	التاريخ
	التوقيـــــع
	الاسم
	التاريخ
	التوقيــــع
	الاســـم

رُوجع على النص العربي ومطابق للأصل اليدوى ويطبع على مسؤلية اللجنة الفنية ،

(E.N/15) ARAB REPUBLIC OF EGYPT て/パラン /で [パ]

Ministry of Education

Convers Secondary Education Cartificate Examination 2015

General Secondary Education Certificate Examination, 2015 [ New System – First Session ]

Philosophy & Logic Time: 3 hours

الفلسفة والمنطق [باللغة الإنجليزية]

[ الأسئلة في صفحتين ]

تنبيه مهم: ١ ـ يسلم الطالب ورقة امتحانية باللغة العربية مع الورقة المترجمة .

٢ ـ الإجابات المتكررة عن أسئلة الصواب والخطأ لن تقدر ويتم تقدير الإجابة الأولى فقط

#### **First: Philosophy**

#### **Answer the following questions:**

#### **Question (1): (Obligatory)**

(12 marks)

- **A)** Define the relationship between freedom and responsibility in "Sartre's" view.
- **B**) To "Kant", duty is the necessity of doing the act in respect for the law of reason in itself. Illustrate giving an example.
- C) Pleasure or utility is the moral ultimate good for Utilitarians. Comment.
- **D**) To "Al-Farabi" happiness is the end of every moral act. Discuss.

# **Question (2): Answer ONLY THREE of the following:** (9 marks)

- **A)** Review the critiques of "Shaftsbury's" moral sense approach.
- **B**) Identify the three powers of the soul in "Miskawayh's" view.
- **C**) "Al-Ghazali" established two concepts of good and evil (beauty and ugliness). Prove that.
- **D**) The physical evidence is one of the proofs that proponents of freedom provides to support their position. Analyse the statement.

# **Question (3):** Choose only three of the following and show whether they are true or false giving reasons: (9 marks)

- **A)** The discovery of inevitability in biology is one of the factors that contributed to the emergence of modern Determinism.
- **B**) To "Rousseau", democracy is a means for social reform.
- **C**) Ethics is a normative discipline to the Positivist Communitarians.
- **D**) To "Al-Farabi", virtue lies midway between two extremes, both of them are vilified.

[ بقية الأسئلة في الصفحة الثانية ]

تابع [٦١] ج/ ث.ع/أ/ح

#### Second: Logic

## **Answer the following questions:**

### **Question (4): (Obligatory)**

**(12 marks)** 

- **A)** Define the non-definables in mathematical deduction.
- **B**) The human phenomenon is more sophisticated and intricate than the physical phenomenon. Illustrate giving an example.
- **C**) Coherence and broadness are two measures of critical thinking. Prove that.
- **D)** The laws of physical sciences rely on probabilistic weighting. Analyse the statement.

## **Question (5): Answer ONLY THREE of the following:** (9 marks)

- **A)** Explain three conditions of scientific observation in the traditional inductive method.
- **B**) The validity of mathematical theories depends on the validity of premises within the mathematical pattern. Prove that.
- C) A person encounters difficulties when attempting a critical analysis of any text. Discuss.

## D) Read the following text, then respond to the tasks required:

- "Researchers assert that protecting the environment from pollution decreases diseases which in turn decreases mortality rate and improves the health condition of people. Accordingly, establishing the society of environment protection friends is a must."
- **1-** Identify the main issue of the text.
- **2-** From the text, infer a typical logical argument according to the line of deduction.

# Question (6): Choose only three of the following and show whether they are true or false giving reasons: (9 marks)

- **A)** Mathematics is a deductive system.
- **B**) Scientific knowledge is direct knowledge.
- C) Ancient Egyptians made contributions to the history of induction.
- **D**) Critical thinking is a meditative thinking.

[انتهت الأسئلة]

الدرجة العظمى ( ٣٠ ) الدرجة الصغرى ( ٣٠ ) عدد الصفحات ( ٣ )

جمهورية مصر العربية وزارة التربية والتعليم امتحان شهادة إتمام الدراسة الثانوية العامة لعام ٢٠١٥ م نموذج إجابة [نموذج إجابة الفلسفة والمنطق (بالإنجليزية)]

[ ٦١ ] الدور الأول ( نظام حديث )

#### **I- Philosophy**

#### **Answer to question (1): (Obligatory)**

(The student should answer four items of three marks each.  $4 \times 3 = 12$ )

### A) The relationship between freedom and responsibility in Sartre's view:

If a man is free to choose his actions by himself and define his identity by his free will, he must bear all the consequences of his actions that he chose by his own free will, because without bearing responsibility. The absolute freedom of an individual will lead to total chaos and mass destruction to the society. Sartre asserts that by saying: "If the existence is prior to identity, then, man becomes responsible for what he is." So, the first existentialist implication of this premise is that it makes each individual as a trustee of himself, and completely responsible for his own actions, i.e. absolute freedom requires absolute responsibility.

