9 months to complete the portfolio of 3 commentaries, if not longer. The Internal Assessment (IA) is an integral part of the IB course and should not be seen as a set of assignments to complete at the end, which it was by some candidates. It is recommended that each assignment should be completed when different sections of the syllabus are being taught, so they may do one or two commentaries in Year 1 and the remainder in Year 2. It is also recommended that students are encouraged to select articles about different countries other than their own. Candidates should be discouraged from searching for other sources to add on to the information already provided in their selected article. Marks are only awarded for work done on the chosen article so there is no benefit in finding other related resources. If they select appropriate articles, of a length that gives them enough content to write about, there should be no need for extra information.

Teachers are to guide students but not to choose articles for them to write their commentaries on. It was noticed in some centres that the students had all written their three commentaries on very similar topics. Teachers may give one written feedback only on the first submission and the second submission must be final.

It is recommended that students download and save articles directly with the source visible (for example website link) as honesty is sometimes compromised if sources are just named. Too often Word documents copied and pasted from the article were submitted and again, honesty is compromised. Also, the details of the sources in each file should match with the details given in the cover sheet. Highlighting of the areas of long articles being commented on is recommended, but it must be effective and not just the odd sentence or word.

Students should be informed that there is no need to fully define every economic term used, or a set number of terms, but just use, apply and explain terms in reference to the chosen article. Criterion B does not ask for definitions.

Teachers should make brief comments as to why they awarded marks. When teachers write no comments about why marks have been given, the examiner sometimes is unsure as to why marks have been or not been given. These comments should not be addressed to the student or just comments about the student's ability but purely as to the reasons why marks have been given. Teachers are permitted to write comments on the IAs but it is advised that these are not written in red pen and they will also have to upload a separate file to indicate the marks awarded and comments to justify the awarded marks as per the subject component upload requirements for the session. The requirement is for teachers to upload a separate sheet with marks and comments detailed. If teachers wish to annotate IAs in addition to this, it is permitted, but it is not a requirement.

It was obvious sometimes that the teacher had not checked the article and commentary submitted at all, such as when an electricity tariff being raised was seen as a trade tariff. It is the role of the teacher to check the article and the first submitted commentary.

Referencing of the article itself should be on the cover sheet and it is very helpful, as mentioned above, if the article is directly taken from the website, not a copy and pasted one or a Microsoft word document. Diagrams need to be presented appropriately, carefully labelled in relation to the content of the article, and be dynamic and not generic.

## Further comments

Teachers at times seem to misinterpret the criteria. Full marks were usually given for Criterion F, even when the rubric requirements were not all met. Some teachers gave 1 mark only for Criterion B if definitions were not given for terms used, despite there being no requirement for definitions. Teachers must ensure that they are fully aware of and understand the marking criteria and also that the students themselves are aware of these. It can be quite obvious sometimes that either or both the student and teacher are not aware of the criteria.

It is most important that where a centre has more than one teacher marking the IA, the teachers should standardize their marking so that they are all applying the assessment criteria in the same and correct way. It was noticeable this session that in some centres the awarding of marks was variable and inconsistent for each candidate.

## Higher level paper one

### General comments

It seems that this session the candidates who sat the HL paper 1 exam were much better prepared to answer questions from the microeconomic and macroeconomic parts of the syllabus rather than questions on the global economy part of the syllabus (and in particular the topics related to economic development).

### The areas of the programme and examination which appeared difficult for the candidates

The great majority of candidates who attempted Q3(b) clearly couldn't distinguish between weak institutional framework and other barriers to economic development. Therefore, the great majority just explained some barriers to economic development, only partially answering the question and preventing their answers from achieving high marks.

### The areas of the programme and examination in which candidates appeared well prepared

Most of the candidates seemed to understand monopolistic competition well and were able to provide appropriate examples. Furthermore, most of the candidates were able to correctly draw a diagram showing a firm with some market power that has abnormal profit.

Traditionally, the effect of macroeconomic demand-side policies on the economy was well explained.

### The strengths and weaknesses of the candidates in the treatment of individual questions

#### Question 1

(a) Assumptions of monopolistic competition firms appeared to be understood by most candidates who attempted this question. Short-run abnormal profits were well-explained by most with generally correct diagrams. However, some candidates did not explain well the long-run adjustment to normal profits. There was also some confusion between the diagrams for perfect competition and monopolistic competition.

(b) Better-prepared candidates were able to discuss and show a clear understanding of the advantages and disadvantages of both market structures. Some candidates made mistakes in discussing allocative efficiency and why abnormal profits are possible (or not possible) for the two types of market structures. The better-prepared candidates noted the benefits of oligopoly market structures such as the benefits arising from economies of scale and from expenditures on research and development but some weaker responses focused exclusively on the benefits of monopolistic competition and the disadvantages of oligopoly. Only the best responses distinguished between colluding and non-colluding oligopolies in their evaluation.



## Question 2

(a) The best responses explained each of the three types of unemployment that comprise natural unemployment while also relating natural unemployment to the full employment level of output. Unfortunately, many candidates focused their explanations on either the types of unemployment that comprise natural unemployment or on the link between natural unemployment and the business cycle. The weakest answers confused cyclical and natural unemployment.

(b) Most candidates appeared well-prepared to discuss the effectiveness of monetary policy in reducing a large deflationary gap. However, some candidates confused the deflationary (recessionary) gap with deflation and monetary policy with fiscal policy. The most common weaknesses were candidates not explaining in detail the monetary policy tools and candidates providing diagrams and/or real-world examples where the economy does not start in a situation with a large deflationary (recessionary) gap.

## Question 3

(a) Quite a few candidates related education and health programmes to economic growth without extending the discussion to economic development as the question prompt requested. Answers could have been more specific about how these programmes can promote economic development. Most candidates failed to explain the effect of these two programmes on human capital and the link between human capital, productivity, economic output and economic development.

(b) The great majority of candidates did not demonstrate an understanding of weak institutional framework. While various economic, political and social barriers to economic development were explained in more or less detail, very few candidates addressed the specific demands of the question.

## Recommendations and guidance for the teaching of future candidates

While the use of real-world examples is key for achieving the highest marks, teachers should be aware that the provision of plenty of real-world information (some of it with limited relevance to the question) cannot substitute/compensate for lack of theoretical understanding. Real-world examples discussed in class should be used to illustrate economic theory after it has been explained and understood by students: the discussion of real-world examples cannot replace the teaching of economic concepts and models.

Teachers should make sure that candidates use diagrams effectively (by modifying the generic labelling to better correspond to the explanations and the real-world examples that are provided and by using the diagrams to support the evaluation).

Teachers should make sure that they allocate enough hours to teach the last part of the syllabus (that relate to the issues of economic development).

## Standard level paper one

### General comments

In this second Economics May examination based on the new specification, it was encouraging to see both the breadth and depth of the knowledge of the candidates.

