Aga Khan University Examination Board

Notes from E-Marking Centre on HSSC-I Principles of Economics Examination May 2018

Introduction:

This document has been produced for the teachers and candidates of the Higher Secondary School Certificate (HSSC) Part I (Class XI) subject in Principles of Economics (POE). It contains comments on candidates' responses to the 2018 HSSC-I Examination, indicating the quality of the responses and highlighting their relative strengths and weaknesses.

E-Marking Notes:

This includes overall comments on candidates' performance on every question and *some* specific examples of candidates' responses which support the mentioned comments. Please note that the descriptive comments represent an overall perception of the better and weaker responses as gathered from the e-marking session. However, the candidates' responses shared in this document represent some specific example(s) of the mentioned comments.

Teachers and candidates should be aware that examiners may ask questions that address the Students Learning Outcomes (SLOs) in a manner that require candidates to respond by integrating knowledge, understanding and application skills they have developed during the course of study. Candidates are advised to read and comprehend each question carefully before writing the response to fulfil the demand of the question.

Candidates need to be aware that the marks allocated to the questions are related to the answer space provided on the examination paper as a guide to the length of the required response. A longer response will not in itself lead to higher marks. Candidates need to be familiar with the command words in the SLOs which contain terms commonly used in examination questions. However, candidates should also be aware that not all questions will start with or contain one of the command words. Words such as 'how', 'why' or 'what' may also be used.

General comments:

The responses reflected that the candidates lack basic knowledge of graphs and their applications in economics. Also, candidates were not able to relate what to do in the scenario or situation given in the questions and hence, performed badly. It was also observed that candidates did not comprehend the requirement of the questions particularly, the command words used in the questions which is observant through the irrelevant responses. It was observed in extended response questions (ERQs) that candidates were unable to make connections or relate the given information or scenario to the economics phenomena or concept tested. However, the candidates performed well in the questions related to the computation and calculations. Most of the candidates scored better marks on such questions. Questions referring to graphs and hypothetical data were also an area of attention which need to be improved as much of the candidates were unable to score full marks and have lost marks either in labelling or interpretations of the given graphs.

Note: Candidates responses reproduced in this report have not been corrected for grammar, spelling, format or factual information.

Detailed Comments:

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Constructive Response Questions (CRQs)

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> **Question 1:**
>
> The law of diminishing marginal utility states that if a person increases consumption of a product while keeping consumption of other products constant, there is a decline in the satisfaction level that person derives from consuming each additional unit of that product.
>
> Discuss any TWO points about practical importance of the law of diminishing marginal utility with the help of an example from everyday life.

Better responses were the ones where the candidates were able to comprehend and discus the given situation and answered in light of the context given. In few good responses, the candidates were able to write examples of the law from everyday life, i.e. eating an apple, drinking cold drinks.

Example:

Weaker responses were ones where the candidates were not able to relate the application of law of diminishing utility to the everyday life. The candidates mostly wrote examples of necessities such as drinking water and oxygen (fresh air) which was irrelevant or they shared examples of luxuries goods or giffen goods on which the law is not applicable.

Example:

Question 2:

The law of supply states that "if other factors remain constant, an increase in price results an increase in quantity supplied".

Mention any FOUR factors that should remain constant in the law mentioned above.

Better responses were able to give all four factors that remain constant as per given statement of law of supply, i.e. no change in cost of production, technology, climate, price substitutes, natural resources, capital goods, political situation and tax policy.

Example:

Weaker responses were not able to write all the four factors. Candidates mostly wrote one or two relevant factors. Some weaker responses were even not able to write one correct factor as they tried to comprehend the law of supply in their own words or wrote points that are not relevant to the factors effecting supply curve.

Example:

Question 3a:

The given table shows the quantity demanded of a product at different price levels.

Point	Price	Quantity Demanded	Computation of Elasticity of Demand	Degree of Elasticity
A	2	40	----	----
B	4	30		
C	8	10		

Calculate the price elasticity of demand at each point (B and C) and on the basis of that categorise the degree of elasticity of demand as either elastic, inelastic or unit elastic.