# B) Duty in Kant's view is the necessity to do the act in respect for the law of reason in itself:

Duty here is a synonym of law, and the law that is meant here is reason with its absolute principle. Everything happens according to definite laws compatible with the nature of these things. If man is by nature rational, then the laws that he should follow in his life and morals must be according to principles of reason. And if so, the moral law will itself be the rule of reason. For example, when a man tells the truth for its own sake and be honest for honesty's sake.

# (Two marks for explanation and one mark for the example.) (Any other reasonable and correct example is accepted.)

# C) Pleasure or utility is the moral ultimate good for Utilitarians:

The ultimate end for morals is to reach the utmost good, that's according to all views which admitted that this utmost good is the happiness that we always pursue to achieve. But the conflict among philosophers appears when it comes to defining the meaning of happiness, for it, according to some views, is of a rational nature and to others it takes the form of self-sacrifice, etc. however, happiness here is every act that gives it's doer the utmost pleasure which is utility at the same time, i.e. pleasure is utility. utilitarians have different views about pleasure whether it is sensory or mental. But, what is meant by pleasure here is the pleasure of senses, although some of the utilitarians exert some effort later to make part of the pleasure rather mental.

# (Other logical answers are acceptable)

# D) To AL Farabi, happiness is the end of every moral act:

In AL Farabi's view, happiness can be realised when the soul reaches its perfection by getting away from the immediate sensual pleasures and the physical needs. It can do that by doing some acts willingly, there are two types of these actions:

- **1-** Physical actions: that hinder the individual from attaining the happiness. So they are bad actions and they are considered misdeeds
- **2-** Mental actions: only these are considered good deeds but they are not good as means in themselves. They are good to reach happiness, so happiness is the good that is required for its own sake.

(Other logical answers are acceptable)

# تابع [ ٦١ ] ث.ع / أ / ح نموذج إجابة [ الفلسفة والمنطق (بالإنجليزية) ] نظام حديث - الدور الأول ٢٠١٥

#### Answer to question (2):

(Four items, the student is to choose only three of them of three marks each  $3 \times 3 = 9$ ) A) The critiques of Shaftsbury's moral sense approach:

#### 1- Affection / feeling is varied and relative:

To build morals on feelings and make the moral commitment due to affection and depending on internal individual source leads to relative individual moral judgements, because affection is relative and feeling is varied, also the individual is not the same every time. So it cannot be proper to build a general moral law that all humans agree on.

#### 2- The separation of moral and religion is wrong:

Religious men criticised Shaftsbury's call for the separation of moral and religion, and his insistence to exclude the religious reward or punishment as a moral act. They argued that making people love Heaven and fear Hell has much moral effect than leaving them for their internal feelings and their own sense of virtue apart from religion.

## 3- It is wrong to say that virtues do not require suffering / efforts:

Virtue is essentially a sort of self-denial. This self-denial comes after much individual suffering to defeat selfishness and try to realise virtue. Only then can man deserve to be described as a man of morals. But Shaftsbury decided in his approach that man is good by nature. So, he acts morally spontaneously without any suffering, then man doesn't do any favour by being a man of moral, while the real morals are based on free human will that results from suffering.

## B) The three powers of the soul in Miskawayh's view:

Miskawayh argued that each power of the three powers of soul has a special virtue that is compatible with its nature and its function as follows:

- The power of lust: its virtue is chastity and results from generosity.
- The power of Anger: its virtue is courage, and results from patience.
- The Power of speech: its virtue wisdom and it results from knowledge.

# C) Concepts of good and evil (Beauty and ugliness) in AL Ghazali's view:

Al Ghazali identifies "Good" as what man can benefit in the hear after, and "evil" is what harms at the end. The act is considered "good" or "evil" according to its benefit or its harm in the hereafter. So, the act that causes harms to its doer in the hereafter and benefit him in this life isn't considered "good". So, AL Ghazali assures that "The origin of all evil is involvement in this life and overlooking the hereafter, while the origin of all good is to act for the hereafter's sake, but without overlooking this life.

For this life in the farm where man cultivates for the hereafter. So, man needs divine revelation to differentiate between good and evil and also needs reason to guide him when applying this.