### The areas of the programme and examination which appeared difficult for the candidates

The costs of deflation were difficult for candidates to explain in question 2(a). In question 2(b), it was apparent that candidates had a hard time comparing the problems associated with high inflation to high unemployment. The poverty cycle (question 3(a)) is not widely understood by candidates and most could not provide a diagram to illustrate it. It was discouraging in question 3(b) how many candidates did not understand the concept of economic development.

### The areas of the programme and examination in which candidates appeared well prepared

Candidates performed well on question 1(a) which dealt with positive externalities and most understood that health care and education are merit goods that give rise to positive externalities of consumption. The concept of subsidies in question 1(b) was usually well explained with a diagram and candidates were able to evaluate the use of subsidies to increase the consumption of merit goods.

It is encouraging that candidates are being taught to provide real-world examples and to use them throughout in their responses to part (b) questions.

### The strengths and weaknesses of the candidates in the treatment of individual questions

#### Question 1

(a) This was the most popular question and the one for which candidates were well prepared, in general. Most candidates recognized health care and education as merit goods but were unable to fully explain the external benefits of these two goods. There were proper diagrams illustrating the positive externalities, but the welfare loss was often not correctly labelled. Some candidates incorrectly explained these two merit goods as producing positive externalities of production. Many candidates understood why positive externalities cause market failure and could explain it using the diagram, but it was evident that market failure is a concept that is not understood by all candidates.

(b) Most candidates were able to explain how subsidies work and illustrate them on a properly labelled diagram. It was surprising that the concept of merit goods was not always properly explained. There were some good real-world examples of merit goods but why they are merit goods was often not explained. Many were able to evaluate the use of subsidies to increase the consumption of merit goods but did not compare them to any other ways to increase consumption.

## Question 2

(a) This was the least popular question and one which presented difficulties for many candidates. Many explained the causes of deflation, rather than the costs. Those who did explain costs did not present a clear explanation of two distinct costs. The responses often contained mention of several costs, but none were explained in any detail and were often all part of the same cost. Disinflation was often confused with deflation. There was usually a decent diagram for deflation.

(b) This question was challenging for many of the candidates. Most were unable to produce a response that compared the costs of inflation with the costs of unemployment which would have been the easiest and most logical approach to this question. Many candidates focused on the policies used to tackle inflation and unemployment without using this discussion to answer the question.

## Question 3

(a) Many candidates answered this question, but sadly most did not properly explain a poverty cycle using economic terminology. Many produced a response discussing issues surrounding poverty without explaining the key components of a poverty cycle. Most responses did not provide a diagram to illustrate the cycle. Few mentioned the concept of economic growth and very few could explain why the poverty cycle could act as a barrier to economic growth. It would be helpful if candidates were to respond to the question asked, rather than just explain the problem of poverty.

(b) Surprisingly, this question proved to be challenging for candidates. The concept of economic growth seems to be somewhat understood and diagrams to illustrate it were often provided with some real-world examples of countries where economic growth has taken place. However, the concept of economic development is not well understood. The stronger responses used real-world examples to demonstrate countries that have experienced economic growth and have used this growth to increase their spending on education, health care, etc. This was then compared to countries that have experienced growth but did not use it for development purposes. Candidates needed to recognize that development is a multi-dimensional concept and that an increase in GDP/GNI may have no impact on the indicators of development.

## Recommendations and guidance for the teaching of future candidates

It is important for candidates to read the questions carefully and answer what is being asked. In the case of a question asking for a discussion of what is the “best” way to do something (in the case of question 1(b) that asks whether the provision of subsidies is the **best** way to increase the consumption of merit goods), it is important to discuss alternatives to the option provided (alternatives to subsidies, in the case of question 1(b)).

Candidates should be encouraged to plan their responses before beginning to write. This would present a more cohesive and logical response to the question posed.

To demonstrate their knowledge of key economic terminology, candidates should begin their responses with an explanation of the key terms relevant to the question.

Candidates should be encouraged to use more diagrams in their work. Both parts (a) and (b) should include at least one diagram. There seems to be more diagrams included in the answers, but they are not incorporated into the text of the answer and are often not explained. This would provide a fuller response to the question set. It would also be useful if candidates were encouraged to fully label the diagrams that

are provided. If an example is being used to support the argument, then the diagram should incorporate reference to the example. Axes should be labelled as well as the curves.

Candidates should be encouraged to illustrate their answers with 'real-world' examples, to show that they really can apply their economic theory. This should not be just at the end of part (b), but the example should be developed throughout the context of the response to part (b) to support the argument.

When writing essays, candidates should be taught to use evaluation in part (b) of each question. This may be comparing the advantages and disadvantages, looking at an issue from another perspective or different stakeholders or considering the difference in short-run and long-run outcomes or weighing the relative importance of various factors.

Teachers should encourage candidates to write their essay questions in two distinct parts, labelling each as (a) and (b). There were many candidates that write them as one answer.

## Higher level paper two

### General comments

This subject report, used in conjunction with the markscheme, is designed to help teachers prepare their candidates for future examinations by clarifying the expectations of the examining team. Since the markscheme outlines the most appropriate responses, this report focuses on the more common errors made by candidates.

In this session both questions were considered to be comparable in terms of difficulties and expectations. On balance the great majority of students chose question 2.

### The areas of the programme and examination which appeared difficult for the candidates

In part (a) questions, many candidates lost marks for vague or incorrect definitions or functions. For part (b)(i) questions, it was surprising to see how many students were unable to undertake simple calculations and some lost marks for missing units and rounding errors. In part (b)(ii) questions, many students provided a lengthy explanation of the diagram, wasting precious time, when the question only asked for the diagram. Also, some candidates wrote too much for parts (c), (d), (e) and (f), leaving less time to write a full response for part (g).

Further, part (g) answers rarely reached the highest band mark, partially due to the ineffective use of diagrams, unsupported generalisations without backing these with theory and information from the text, a lack of sufficient focus on the demands of the question, and a lack of effective evaluation. A surprising number of candidates did not use diagrams to help support their answers.

Specific areas of the programme where students had difficulties included:

- Knowledge of IMF functions.
- Property rights was only partially understood.
- While an understanding of automatic stabilizers was evident, too often the explanation was partial. There were also difficulties in drawing a full business cycle diagram and using it to explain the nature and role of automatic stabilizers.
- Many candidates could not appropriately apply the Marshall-Lerner condition
- The relationship between the Gini coefficient and the Lorenz curve.

### The areas of the programme and examination in which candidates appeared well prepared

Generally, students were better prepared and more familiar with the new examination format and showed a better understanding of economic theory than in the May 2022 examination.

With some notable exceptions, 4 mark questions showed a distinct improvement this session. Candidates still need to practice drawing and completing diagrams as a key skill. Too many marks were lost on careless errors or omissions of labels on otherwise good diagrams. Also, some candidates gave long and unnecessary explanations for diagrams in part (b)(ii) questions. This is not required.