Better responses were able to compute elasticity of demand according to the formula and were able to categorise the degree of elasticity. Some candidates were able to compute but were not able to categorise the degree of elasticity.

Example:

Weaker responses were not able to compute the elasticity or they computed the elasticity with reversal fraction i.e. (shifting denominator) which shows that they do not have firm understanding of the formula to compute degree of elasticity.
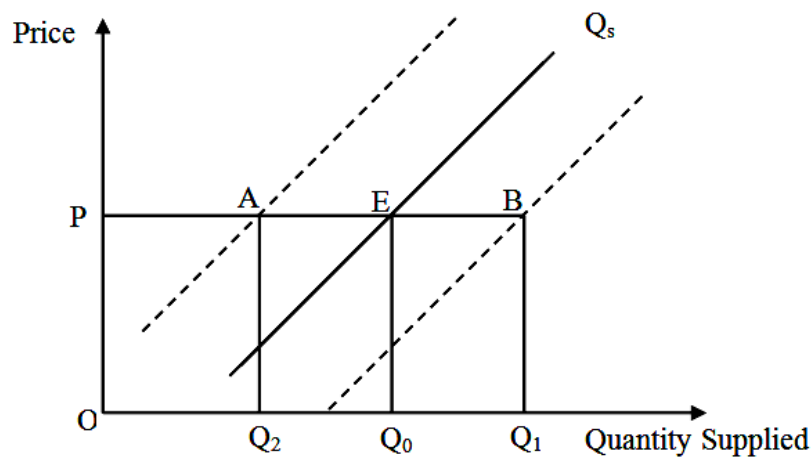
Example:

Point	Price	Quantity Demanded	Computation of Elasticity of Demand	Degree of Elasticity
A	2	40	----	----
B	4	30	0.7	elastic.
C	8	10	4	inelastic

Calculate the price elasticity of demand at each point (B and C) and on the basis of that categorise the degree of elasticity of demand as either elastic, inelastic or unit elastic. (3 Marks)

Point B

$$\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}$$

$$\frac{10}{30} \div \frac{2}{4}$$

$$\frac{10}{30} \times \frac{4}{2} \qquad = \qquad \frac{4}{6}$$

Point C.

$$\frac{\Delta Q}{Q} \div \frac{\Delta P}{P}$$

$$\frac{-20}{10} \div \frac{4}{8}$$

$$\frac{-20}{10} \times \frac{8}{4} \qquad = \qquad 4$$

Question3b:

If the initial supply curve in the given graph is represented as Qs, then analyse the effect of the following conditions on movement of the supply curve and complete the table. (Attempt any THREE conditions).

(**Note**: The first example has been done for your assistance.)

S. No.	Condition	Reason	Movement or shift of the curve
1	**The government has announced a subsidy on the production of the good depicted in the graph.**	**Subsidies will decrease the cost of production so it becomes cheap for production.**	**Supply curve will move towards point B from E because of increase in production.**
2	The government has raised the minimum wage rate by 25%.		
3	The government cuts the import duty on raw material and machinery used in the production of the good depicted in the given graph.		
4	The company has installed new machinery with latest technology which resulted in an increase in production.		
5	Government invites new manufacturers in the market to increase competition and reduce supremacy of existing manufacturers.		

Better responses comprehended the question very well and analysed critically the given condition on the graph and interpretatively explained the movement or shift of the curve with reasoning. This shows that the candidates have not only understood the movement along the curve but they have also comprehended the reason behind such shift or change. They were able to connect conceptual understanding with the given graph.

Example:

S. No.	Condition	Reason	Movement or shift of the curve
1	The government has announced a subsidy on the production of the good depicted in the graph.	Subsidies will decrease the cost of production so it becomes cheap for production.	Supply curve will move towards point B from E because of increase in production.
2	The government has raised the minimum wage rate by 25%.	Lesser the wage will increase cost of production.	Move from A to E because of decrease in production.
3	The government cuts the import duty on raw material and machinery used in the production of the good depicted in the given graph.	Import duty will decrease the cost of production	Supply curve will move towards point B from E because increase in production.
4	The company has installed new machinery with latest technology which resulted in an increase in production.	machinery with latest technology.	Supply curve will move to B from E because of increase in production.
5	Government invites new manufacturers in the market to increase competition and reduce supremacy of existing manufacturers.		