# D) Physical evidence is one of the proofs that proponents of freedom provide to support the position:

It is known that there are some physical movements and acts that man cannot interfere in or control, such as, the primary instinctive urges:

Hunger, thirst, excretion etc. When man finds himself obliged to follow these instinctive behaviour involuntarily. That is beside the involuntary reflexive acts, such as closing eyes in a strong light. Moreover, one feels that there is another set of acts of the organs and physical movements that he can control. This appears in the voluntary acts, which are far more than the involuntary acts such as the ability to

تابع [ ٦١ ] ث.ع / أ / ح نموذج إجابة [ الفلسفة والمنطق (بالإنجليزية) ] نظام حديث ــ الدور الأول ٢٠١٥ من معنى ــ الدور الأول م ٢٠١٠ من معنى من move the body organs and ability to cure many diseases without being completely controlled by the disease.

#### Answer to question (3):

(Four items, the student is to choose only three of them of three marks each  $3 \times 3 = 9$ ) (1 mark for the tick and two marks for giving reason)

A) The discovery of inevitability in biology is one of the factors that contributed to the emergence of modern Determinism. (True)

**The reason:** scientists wrongly thought that the living body with its essential cells is not subjected to any inevitable constrains at all, but the recent scientific discoveries, specially after the emergence of organic chemistry proved that the living cell is an inevitable result of many chemical reactions following certain laws.

B) To Rousseau, Democracy is a means of social reform. (True)

The reason: Democracy is one of the two means to reform society in Rousseau's view, and it is related to the political aspect. It aimed at attaining freedom for all the people through the democratic system, because dictatorship robs individuals of their freedom as the minority dominates the majority while democracy gives them their freedom because the governing body came according to a social contract among the individuals in the society. Thus, these individuals will have the right to displace this governing body if it contradicts the will of people. However, Rousseau believes that Democracy in its proper and complete meaning has never and will never be achieved. But man tries to get closer to it and seeks to achieve its aims as much as possible. And, in addition to the advantages of Democracy, there are some disadvantages such as changing the governments rapidly and frequently, and vulnerability to civil wars. Despite these advantages, Rousseau prefers Democracy and says: "I prefer freedom with danger to slavery with peace."

C) Ethics is a normative discipline to the Positivists Communitarians. (False)

The reason: because turning to the use of the scientific in studying the ethical phenomenon as it is in society means that ethics became an experimental positivist science like the rest of the physical sciences, taking into consideration some of the qualitative differences such as experimentation in sociology is not empirical. Instead, it is interpretation of social phenomena, a life observation of its development and an attempt to unravel the laws that directs them. It is the same also in the Positivist ethics for the experimentation in it is not empirical either, but it depends on planned observations of various phenomena in society to discover their impact on shaping the ethical values in their societal conditions. The analysis of these ethical values leads us to discover their social origins as social phenomena. For ethics does not appear if man is alone on a deserted island, but it appears in the community and according to the societal conditions. So we have to study it as a positivist science.

D) To Al-Farabi, virtue lies midway between two extremes, both of are vilified. (True)

**The reason:** virtue lies midway between two extremes, both of them are vilified such as excessiveness and negligence. The good deed is midway between these two extremes. Courage, for example, is midway between recklessness and cowardice,

تابع [ ٦١ ] ث.ع / أ / ح نموذج إجابة [ الفلسفة والمنطق (بالإنجليزية) ] نظام حديث ــ الدور الأول م ٢٠١٥ and generosity is midway between stinginess and extravagance, chastity is midway between glutton and indifference to pleasure.

### II- Logic

#### **Answer to question (4): (Obligatory)**

(The student should answer four items of three marks each.  $3 \times 4 = 12$ )

**A)** The non-definables in mathematical deduction: The are a set of concepts or propositions that the mathematician takes without a definition to use them in defining other concepts, for if we insist on defining every word the mathematician says, we would have limitless definitions because every definition depends on other words, you would have used other words and so on. So he must take some words without defining them to define other words.

# B) The human phenomenon is more sophisticated and intricate than the physical phenomenon:

The human phenomena that are studied by the humanities are more sophisticated, intricate and complicated than those studied by physical sciences. They are much more difficult to measure and to empirically study than the physical phenomena. For example, there is a big difference between a scientist studying the impact off temperature on iron extension, and a researcher studying the influence of school peers on child behaviour. For in the first case, the scientist can control all the variables: light, presser, temperature and so on to measure the effect of only one variable on extension. But in the other case, it is difficult to insulate one factor (i.e. influence of the peers at school) on a certain child, for there are other factors that surround him and he was influence by, and they are interacted to the extent that we cannot define the impact of only one factor separated from the others.