With very few exceptions students followed the guidelines in answering only one question.

Stronger responses answered part (a) to (f) questions concisely, allowing sufficient time to fully address the part (g) question.

In general students appeared better prepared in microeconomics and the global economy as opposed to macroeconomics.

In question 1 supply and demand questions were well answered; the minimum wage diagram was generally accurate, and the poverty cycle was generally constructed accurately.

In question 2, profit was well understood; the AD/AS diagram was accurately drawn by most; the subsidy diagram and its explanation were usually well answered; the tariff diagram was appropriately drawn and labelled with acceptable explanations; there were also accurate Lorenz curve diagrams with an excellent explanation by some.

## The strengths and weaknesses of the candidates in the treatment of individual questions

### Question 1

(a)(i) Few candidates had knowledge of IMF functions, providing vague answers or listing functions relating to the World Bank and occasionally the WTO.

(a)(ii) Almost all the students were able to answer this question correctly.

(b)(i) This was a simple calculation which students had little difficulty answering correctly.

(b)(ii) Most candidates correctly constructed the minimum wage diagram although a significant minority failed to identify the possible effect on employment in the diagram. Most candidates accompanied the diagram with an explanation, sometimes at length. It should be emphasised that an explanation is not required and uses up valuable time that could have been spent on other questions.

(c) The majority of students constructed the standard business cycle diagram, but few included the impact of automatic stabilizers. Too often the explanation lacked examples of automatic stabilizers, or a complete explanation of how automatic stabilizers might mitigate the effects of a recession. Candidates seemed to have difficulty in explaining that stabilizers resulted in real GDP being higher than it would otherwise have been.

(d) This was generally quite well answered. Most students used the text to identify "increase their use of alternative energy" to explain how this might lead to a continued fall in oil prices.

(e) The majority of candidates produced a well labelled J-curve diagram, but a significant number demonstrated partial understanding in their explanation. Better answers effectively used the Marshall-Lerner condition in their explanation. Some students did not indicate surplus or deficit as part of the y-axis labelling.

(f) Almost all the candidates were able to explain how increased access to finance can help break the poverty cycle, but a few lost a mark for not drawing the poverty cycle diagram correctly.

(g) The quality of answers to this question varied. Good answers were able to use the text effectively and integrate the data with economic theory.

There was generally a basic understanding of the question but too often responses tended to be generic. Better answers effectively used economic theory and terminology coupled with appropriate diagrams in their analysis. Too many responses, however, were descriptive or simply outlined the costs and benefits of

free trade with limited focus on the question. For example, students would write “trade diversion” or “trade creation” without explaining what is meant in the context of the question. While judgments were made, evaluation tended to be superficial.

It should be noted that reference to diagrams in previous questions is acceptable.

## Question 2

(a)(i) Most candidates defined the term accurately.

(a)(ii) Over a third of students did not mention that property rights should be legal, while another third of the students did not mention the right to determine how the land/property is used or controlled.

(b)(i) This was very poorly answered with the majority of candidates scoring 0 marks. It was surprising that most candidates used the incorrect formula (i.e.  $1119-1085$ ) instead of  $1085-1119$ . It gave the impression that perhaps some students are reluctant to give negative numbers.

(b)(ii) While most students correctly recognised there would be a shift to the left of the AD curve, a significant minority increased the AD curve and/or shifted the AS curve. Students should be careful with labelling. Many potentially good diagrams were spoiled with careless labelling.

(c) The subsidy diagram was in the main well-constructed. The explanation was generally well answered but a significant minority omitted the significance of the subsidy in reducing production costs.

(d) Good responses effectively used the text to explain their answers (i.e. low PED of palm oil). Diagrams were generally good but some were spoiled with inaccurate Y-axis labelling. Also, a minority of candidates shifted the supply curve instead of the demand curve, demonstrating a lack of understanding of how currencies change values.

(e) International trade diagrams were often well-drawn and labelled and students effectively used the annotations on the diagrams to explain the decrease in imports.

(f) There were some excellent answers to this question. However, several weaknesses were evident. Many students incorrectly labelled the axes (e.g. “income” and “population” rather than “% income” and “% population”). Other students reversed the labelling. Weaker responses suggested there would be an improvement in the distribution of income with an inward shift of the Lorenz curve.

(g) While there were some outstanding responses to this question the majority were not able to access the higher markbands. In general, the question was quite well understood. However, a significant minority focused on economic development in general rather than SDG12. Also, many candidates offered/analysed policy solutions that could help Indonesia meet SDG 12 and thus were not directly addressing the specific demands of the question. This often led to a limited and at times an irrelevant answer. Also, too often the quality and use of economic theory was limited with students taking a descriptive approach. There was a general lack of balance in most responses. Candidates would be advised to use appropriate diagrams to enhance the quality of their analysis. While judgments were made, evaluation tended to be superficial or appropriate with often a lack of balance.

## Recommendations and guidance for the teaching of future candidates

Teachers are urged to read through the subject reports as they provide invaluable insight into the strengths and weaknesses in past exams. These provide guidance on key areas to improve. Teachers should also go to the IB resource site where there is access to sample responses with comments.



Teachers should encourage their candidates to learn precise definitions and formulas, as the use of precise and accurate economic terminology will enhance performance on all assessment components. If candidates are confident in their knowledge of definitions and formulas, they can proceed quickly through the first part of each data response question. To help candidates to develop this important skill, candidates should be encouraged to compile a glossary of terms and formulas. Candidates must be taught to include appropriate economic terms in their definitions. Note that the use of examples cannot replace a definition.

In the Economics teacher support material (TSM) on the PRC, there is a “Glossary of subject-specific terms” which are likely to be used in assessment. However, note that this is not an exhaustive list of terms that may be assessed. Any technical term within the guide can be assessed and not all terms in the new guide are included in the glossary.

There is a substantial number of resources posted in the teacher resource to help teachers plan and teach. For example, resources on the circular economy (new to IB Economics) need to be promoted. It is recommended that teachers access these resources.

In part (a) questions, students should be encouraged to be succinct. Many candidates lost marks for vague, incomplete, or incorrect definitions.

In part (b)(i) students should be told that all workings should be shown, answers should be given exactly or rounded to 2 decimal places, unless told otherwise and units given.

In part (b)(ii), many students explained diagrams, which is not required in 3-mark responses.

Students should be reminded that diagrams in part (b) questions, as opposed to part (c) to (f) questions, do not require text explanation and that it is important to annotate the diagram fully to ensure it clearly meets the requirements of the question.

In part (b)(i) calculation questions, candidates should be informed that they will be penalised for rounding errors, for not using the correct units or not showing the working.

Part (c) to (f) questions/diagrams:

Many of these questions require the use of standard diagrams from the syllabus. Candidates would thus benefit if they compiled a glossary of all the diagrams. Where a diagram is used in these questions, candidates should be sure to use/explain the diagram by making direct references to it in the response.