Weaker responses were failed to understand the concept and were not able to analyse the reason behind the movement of the supply curve of graph. They mostly described the given conditions in their own words rather than describing the reason or shifting of the curve. Some candidates were only able to elaborate the movement but did not analyse the reason or cause for such movement.

Example:

(Note: The first example has been done for your assistance.)

S. No.	Condition	Reason	Movement or shift of the curve
1	The government has announced a subsidy on the production of the good depicted in the graph.	Subsidies will decrease the cost of production so it becomes cheap for production.	Supply curve will move towards point B from E because of increase in production.
2	The government has raised the minimum wage rate by 25%.	Rise in wages increase the price.	Supply curve will move towards point B from E as wages increase the price.
3	The government cuts the import duty on raw material and machinery used in the production of the good depicted in the given graph.	Import duties decrease the production	Supply curve will move towards point A from E because of decrease in supply.
4	The company has installed new machinery with latest technology which resulted in an increase in production.	Installation of new machinery increase the production	Supply curve will move to B from E as the production increases
5	Government invites new manufacturers in the market to increase competition and reduce supremacy of existing manufacturers.		

Question 4:

Explain the 'law of increasing return' along with the schedule and graph from hypothetical data.

Better responses comprehended the question well and prepared a schedule based on a hypothetical data along with a graph. The better responses drew the schedule on the basis of hypothetical data and were able to prove the law on the situation hypothetically assumed. Although in few of the good responses, the candidates were not able to explain in brief but, the data and the graphs were accurate which means that they do have the understanding of the law of increasing returns. However, they were unable to write in brief with reference to a graph and schedule which drawn hypothetically.

Example:

Law of return states the relalationship between factor input and the resulting out put when one factor is increased, keeping the other constant.

Law of increasing return is the first phase of law of return. During this phase marginal product is rising and marginal cost is decreasing. This phase docent lasts much longer.

Fixed factor	variable factor	Total product	marginal product	AP
10	1	10	10	10
10	2	25	15	12.5
10	3	45	20	15
10	4	45	0	15
10	5	25	-20	5

In most of the *weaker responses,* the candidates did not understand the concept and wrote about diminishing marginal utility returns which means that the candidates did not clearly distinguish the two concepts. In some weaker responses, the candidates explained the law of increasing returns but were unable to draw the schedule or graph accordingly.

Example:

Law of increasing return: It means that there in the decrease demand or Supply and increasin Supply. Prices get higher. People can't afford the Prices. If there is Mos less demand So price would be higher or if there is More Supply The price of commodity will be higher.

Price	Quantity dmand	Quantity Supply
2	800	200
4	600	400
6	400	600
8	200	800

Question 5:

Revenue provides the income which a firm needs, to be able to cover its costs of production, and from which it derives profit.

a. Differentiate between the given types of revenue.

Total Revenue (TR)	Marginal Revenue (MR)	Average Revenue (AR)
1.	1.	1.

b. Elaborate the impact of price on each type of revenue.

	Total Revenue (TR)	Marginal Revenue (MR)	Average Revenue (AR)
If Prices are Fixed			
If Prices are Variable			

Better responses included differentiation between Total Revenue (TR), Marginal Revenue (MR) and Average Revenue (AR) and mentioned. TR as submission of all the revenue heads of a business, MR as an excessive value earned by sale of every next item or product. Moreover, AR is achieved by computing revenue on each product level. Some of the candidates were able to differentiate TR, MR and AR with the help of examples. However, only fewer candidates were able to elaborate the impact of TR, MR and AR on prices. This topic needs to be taken into class with the intension to clear the miss concepts of these overlapping concepts, so that candidates can distinguish them and can be able to elaborate these concepts of revenues in different price situations.