# (If the student gave another correct and logical answer, he would take the mark.)

C) Coherence and broadness are two measures of critical thinking:

Firstly, by coherence we mean to what extent the question, the interference, the argument or the phrase is related to the subject of the argument or problem. One question that helps in applying this measure is do these questions or ideas shed light on the subject of the argument? Another is: to what extent do they contribute to the solutions of the problem? Second, by this measure we mean examining all the aspects of the problem. These aspects include all the details relevant to the subject. One question that can help bring the broad aspects of the subject together is: "Is there a necessity to include other methods in dealing with the problem?" another is: "Are there new details to be introduced in the examination of the problem in question?"

(3 marks for each measure. If the student raised only one logical question to apply its measure, he would take the full mark.)

D) The laws of physical sciences rely on probabilistic weighting:

# تابع [ ٦١ ] ث.ع / أ / ح نموذج إجابة [ الفلسفة والمنطق (بالإنجليزية) ] نظام حديث – الدور الأول ٢٠١٥ Because generalization in the physical sciences involves risks for it allows to judge

things the researcher has not experienced or made a subject of research. Therefore is judgement or the scientific law cannot be certainly true. So, reaching certainty cannot be achieved by induction and the physical sciences as we may know new things in the future that can make us change our judgements.

#### Answer to question (5):

(Four items, the student is to choose only three of them of three marks each  $3 \times 3 = 9$ )

- A) The conditions of scientific observation:
  - **1-** The observer should be as secure as possible.
  - **2-** The observer should be ready and fit for it.
  - **3-** The phenomenon should be repeatable, for the phenomenon that happens only once cannot be subjected to accurate observation. The observer has to be able to make sure that it is repeatable to be able to revise and correct whatever mistakes he might have made.
  - **4-** The phenomenon should be observed from all aspects, because overlooking any of

them may lead to misinterpreting the phenomenon.

- 5- Objectivity in observation, i.e. the researcher has to observe the phenomenon as it
  - occurs in reality and record everything honestly and impartially.
- **6-** Using the equipment and devices that make the observation accurate. One case in point is the use of microscopes and telescopes when the bare eyes are unable to see the phenomenon under study. But the researcher has to make sure that the equipment and devices are in good shape.

## (Three conditions are enough.)

# B) The validity of mathematical theories depends on the validity of premises within the mathematical pattern:

If the premises are valid, we have to accept the validity of what results from them logically in accordance with rules of deduction. If we ask mathematician to prove any of his theories, he would return, directly or in directly, to the first premises. By indirect is meant that if a mathematician has proved a theory it would become one of the theories that he uses to prove his subsequent theory.

# C) The difficulties a person encounters when attempting a critical analysis of any text:

- The first difficulty is that there are no predetermined definitive rules that writers or speakers follow for whatever they produce. So, it is not easy to identify premises and other lines of argumentation in a written text or a speech. So, identifying a line of argument has to do with identifying an author's intention and thematic signals, and this needs a lot of practice.
- The second difficulty is that some authors tend to leave textual gaps making readers

unable to identify premises so they have to fall upon their own mental resources. This is why each issue has to be clearly defined by the reader and the argument as a whole be put explicitly.

(Other logical answers are acceptable)

# تابع [ ٦١ ] ثع / أ / ح نموذج إجابة [ الفلسفة والمنطق (بالإنجليزية) ] نظام حديث ـ الدور الأول ٢٠١٥ .

D) The main issue of the text is: protecting the environment from pollution protecting the environment protects us from diseases – environmentalists.

(Any other main issue expressing the subject is acceptable)

- P.1 Protecting the environment from pollution decreases infections.
- P.2 That leads to decreasing of death rates.
- P.3 That also improves the individual's health.
- C. Developing the Society of Environment Friends is inevitable.

(2 marks)

(**N.B.** The premises order or number is not a must)

#### Answer to question (6):

#### A) Mathematics is a deductive system. (True)

The word system implies an integrated structure composed of a set of mathematical concepts and problems, beginning with a number of terms and issues that make the premises of the system. Then, a set of issues that represent the mathematical theories deduced from the premises. This means that deduction plays the key role in the mathematical structure. It moves us from the premises to the conclusions and this is why mathematics is describes as a deductive system.

#### B) Scientific knowledge is direct knowledge. (False)

Because it is indirect and is generalized and the aim of science is to come to a general law which explains all the members or elements of the phenomenon the scientist investigates.

# C) Ancient Egyptians made contributions to the history of induction. (True)

Ancient Egyptians showed great skills at medicine, chemistry and other disciplines. It is not possible that they attained such knowledge without a scientific method of thinking and research like the one followed in modern science.

# D) Critical thinking is reflective. (True)

A critical thinker suspends his beliefs, reconsiders his assumptions, and their implications.