The diagram and explanation should be integrated with the explanation using annotations on the diagram where appropriate to ensure the question is being answered.

Candidates should explain reasons for any changes, use arrows if appropriate, and use (dotted) lines to the axes and notation such as  $q_1$  to  $q_2$  or  $AD_1$  to  $AD_2$  in their responses. Candidates must be able to distinguish between macroeconomic and microeconomic labelling. Failure to label diagrams correctly prevents candidates from achieving full marks.

Whenever possible, diagrams should not be placed at the end of the examination response. They should be drawn exactly where the accompanying explanation is written. The use of graph paper sometimes makes it challenging for the student to link the diagram with explanations. For this examination, graph paper is not required.

Candidates should be discouraged from using coloured pens/pencils on their examinations. When candidates use coloured pens, the grayscale scanning of scripts does not pick up the different colours, so examiners cannot see any differences between curves, etc, when candidates have referred to different colours in their diagrams. When candidates use pencils, the scanning often is not effective enough to pick



it up. This either results in an examiner not being able to properly see the diagram (the labelling may be unclear for example), or sometimes the examiner cannot see a diagram at all. While the IB does its best to overcome these problems, it could still result in a candidate not being awarded any marks for a diagram they have drawn. Therefore, the guidance is to use black ink or a very dark black pencil.

Part (g) questions:

- Candidates should be given opportunities to practice writing part (g) responses using evidence from a text and writing clear responses that directly address the question as it is asked.
- Teachers should encourage candidates to closely read the question so that they understand what they are being asked. They need to be taught how to read the question, how to go through the text and pick out the key points, and then how to organise them into a cogent argument.
- Candidates should be made aware of the level descriptors and that the marking will be based on these, using the “best-fit approach”. For part (g) questions, it would be useful to provide graphic organisers / knowledge maps and other tools to help students produce lengthy answers, unpack the question, and address the requirements.
- Teachers should ensure that students do not approach the part (g) question in the same way as a Paper 1, 15-mark essay, where they are required to provide real-life examples of other countries. It is important to emphasise that for Paper 2, only the text information/data provided in the paper should be used to support the analysis and evaluation.
- Candidates need to ensure all analysis and evaluation are linked back to the focus of the actual question: e.g. in this examination on SDG12 and on economic growth.
- These answers also require candidates to apply and develop the economic theory that is relevant to the text. It is not enough to simply mention the relevant theory. Candidates must clearly demonstrate knowledge and application of that theory and evaluate it within the context of the text. As part of the evaluation, candidates should be encouraged to think critically about the information in the text. They should be advised that to reach 10 marks and above, reasoned judgments/evaluation are required based on the evidence provided and their applied knowledge of economics.
- Wherever possible, pertinent, and fully explained diagrams must be used in the responses. In part (g), wherever appropriate, candidates are permitted to refer to the previous answers from parts (a) to (f). It is recommended that instead of repeating the diagram or the explanation in part (g), they can make references to the previous answers and save time. In view of this, students should be advised to answer question (g) only when they have answered all the other questions.
- Too often candidates draw diagrams, such as poverty cycles, but do not use these in their explanations/analysis/evaluation. For 10-12 marks the descriptor states “relevant diagram(s) are included and explained” so they should be explained to support the analysis and evaluation.
- While definitions are not a requirement, it is essential that relevant economic terms are used appropriately throughout the response. Often the better responses define the key terms of the question, such as economic growth and SDG12, in their introduction.
- Examiners are concerned at the extent to which candidates are uncritically paraphrasing/repeating the texts in their answers. Candidates must be reminded that their reference to the text is in support of their analysis and evaluation. Candidates should be encouraged to use quotation marks or to make references to the paragraphs or texts.
- Submitting a pre-learned mini-essay / generic answer which is not related to the text will rarely obtain more than 3 marks as “the response contains no use of text / data” and “indicates little understanding of the specific demands of the question”.

Candidates should be encouraged to present the answer in a structured way with:

- A short introduction. Although not specifically required, defining the key terms of the question would help the students focus on its demands and show the examiners they understand how to use these appropriately.
- Fit for purpose paragraphs – too many candidates write 2 to 4 pages without paragraphs.
- Conclusion – There was a tendency to use the conclusion as a summary rather than an attempt provide reasoned judgments based on the evidence provided. Candidates need to realise that a summary of what has already been said is not evaluation.

Strong responses demonstrate evaluation throughout. When a candidate analyses fully, using appropriate theories and the text/data provided, they may begin to demonstrate evidence of evaluation through:

- providing justified weightings given to arguments (prioritising with evidence).
- identification of the stakeholder impact (different perspectives) considered. Good responses will identify and justify the level of impact.
- a discussion of LT vs ST impact.
- an attempt to critique their argument.
- identification of weaknesses in knowledge/assumptions/data/theory.
- providing overall judgements that are well considered and supported through economic analysis and considering the context of the text/data provided.

Instructions:

Candidates must be taught to carefully identify what a question is asking. For example, they should make sure that their diagrams address the specific question that is asked, rather than write about every aspect of a diagram (this can be a significant waste of time).

For part (b(ii)) questions candidates must be reminded that the “Instructions to candidates” on the front cover of the examination state that “Unless otherwise stated in the question, all numerical answers must be given exactly or correct to two decimal places”.

Candidates could be advised to read the question more than once before starting their answer to ensure they understand its requirements. They could also be advised to re-read it again, once they have finished writing their answer as this can serve as a self-check to make sure that the question has actually been fully addressed. In many cases, candidates come very close, but do not actually answer the question set and they would easily be awarded full marks if they added just one sentence to present a clear answer to the actual question.

Candidates must be made aware of the different AO3 command terms that may be employed in part (g), such as “discuss” or “evaluate” and the evaluation/ synthesis skills that are being tested. The synthesis/evaluation command required in the response is made clear in the 2024 IB Economic Guide “Glossary of Command Terms”.

## Standard level paper two

### General comments

We are now in the second year of the paper 2 examination based on the new syllabus. It is evident that candidates continue to be more comfortable with the 2-mark and 4-mark questions, as these have carried over from the previous paper 2 format. Moreover, it is encouraging that a significantly smaller number of candidates encountered difficulties with the quantitative part (b) questions and that there was a noticeable improvement in the quality of responses to part (g) question.

### The areas of the programme and examination which appeared difficult for the candidates

No question proved to be particularly popular this session. While there was a slight majority of candidates who chose question 2 on economic development in Cameroon, this was marginal. However, candidates faced the same difficulties in achieving higher mark bands for the descriptor related to “answering the specific demands of the question” in their responses to part (g) in both questions.