Example:

Total Revenue (TR)	Marginal Revenue (MR)	Average Revenue (AR)
1. It is the total amount received by the firm after selling whole output.	1. It is the present amount net addition made in the total revenue.	1. It is the per unit amount. formula = Total revenue / output

b.   Elaborate the impact of price on each type of revenue.   (2 Marks)

	Total Revenue (TR)	Marginal Revenue (MR)	Average Revenue (AR)
If Prices are Fixed	TR will remain constant	MR will also remain constant	and AR will be also constant.
If Prices are Variable	TR will be increase	MR will also increase decrease	AR will increase.

In *weak responses* candidates were not able to distinguish between Total Revenue (TR), Marginal Revenue (MR) and Average Revenue (AR) and how prices have impact on these revenue accounts. Mostly candidates, who were failed to distinguish between TR, MR and AR were not able to elaborate the effect of change. Candidates merged the concept of total product with concept of total revenue. In some weaker responses, candidates were not clear in the concept of marginal and average revenue and they wrote irreverent points.

Example:

Total Revenue (TR)	Marginal Revenue (MR)	Average Revenue (AR)
1. Total revenue means total production said and earned profit	1. marginal revenue is obtained by dividit dividing output by the factor and income of labour	1. Average revenue means by selling and deaddition to the Production.

b.   Elaborate the impact of price on each type of revenue.   (2 Marks)

	Total Revenue (TR)	Marginal Revenue (MR)	Average Revenue (AR)
If Prices are Fixed	If prices are fixed men+ Total revenue will decreases	If prices are fixed marginal revinue will de increases	Average reveine will decrease.
If Prices are Variable	the Total reveni ewill increase.	the Marginal revenue will remain constant.	Average revenue will increase.

Question 6:

Explain with the help of an example what is meant by real wage and nominal wage.

Better responses clearly explained the real wage and nominal wage with their examples. The candidates mostly mentioned that real wage is the amount of money which receives in exchange of services performed by the labour and on gaining the wage on overtime services and the real wage is the adjusted wage with reference to the inflation in the economy. In fewer responses, the candidates mentioned relatively weaker examples which were partially correct.

Example:

Nominal wage is the total wage alloted to a person to carry out its expanditure but the taxes and other expensed are including in it after paying these expense the wage that remain is called the real wage. For example a nominal wage of a labour is 100 Rs After deducting the expenses tax etc of 50 Rs he is left with 50 Rs which is his real wage now from this if he has to save or invest it's his own awish.

In *weaker responses*, the candidates were not able to distinguish between nominal and real wage. The candidate mostly wrote about different types of wages with reference to payment. This concept needs to be taught and explained to the candidates as by reviewing some responses, it was apparent that candidates have very week understanding of this topic.

Example:

Real Wage: The wages earned as salary, by providing your services are real wages.
    Eg: Salary
Nominal Wage: The wages earned through rent, or after excluding government taxes etc is nominal wages.
    eg. Rent

Question 7:

The following are the statistics of an economy.

S. No.	Particulars	Amount (million $)
1.	Consumption expenditure	450
2.	Investment expenditure	210
3.	Government expenditure	350
4.	Exports	450
5.	Imports	325
6.	Net factor income from abroad (NFIA)	310
7.	Depreciation	75
8.	Subsidies	125
9.	Indirect taxes	180

Compute GNP (Gross National Product) and NI (National Income) from the given data.

Better responses correctly computed (GNP) gross national product and national income (NI) from the given figures by eliminating the unnecessary figures.

Example:

$$GNP = GDP + (Net\ income\ from\ abroad)$$
$$GDP = C + G + I + NFX\ (Import - Export)$$
$$= 450 + 350 + 210 + (450 - 325)$$
$$GDP = 1135$$
$$GNP = GDP + Net\ income\ factor\ from\ abroad$$
$$= 1135 + 310$$
$$GNP\ (GDP = 1445$$
$$National\ Income = GNP - Indirect\ taxes - Depreciation$$
$$+ Subsidies.$$
$$= 1445 - 180 - 75 + 125.$$
$$= 1315$$

Weaker responses mostly computed by the submission of the all given figures. In some responses candidates computed Net National Product (NNP) rather than computing gross national product (GNP).