For question 1, candidates were required to discuss both the benefits and drawbacks of economic integration. However, many candidates limited their discussion to free trade without considering the various degrees of economic integration. For question 2, a significant number of candidates seemed to lack an understanding of the distinction between market-oriented policies and other forms of government intervention. Weaker responses to 2(g) were those which failed to address economic development issues and instead focused solely on the general impact of government policies on economic growth.

A lack of coherence and organization in responses to part (g) was also a common contributor to lower marks. Some candidates provided generic responses without incorporating relevant evidence, data, or the contextual information provided in the texts/data. Consequently, their ideas were poorly developed, and thus could not meet the requirements of the question.

In terms of content, candidates generally demonstrated a good understanding of economic concepts across all tested units. However, areas of concern emerged regarding the understanding of the concepts of capital flight, overvaluation, and the long-term impacts of trade liberalization.

### The areas of the programme and examination in which candidates appeared well prepared

Most candidates understood the need for concise definitions and provided their workings for calculation questions. Final answers were often given to two decimal points with stated units, thereby minimizing careless errors and avoiding mark deductions in part (b). Diagrams were frequently fully and correctly labelled, referenced, and explained appropriately, leading to many responses being awarded full marks in parts (c) to (f). However, there were a few concepts that candidates found challenging to illustrate on a diagram. These included the revenue areas for question 1(c), structural unemployment for question 1(e), currency overvaluation for question 2(d), and the long-term impact of trade liberalization in question 1(f).

When answering part (g), the majority of candidates referenced the texts and data. Furthermore, a significant number of responses demonstrated balanced evaluation and effective synthesis. High-scoring responses indicated an understanding of economic integration beyond the mere removal of tariffs in question 1(g) and addressed economic development issues, such as the lack of diversification, which could

be addressed by specific policies, in question 2(g). Notably, stronger responses recognized the need to avoid over-elaboration in parts (c) to (f) and allocated more time to part (g) where greater analysis was required.

## The strengths and weaknesses of the candidates in the treatment of individual questions

### Question 1

(a) Definitions of GDP that were awarded 1 mark often failed to identify the concept of “value” or simply repeated the formula for GDP using the expenditure method ( $GDP = C + I + G + (X - M)$ ) without providing a comprehensive definition. On the other hand, while almost all students were able to define sustainability by considering either future generations or preserving the environment/resources, incorporating both aspects was required for full marks.

(b) The quantitative questions did not appear to pose significant challenges for candidates. Most students were able to calculate the current account balance, although a few mistakenly added import expenditure instead of subtracting it. Surprisingly, several candidates referred to the current account values calculated in (b)(i) rather than Table 1 to answer (b)(ii), resulting in the incorrect identification of a deficit in the balance of trade. It is important to remind students that part (b) questions are purely quantitative, and therefore, the word “surplus” was sufficient to earn the 1 mark available in (b)(ii). It is unnecessary to provide sentences justifying the answer. In (b)(iii), the Lorenz curve shift was often correctly illustrated.

(c) Responses often included a correctly drawn diagram depicting both price and quantity increasing. However, many candidates did not receive full marks as they didn’t identify the precise area(s) for (total) revenue. This could have been accomplished through shading or referencing in the explanation (e.g. stating that P1Q1 and P2Q2 represent the old and new revenue areas). It is worth noting that this question was similar to one presented in the November 2022 paper, where candidates encountered the same challenge identifying revenue areas.

(d) Except for occasional mislabelling of the vertical axis and incorrect curve shifts, this question was generally well attempted. Some explanations were incomplete as they merely stated that decreased exports would shift the demand curve to the left without elaborating on the reduced need for foreign consumers to purchase the peso to pay for goods from Uruguay.

(e) The intention of the question was to assess candidates' ability to illustrate structural unemployment using a diagram “showing a fall in the demand for labour for a particular market or geographical area” (as stated in the subject guide). However, a range of diagrams (labour market, good market, or tariff diagrams) were accepted as long as candidates could explain how participation in the free trade agreement could lead to structural unemployment, with reference to their chosen diagram. The use of an AD/AS diagram was not permitted since it does not cover a specific good/market (and consequently, specific skills), but rather indicates cyclical unemployment. Similarly, to earn full marks in the explanation, it was insufficient to simply state that unemployment might increase. Candidates needed to provide an explanation as to why this unemployment is structural, such as skills becoming irrelevant or geographical immobility.

(f) It was evident that many students were unaware that a change in potential (long-term) output can only be demonstrated by a shift in LRAS (or rightward shift of the Keynesian AS). Additionally, a significant number of students didn’t consider the information provided in Text C, which was crucial for understanding the reasons behind the shift. Trade liberalization is classified in the subject guide as a

market-based policy that promotes competition. Regrettably, many students displayed limited familiarity with the effects of such supply-side policies.

(g) To address the specific demands of this question, candidates were expected to provide a balanced discussion on both the benefits and drawbacks of economic integration. Responses that focused solely on one aspect of economic integration, particularly participation in the free trade agreement with the EU, only partially addressed the demands of the question (descriptor for the 7-9 markband). High-achieving responses presented a well-rounded perspective, considering both the benefits and drawbacks of membership in the MERCOSUR common market and the impacts of the free trade agreement, with reference to the provided texts and data. Weaker answers tended to summarize the text and disproportionately emphasized the impact of trade with China, which was largely irrelevant as Uruguay is not part of a trading bloc with China. The strongest responses added value to the information from the texts such as explaining how freedom of movement of capital or access to a larger market in a common market can drive an increase in foreign direct investment (FDI). Moreover, these strong answers incorporated trade-related concepts like economies of scale, rather than simply restating statements such as “the MERCOSUR common market allows Uruguayan producers tariff-free access to 290 million consumers”.

## Question 2

(a) Most responses to (a)(i) were able to receive 1 mark for demonstrating an approximate understanding of relative poverty but few could provide a definition precise enough to be awarded full marks. A significant number of candidates exhibited confusion between the concepts of absolute poverty and relative poverty. Defining infrastructure proved to be less challenging, with most candidates earning at least 1 mark and many achieving full marks. However, a common misunderstanding was that infrastructure refer exclusively to “public goods”.

(b) Most students could calculate the inflation rate, although occasional careless mistakes were observed. These errors included using the wrong base year in the denominator or failing to subtract one when using the formula “new value divided by original value”. Additional mistakes that resulted in mark deductions were the omission of the unit (%) in this case) and rounding down to less than two decimal points, as explicitly instructed on the exam cover page. Fewer candidates were able to calculate the real interest rate, although some students who made errors in calculating the inflation rate in part (b)(i) demonstrated knowledge of the calculation of the real interest rate in part (b)(ii) and received the mark through the application of the Own Figure Rule (OFR) principle. Surprisingly, the minimum wage diagram proved challenging for many candidates. While most students understood that unemployment would increase due to a minimum wage, they struggled to effectively illustrate this on a diagram. Common mistakes included mislabelling of axes and treating the diagram as a standard demand and supply diagram for goods rather than a factor market diagram. Many candidates also felt compelled to provide lengthy explanations for the diagram, leading to a waste of valuable time. It is important to note that part (b) questions are strictly quantitative and do not require explanatory narratives.

(c) Most candidates performed well on this question and received 2 marks for the diagram. Only a small number of responses incorrectly shifted the short-run aggregate supply (SRAS) curve, resulting in no mark awarded for the diagram. However, in the explanations, an essential step was often omitted: explaining that government expenditure (and/or consumption/investment in the case of expansionary policy explained through a decrease in taxes) is a component of aggregate demand.

(d) This question highlighted a lack of understanding among most candidates regarding the concept of capital flight, which results in an increased supply of domestic currency (francs in this case). Several



candidates mistakenly equated "overvaluation" with "revaluation" or "appreciation," leading them to draw diagrams showing the exchange rate rising. It was not uncommon to see diagrams depicting an increase in the demand for francs and a subsequent rise in the exchange rate. It is evident that candidates struggled trying to illustrate a fixed exchange rate system.

(e) Most students performed well on this question, successfully drawing a fully labelled diagram showing the increase in supply and decrease in price. If any marks were deducted, it was typically due to missing labels or a failure to mention the impact on the cost of production in the explanation.

(f) The question did not present any significant difficulties for most candidates. Some students missed out on full marks in the explanation portion as they simply stated that imports increase without providing supporting analysis. For example, they failed to recognize that the decrease in price leads to a decline in domestic supply and/or an increase in domestic demand, resulting in a greater need to import fertilizer. It is worth noting that some students misinterpreted the question and spent a considerable amount of time describing the effects of tariff removal on government revenues, consumer and producer surpluses, and welfare losses. This is not uncommon for questions relating to trade protection diagrams. While there is no mark deduction for over-elaboration, candidates self-penalise by having less time to part (g), which carries more marks.

(g) Most candidates understood the concept of economic development and knew it was different from economic growth. Fewer could differentiate between market-oriented policies and other forms of government intervention, but the majority was able to identify some market-oriented policies and interventionist measures mentioned in the texts. Responses that achieved Level 4 (10-12 marks) and Level 5 (13-15 marks) were those that connected the effects of each policy to specific development outcomes, such as breaking the poverty cycle through increased productivity or reduce trade protection hindering diversification. Such connections need to be explained rather than merely stated (for example, explaining how increased foreign direct investment (FDI) could facilitate or impede development). It was not uncommon to read responses with potentially strong economic arguments, which were unfortunately underdeveloped. In such cases, a low score on the second descriptor often resulted in a lower overall score, as the theory was described rather than explained. The strongest answers made use of information from the texts and/or data to support their judgments on the effectiveness of the discussed policies in achieving economic development. Weaker responses failed to distinguish between different types of government intervention or policies and often solely focused on economic growth without establishing a connection between economic growth and economic development.

## Recommendations and guidance for the teaching of future candidates

While the format of this paper is relatively new, many of these suggestions have appeared in previous paper 2 examiner reports due the similarities in terms of contents, structure and skills tested.

- In part (a) questions, students should be encouraged to write no more than two sentences – definitions should be concise but precise. Diagrams and examples are not required.
- For part (b) calculations, candidates need to be reminded to provide their workings and include the relevant units. All the calculation requirements for SL candidates are identified in the subject guide as 'assessment objective 4' (AO4) fields. Candidates should be familiar with these. They should understand how to calculate relative (%) changes. They should also be reminded to include units in the final answer (e.g. \$, millions, billions...).
- Where a diagram is required to answer parts (c) to (f), candidates should explain the diagram by making references to it in the response (while diagrams drawn in response to a part (b) question need not be

explained since part (b) only test quantitative skills). The diagram and the explanation must be integrated with each other. Candidates should explain reasons for movements in variables and shifts of curves and use (dotted) lines to project variables along the axes (e.g.,  $q_1$ ,  $q_2$ ...) for easy referencing. The answer should also focus on the requirements of the question and avoid giving additional (unnecessary) diagram analysis (as was the case for the tariff diagram analysis in question 2(f)).

- Candidates are instructed at the beginning of each examination not to use coloured pens/pencils. Therefore, there should be no reference to coloured lines in the diagram, as these will not show up on the scanned scripts (in grayscale). However, they should use arrows to indicate the direction of change of variables/curves – especially for Lorenz curves which are not typically labelled. If they use a pencil to draw diagrams, it should be sharp enough. It was sometimes difficult to see what was drawn (eg. some lines were too faint).
- Candidates need to be clear about the requirements set by the command term. They should understand the differences between and what is meant by: list, explain, discuss, evaluate...
- Candidates must be reminded that to achieve top marks in questions (g), they must make references to the text/data. Encourage candidates to use quotation marks or make references to the paragraphs, texts and/or tables. Candidates may need to be taught how to add value to the text/data and how to use the information effectively rather than simply summarizing it or repeating phrases and sentences.
- Part (g) answers also require candidates to apply and develop the economic theory that is relevant to the texts/data. It is not enough to simply mention the relevant theory; answers which reach the top level are those where candidates clearly demonstrated knowledge and **application** of that theory. Candidates need to show the examiner that they have studied an economics course, not simply that they can use some economic words that appear in a question or in the text. One of the best ways to develop economic theory is to use an economic model (e.g. an AD/AS analysis to explain how greater public spending could lead to an increase in real GDP and hence economic growth, an explanation of how a particular policy could achieve economic development by breaking the poverty cycle/trap...). If candidates have drawn a diagram in parts (b)-(f) that is relevant, they may refer to that diagram in (g) instead of drawing the exact same diagram. Additional diagrams can be introduced, so long as the explanation of the diagram fits in with what the question requires and/or the information in the text. Calculations in part (b) may be useful in supporting arguments in (g), for instance to establish that the country faces a current account deficit but a trade surplus. This being said, candidates need to find an appropriate balance between economic analysis, evaluation, and use of text/data. Some candidates tend to write purely theoretical answers with no reference to the texts (often the case when they over-elaborate on diagrams). Others are doing so much evaluation and using the texts so much, that analysis is sometimes neglected. Statements should not be made without appropriate justification, usually grounded in economic analysis.
- A good way to conclude an answer to part (g) is by offering a concise summative evaluation. It is important to avoid simply reiterating earlier sections. Instead, the conclusion should focus on the bigger picture. For instance, when answering 2(g), considering whether a greater emphasis on market-oriented policies is desirable in the short run due to a high national debt, while interventionist policies may be preferred in the long term to avoid increased inequalities.

## Higher level paper three

### General comments

It is clear that some centres have not fully adapted teaching to the requirements of the new syllabus (first examinations 2022), with candidates being unaware of the skills and knowledge which appear the new syllabus while misusing some concepts which are no longer included in the current economics course.