Example

$$GNP = GDP - Net\ factor\ income\ from\ abroad$$
$$= 1095$$

$$NI = 450 + 210 + 350 + (450 - 325) - 180 + 125.$$
$$= 1080$$

Question 8:

a. Define quantity theory of money.

b. If the available money supply in the economy is $100, price level is $10 and the volume of transaction is 70, then compute the velocity of money circulation using quantity theory of money.

Better responses defined quantity theory of money of Irving fisher which says that change in money supply and price level has direct relationship in an economy. In part **b**, mostly candidates applied the formula **MV = PT** correctly and computed velocity of money.

Example:

If money increases the value of money goes down but if money decreases the value of money increases.

when price is double, money supply also double but value of money half conversly when price half, money supply also half and money value doubl

$$Pt = MV$$
$$V = \frac{10 \times 70}{100}$$
$$V = 7$$

Weaker responses were not able to define quantity theory of money and compute the value of money correctly. However, few candidates defined the theory but were not able to compute the correct answer.

Example

Quantity theory of money means the value of money. The value of each unit of money.

available money supply + price level - The volume of transaction.
100   +   10   -   70
          =   40 The velocity of money Co Circulation.

Extended Response Questions (ERQs)

Question 9:

In question 9, part **a** was about explaining any four key features of Lionel Robbins definition of economics with reference to a given statement however, in part **b,** the question was about writing any four merits and demerits of Sir Alfred Marshal's definition which was given as reference to the candidates to build upon. Majority of the candidates attempted option **a** but were unable to perform well.

Question 9a:

a. Professor Lionel C. Robbins (1898-1984) defined Economics as "The science which studies human behaviour as a relationship between ends and scarce means which have alternative uses."

With reference to the given statement, explain FOUR key features of Robbin's definition of Economics.

Better responses were able to explain the four key features of Robbins definition of economics i.e. wants are unlimited, limited means, prioritized the wants on the bases of importance and means have alternative uses. Most of the candidates wrote in reference to the above components and elaborate it with some example from everyday life.

Example:

Weaker responses were unable to comprehend the question and did not write anything about the means and ends. Instead, they discussed general features of studying economics. Mostly weaker responses were confused between the key points presented by Alfred Marshall and Lionel Robbins and wrote a mixed match which gave a merger approach and was not correct as both of the viewpoints are contradicting and are of different approach for each other of studying economics.

Example:

> a. 1. Professor Lionel C. Robbins' definition, was partially accurate as it's whole ordeal was considered with wealth.
>
> 2. It defined that when a man possess money, his behaviour solely relies on as how to control his want.
>
> 3. This definition also shows that economics studies to have the way and uses as to how to utilize or spend the income.
>
> 4. This definition faced much less criticism than Marshall's definition of Economics because Marshalls implied Economics to be the study of wealth only.

Question 9b:

Sir Alferd Marshall wrote a book "Principles of Economics" in 1878 and defined Economics in the following words:

"Economics is a study of man's action in the ordinary business of life. It inquires how he gets his income and how he uses it. It examines that part of individual and social actions which is mostly, closely connected with the attainment and with the use of material requisites of well-being. Thus, economics is on one side a study of wealth and on the other and important side, a part of the study of man".

With reference to the given definition, mention any FOUR merits and any FOUR demerits of Marshall's definition of Economics.

Better responses were able to explain the four key merits of Alfred Marshall's definition of economics i.e. it talks about comprehensively about importance of society and consider an ordinary man's welfare, it talks about the unfair distribution of wealth in the society. The better responses also discussed some of the demerits such as, narrow in nature, ignorance to the non-material services, concept of welfare.

Example:

Merits of Marshall's definition

1) Comprehensive :- Marshall's definition is more Comprehensive and clear than Adam Smith.

2) Study of human life :- According to the definition of marshall is the study of human life which studies of a particular subject which is called human life.

3) Importance of Society :- Society has given a much importance in marshall's definition

4) An Ordinary Man discussed :- Economics is a Social science, those people who doesn't study economics like saints will not be studied in economics. which studies of man social life

Demerits of Marshall's definition.

1) Narrow Scope :- Marshall definition has narrowed the scope of economic because it only talks about material welfare.