### The areas of the programme and examination which appeared difficult for the candidates

#### Unit 2 – Microeconomics

- PED – calculation, factors affecting, why it varies along a linear demand curve.
- AO4 skills - calculating “per kg” revenue, dividing billions by millions.
- Suggesting and explaining valid policies for part b questions.
- Allocative efficiency – identifying the condition and explaining the meaning.
- Market power and why it can lead to allocative inefficiency.
- Policies to correct market failure caused by market power (using data provided).

#### Unit 3 – Macroeconomics

- Calculation of indirect tax paid from a given level of spending.
- Calculation of real GDP using a deflator.

#### Unit 4 – The global economy

- Labelling the vertical axis for exchange rate diagrams.
- The difference between the domestic money market and the foreign exchange market.
- The concept of an overvalued currency.
- Policies to influence the exchange rate.

### The areas of the programme and examination in which candidates appeared well prepared

#### Unit 2 – Microeconomics

- Profit-maximizing level of output and calculation of profit.

#### Unit 3 – Macroeconomics

- Calculation of the rate of inflation.
- Impact of a weaker currency on AD/AS.
- Calculation of real GDP per capita.

#### Unit 4 – The global economy

- Calculation of a transaction in different currencies.



## The strengths and weaknesses of the candidates in the treatment of individual questions

### Question 1

(a)(i) The majority of candidates were able to identify the relevant prices and quantities and use the correct formula for PED. However, many candidates inverted the formula, used the final price/quantity as the denominator when calculating percentages or did not correctly round to 2 decimal places or show as a repeating decimal.

(ii) Candidates generally performed the calculation correctly, either by calculating the initial and final CS or by calculating the area of the relevant trapezium. However, it was very common to see responses which did not express the answer in 000s and/or \$.

(iii) The question was generally answered incorrectly. Despite similar questions appearing in the specimen paper and in both May 2022 and November 2022 examinations it appears that candidates did not know how to perform the calculation.

(iv) Stronger responses explained clearly why PED changes along a linear demand curve, often using a mathematical approach. However, a large number of responses simply explained and applied the law of demand.

(v) Responses were generally good with candidates referring to the idea of price-setting ability. Weaker responses referred only to the ability to “influence” or to “control”.

(vi) It is clear that many candidates had not been prepared adequately for this question. With section 2.11 of the subject guide explicitly linking market power to market failure it is to be expected that candidates should be able to explain why the profit-maximizing position for a monopoly is different from the allocatively efficient position, resulting in underallocation of resources and market failure, and to recognise a welfare loss. Many candidates asserted incorrectly that “high” prices would mean that market failure had occurred or that abnormal profit equates to market failure. Furthermore, many referred to productive inefficiency (not in the current syllabus) stating incorrectly that it leads to allocative inefficiency. Some candidates who demonstrated good conceptual understanding neglected to follow the instruction to use “specific reference to the information in Figure 2” and so could not earn full marks.

(vii) Generally well-answered, although with a concerning number of unit errors (ignoring the \$000s).

(viii) This question was removed.

(b) A wide range of approaches was adopted for the “policy question”. Responses which scored well mostly:

- Selected one clear policy (or two complementary policies where a second policy was introduced to address a limitation of the first).
- Selected a policy which was appropriate given the context presented.
- Ensured that their response fully explained the recommended policy, incorporating relevant theory, using appropriate terminology throughout the response and using data provided to support the recommendation and offer a balanced synthesis/evaluation.

Responses were able to achieve full marks with a fairly concise answer which met these requirements. Diagrams (although not expected/required) were often used effectively to support the theory/explanation. However, many “price ceiling” diagrams used were often accompanied by generic

notes on the stakeholder effects rather than the mechanism and possible limitations of the policy in the context provided.

Candidates who did not score highly tended to demonstrate some of the following weaknesses:

- Listing/outlining several policies instead of recommending and explaining one policy.
- Summarising the data provided instead of using it to support the recommendation.
- Neglecting to provide a balanced synthesis. Many answers simply explained without any balance.
- Misreading the data provided and making unrealistic assumptions.
- Neglecting to provide details of the suggested policy. Weaker responses cited deregulation (without any details), fines (without details of the associated infringement), anti-monopoly legislation (without details), supply-side policies (without details) or “encourage foreign firms” (without stating how this could be achieved).

Some weaker policy suggestions included:

- Indirect taxation on groceries.
- Policies to prevent mergers.
- A percentage tax based on market share.
- Privatisation.
- Minimum price legislation.

Some responses also tended to stray into LRAS analysis while many of those who suggested a maximum price argued that “the shortage would leave room for new entrants” without discussing the lack of attractiveness of a price-controlled industry to new entrants. Most candidates who suggested subsidies or price controls drew a perfectly competitive market diagram and referred to one product only.

It appears that many students were more focused on explaining theory rather than thinking as a policy-maker addressing a real-world issue.

## Question 2

(a)(i) This question was generally well-answered. The minority of candidates who used the GDP deflator accurately were fully rewarded.

(ii) The vast majority of responses demonstrated an ability to use the GDP deflator. However, many neglected to multiply by 100. Once again unit errors were common.

(iii) The majority of candidates were able to use their answer to part (a)(ii) and divide by the population. However, many found it difficult to divide billions by millions.

(iv) Generally answered accurately.

(v) Stronger responses were able to explain clearly that an overvalued currency is one which is maintained (via a fixed/managed system) above its value in a freely floating system. Many responses, however, were not so precise, stating that the currency was “stronger than it should be” or “has a value which is too high”.

(vi) Well-prepared candidates explained clearly that a central bank may buy or sell its currency (or use interest rate policy) on the foreign exchange market in order to maintain a fixed exchange rate. However, a significant number of scripts revealed confusion between intervention in the domestic money market and in the foreign exchange market. “Reducing the supply of money” was often equated to action taken to decrease the supply of naira in the foreign exchange market. Furthermore, a significant number of candidates drew a static diagram with no shift in supply of or demand for naira. Labelling the vertical axis was also an issue for many candidates. ₦/\$ is not accepted but \$/₦ is accurate.

(vii) Generally well-answered, although with several rounding errors.

(viii) The majority of responses were able to explain that a weaker currency would make exports more competitive and imports more expensive, leading to an increase in net exports and thus an increase in AD **OR** would increase the cost of imported inputs and thus decrease SRAS. Some candidates inferred from Table 2 that the naira had become stronger, leading to a decrease in net exports. In such cases no marks were awarded for the diagram but error carried forward (ECF) was applied and candidates could earn up to 2 marks for an accurate explanation based on the incorrect inference.

(b) A wide range of policies was suggested for this question.

Weaker responses treated the prompt as similar to part (vi) rather than using the information provided. As a result, they suggested a fixed/pegged exchange rate, similar to the existing system.

Common recommendations were:

- Supply-side policies to increase export of manufactured goods – but often without specifying what type of supply-side policies.
- Import substitution – often without explaining how this might be achieved.
- Interest rate policy – although there was significant confusion between the foreign exchange and the domestic money market. Also, it was common to see the incorrect argument that higher interest rates would attract FDI.
- Contractionary fiscal/monetary policies – expenditure-reducing policies were often quoted although the link to decreased demand for imports and the impact on the foreign exchange market were often overlooked.
- Adopting a floating exchange rate system – but only a small number of candidates were able to explain accurately why a floating system might result in a more stable currency – many just quoted the IMF advice without support.
- Trade protection was often recommended. Stronger responses established a clear link to the value of the currency while weaker responses focused more on a generic explanation of a tariff, with the standard tariff diagram and description.

A common approach was to focus almost completely on policies to address inflation and then write “and thus stabilise the naira” without showing the link between the two concepts. Thus the policy might be appropriate but the explanation/use of theory would be somewhat weak.

## Recommendations and guidance for the teaching of future candidates

- Students should be aware of the acceptable labelling for different types of diagrams.
- When discussing exchange rates it should be made very clear that a currency becomes stronger/weaker if one unit of the currency can be exchanged for more/less of another. If the exchange rate changes from  $\text{US\$1} = \text{₦306.5}$  to  $\text{US\$1} = \text{₦379.5}$  this means that  $\text{₦1}$  can purchase less US currency – thus it has become weaker. Many students are confused when facing such data.
- Students should learn a formula for the calculation of indirect tax from a given price and should practice this skill carefully.
- Teachers should be careful when teaching concepts which are no longer in the syllabus. Many students wrote incorrectly about productive inefficiency as a condition for market failure. Students should be clear about the syllabus content.

- When reading questions, students should be encouraged to underline or highlight any instructions which request that they “use information in the diagram/table” Candidates cannot earn full marks if they do not refer directly to data as instructed.
- Remind students that numerical answers should be correct to 2 decimal places – and stress that this is different from some other IB subjects.
- Remind students of the need to use correct units in their answers to quantitative questions. All too often responses omit \$, 000s, millions and billions. These units are not required in workings but must be included with the final answer. When calculations are based on data given in a graph, unit errors can sometimes be avoided by carefully checking the scale on the horizontal axis. Students should be clear that consumer, producer and social surplus value should be expressed in the appropriate currency (e.g. \$).
- The labelling (curves and axes) should be checked before the script paper is submitted.
- When drawing diagrams, a black pen or soft (2B) pencil should be used. If a light pen or hard pencil is used the lines/labels may not show up on the scanned image which is marked by examiners.
- Students should be reminded to read each question carefully – “revenue per kg” is different from “revenue”.
- When answering 4 mark questions with a diagram required, students should refer to the diagram and explain **why** a curve might shift rather than simply stating that it will do so.
- Teachers should devote some time to discussing the meaning of allocative efficiency – rather than just focus on a triangle showing welfare loss and also use marginal analysis to explain the condition in different contexts (competitive markets, externalities, market power).
- For section 2.11 – market failure (market power), teachers should clarify precisely what students are required to know/to be able to do. The “theory of the firm” section is reduced from the previous syllabus but concepts, conditions, diagrams which are specified in the subject guide must be clear to candidates.

#### Guidance for part b:

- Students should maintain awareness of the part (b) question as they work through part (a), taking note of any data which might lead them towards a recommended policy. This will enable them to refer to the data when answering part (b) in a way which supports/justifies the recommendation.
- Students should not include introduce additional real-world examples to support their recommendations.
- Students should be encouraged to memorise details of the part (b) question before reading through the data provided and answering parts (a)(i) to (viii). This will enable them to note information which may be useful for part (b) as they work through part (a) questions. Data must be used to support/justify the choice of policy and not in a mostly descriptive manner. For “effective” use of data it is not sufficient to merely quote several pieces of data or to begin the response by summarising the issue in some detail by copying parts of the text.
- Students should be advised to resist the temptation to present “textbook notes” on a policy; instead they should try to select aspects of the policy (including advantages and disadvantages) which apply to the specific context.
- Students should be given considerable practice at writing answers to part (b) questions. Techniques may include scaffolding responses in order to ensure that all five strands of the assessment criteria are addressed, reviewing high-scoring exemplars and highlighting data relevant to the policy issue.
- Candidates should be reminded that only one policy recommendation is expected. It may be the case that a second policy is introduced in order to address/complement any limitation(s) of the main policy but on no account should candidates outline a large number of policies.

- It is not necessary (or possible, given the time constraint) to write a long introduction. Summarising the issue is not necessary as the issue is contained in the data provided.

Advice for each strand:

- **The response identifies and fully explains an appropriate policy.**

An appropriate policy may be one which is specified in the subject guide but it is important that candidates assess the appropriateness of the chosen policy for the specific context being studied. Policies set out in the subject guide do not constitute a comprehensive list and it is likely that students will identify a suitable policy which may not be explicitly specified in the subject guide. For a recommendation to be appropriate, it must be possible to use economic theory to explain clearly how the introduction of the policy should address the issue/solve the problem. The policy recommendation must not be vague – supply-side policies, fines or legislation may be valid but the candidate must explain the details of the policy – i.e. which supply-side policies, fines for what, what sort of legislation? The policy must be fully explained – by showing how the policy will lead to the desired outcome.

- **The response uses relevant economic theory effectively to support the recommendation.**

The candidate must incorporate economic theory into the explanation of how the policy is intended to achieve the desired outcome. Theory can/should also be incorporated into evaluative points. Although diagrams are not required (and full marks can and will be awarded for responses which do not include diagrams) an accurate diagram with associated explanation may be a useful way for a candidate to explain the relevant theory. However, long explanations of a theoretical diagram are not necessary and may leave insufficient time to address the other requirements of the markbands.

- **Relevant economic terms are used appropriately throughout the response.**

When explaining the policy it is essential to use appropriate economic terminology.

- **The use of information from the text/data is appropriate, relevant and supports the analysis/evaluation effectively.**

To be considered relevant and supportive of the policy the data presented must help to explain why this particular policy has been chosen. Candidates should be encouraged to state explicitly how the data presented informs the policy recommendation. It is not appropriate to use data in order to justify the fact that a decision is necessary (i.e. to explain the issue/problem). Data may be quantitative or qualitative and should be referred to explicitly rather than via a vague reference to some information which may be inferred from the text/tables/graphs.

- **The response contains evidence of effective and balanced synthesis or evaluation.**

A strong response will provide evaluative balance to the line of argument presented. Often, evaluative points may point out limitations of the recommendation or factors which may influence the effectiveness of the policy. They may also explain why one policy may be better than an alternative (with reference to relevant data). It is often appropriate to begin such comments with “However...”. Candidates should guard against presenting a set of “textbook” limitations/disadvantages as they may or may not be relevant to the specific context under consideration. Strong evaluation typically incorporates data and may conclude with a judgment on the likely effectiveness of the policy and what its success depends upon.