2) Services were ignored :- It ignored non-material services like

Weaker responses were unable to comprehend the question and did not write anything about the means and ends rather than they discussed general features of studying economics.

Example:

Sir Alfred Marshall defined Economics as 'Science of wealth' in 1878 and there were many drawbacks and also new ideas in the field of economics.

• Merits :-

   1- Didn'd Ignore Concept of wealth: As the earlier economists did, they ignored or less defined the concept of wealth.

   2- Gave modern economics they they idea of Income and expenditure.

   3- narrowed the scope of material welfare which economists before him had too widned.

   4- Gave a little light on human behaviour which later was explained and studied and made was made main part of economics.

• Demerits :-

   1- Wealth is immeasurable :- it cannot be measured in $

Question 10:

In question 10, the part **a** was about describing the canons of taxation and in continuation to that section (ii) required an explanation as how these canons are applied in a taxation system. Part **b** of question 10's first section was about drawing a business cycle and second section was about describing any TWO features of any THREE phases the candidates have drawn in the earlier section of the question. Majority of the candidates attempted option **a** and performed well.

Question 10a:

i.   Describe the term 'canons of taxation'.

ii. Explain any THREE canons of taxation and describe how they govern taxation rules (effect of having such canon in the tax system).

Better responses described the term 'canon of taxation' and explained three taxation canons with examples and explaining how these canons are applied in any taxation system. Mostly of the candidates wrote three out of the four main 'canon of taxation' which were presented by Sir Adam Smith i.e. canon of equality, canon of convenience, canon of certainty and canon of economy. Furthermore, a few candidates also mentioned the other cannons of modern day economic system such as cannon of productivity, cannon of elasticity, cannon of simplicity, cannon of diversity and canon of flexibility.

Example:

Weaker responses were unable to describe the canons. However, in few weaker responses candidates were able to describe one or two canons only or even in some of the weaker responses overlapped one into another or mix the concept such as 'canon of equality' and 'canon of certainty'. In few weaker responses candidates described the 'canon of taxation' well but were unable to give an example that how such canon can be implemented in a tax system.

Example:
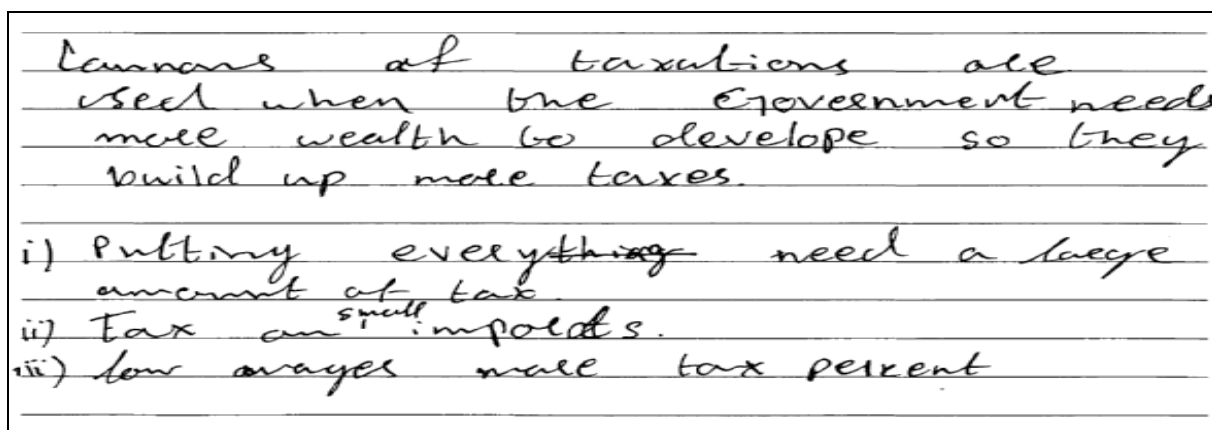
In some responses, candidates had wrongly spelled the word cannon instead of canon. The word canon is used for principle or standard and the other word is usually used as arsenal vocabulary for mortar or guns though the marks were not deducted for that during the e-marking, but candidates are suggested to use the correct vocabulary as this change the context of concept in economics.

Question 10b:

i.   Draw business cycle by mentioning different phases.

ii. Discuss any TWO features of any THREE phases of business cycle.

Better responses were able to draw the cycle well with reference to time period and production (output). Candidates discussed the two features of the business cycle (i.e. prosperity, recession, depression and boom) with reference to different economic indicators. Candidates mentioned features such as, in prosperity phase, there is an expansion of output, income employment, prices and profits, in recession phase, the economic activities slow down, decline in output, income, employment, prices and profits. Mostly Candidates mentioned that in depression, the volume of output and trade falls and deflation with contraction of bank credit occurs. Few candidates also drew comparative analysis between different phases of business cycle.

Example:
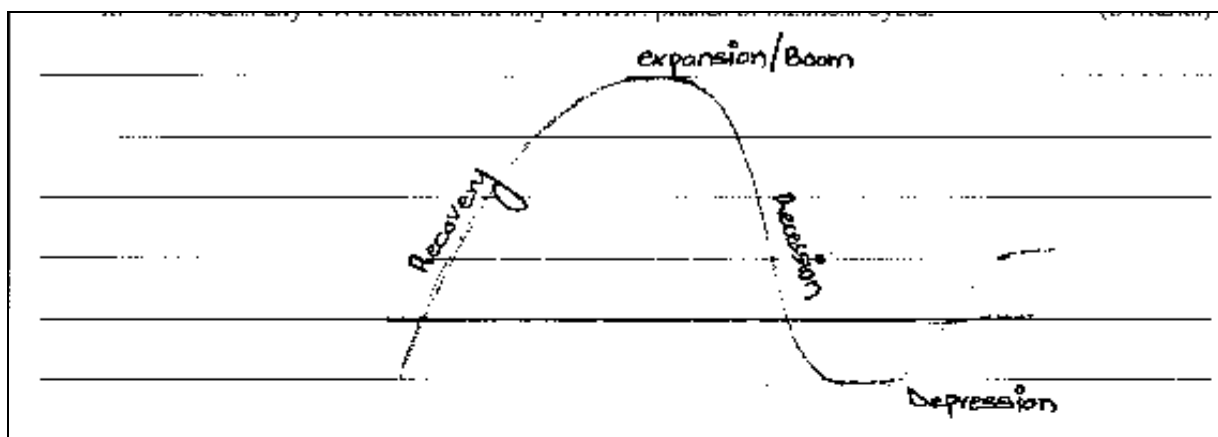
1) Expansion / Boom

Expansion and Boom period means that the economy is developed. In this Period the Price and demand for raw material increases with the increase of the output. The profit also increases at the time and investment, output, economy, profit raises, and then GDP of a country increases with the increase of the economic Activity.

2) Recovery

The Recovery is a period which means that country is now developing. In this period Price of Durable goods increase with the increase in output and Profit. The investment Take Place and In this period new firm entre in the market. The bank increase loans and economy develops.

3) Depression

I Depression means that the country is in the Period of downfall. In this output decreases with the rawmaterial, the firm in is on level of loss, massive unemployment, no investment take Place and economy is decline

In *weaker responses* candidates were not able to recognise the business cycle and drew different diagrams. Some of the candidates drew production possibility frontier graph which was not required. In some weaker responses, the candidates drew the diagram correctly but were unable to give two features for the phases they had drawn which shows weaker understanding of the concept. In few *weaker responses* the candidates wrongly marked the phases and most of the candidates replaced recession with depression either in marking in diagram or in writing features due to which they were unable to score good marks.

Example:
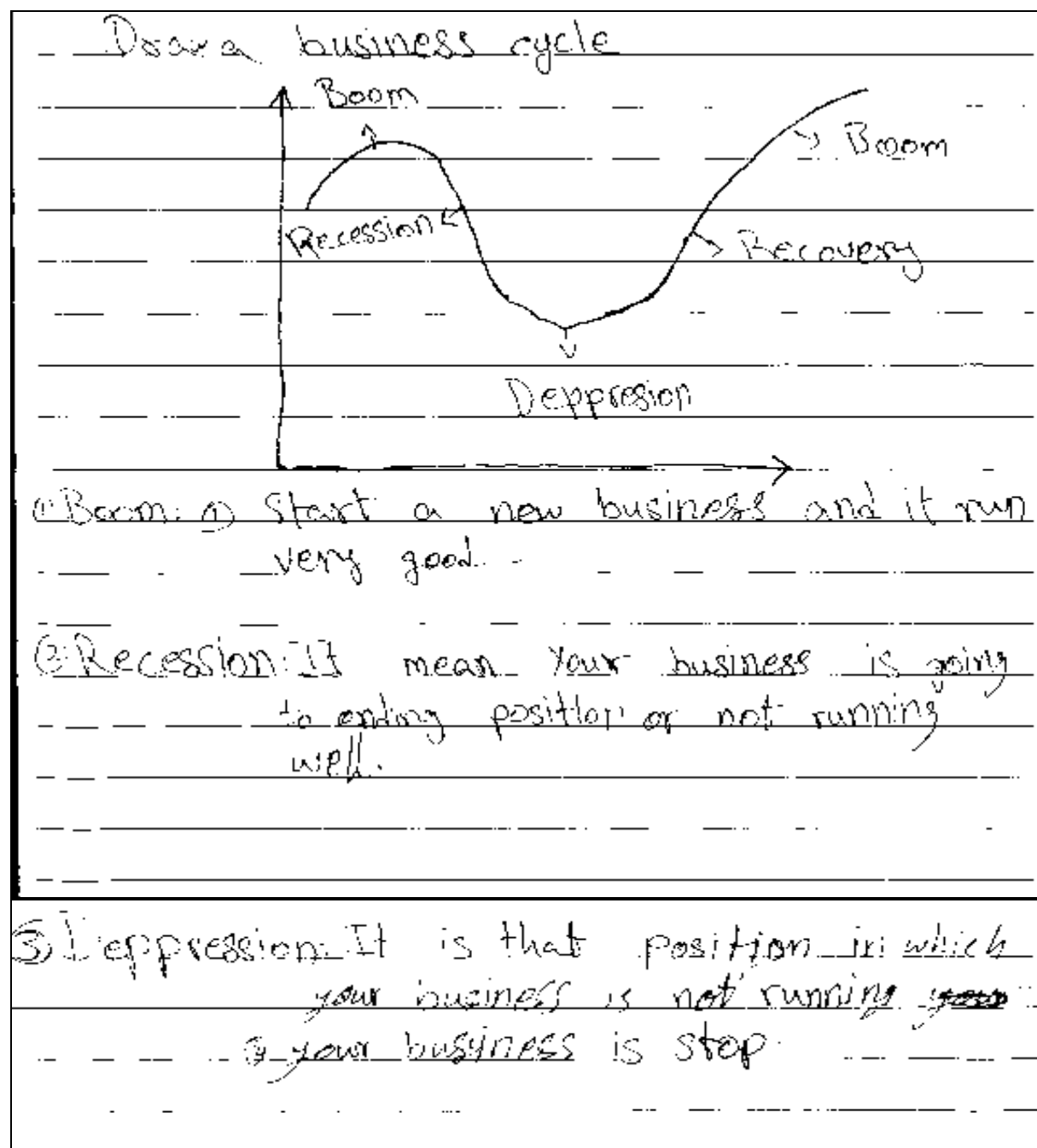
Conclusion:

The distinguishable difference noted among the weaker and stronger responses is the understanding of the command word and its scope with reference to composing a response. Moreover, candidates were mostly unaware of exact requirement of the questions so they were unable to comprehend scope and range of writing a response. In few weaker responses where they were to asked to build upon or write response to a given scenario or statement but they were unable to connect it with the given reference.

In question where candidates have to apply a pre-defined formula on a given set of data, Mostly in weaker responses they were unable to filter the correct figures from the given data, so this can be improved by practicing such questions in classroom based assessment. Teachers and candidates should practice a bit more on the graphical representation of the economic concepts as most of the candidates were unable to perform better on such questions. The performance on graphical representation based question was comparatively low as compared to question based on theories and concepts.