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UNIVERSITY OF GHANA

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UGRC 150: Critical Thinking and Practical Reasoning

Final Examination. Second Semester 2014-2015

MAIN CAMPUS and ACCRA CITY CAMPUS

TIME: 2 hours

INSTRUCTIONS: Answer ALL 35 questions. RETURN ALL SHEETS.

Circle ONE letter as your answer to each question on the question sheet.

ALL QUESTIONS ARE WORTH TWO (2) POINTS EACH.

1. Which letter corresponds to an **emotive expression**?
 - A. Rice and stew is on the menu today.
 - B. Now let us pray.
 - C. Jesus is the Son of God.
 - D. Mohammed is the Rasul of God.
 - E. Hallelujah!
2. Which letter corresponds to a straightfoward **interrogative**?
 - A. Is this the tro-tro that goes to Madina?
 - B. Will you shut the door when you go out, please?
 - C. Start work.
 - D. I need to go to Madina.
 - E. I hate examinations so much, isn't this just the Devil's work?
3. Which letter corresponds to a **declarative**?
 - A. This tro-tro goes to Madina.
 - B. Unless tomorrow.
 - C. Rice and stew.
 - D. Now let us pray.
 - E. How are you?
4. Which letter corresponds to a **sentence fragment**?
 - A. This tro-tro goes to Madina.
 - B. Unless tomorrow.
 - C. Start work.
 - D. Now let us pray.
 - E. How are you?

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5. Which letter corresponds to an **imperative**?
 - A. Is this the tro-tro that goes to Madina?
 - B. You must show your ID card in order to take this exam.
 - C. GBC 6.00 news.
 - D. I prefer to shop in Madina when there is less traffic.
 - E. I hate examinations; isn't this awful?

6. Choose the best example of a **definition**.
 - A. International football is such a sorrow to me! It's so unfair it makes me cry!
 - B. Water is a colourless, tasteless, odourless fluid which has the molecular compound the English word for H₂O.
 - C. Water is necessary for every mammal to sustain life.
 - D. Let there be light! And light was over all.
 - E. God's love is the bread of life.

7. Choose the best example of a **moral judgment**.
 - A. There are seven days in the week.
 - B. The new holiday declared this year celebrates Kwame Nkrumah's birthday anniversary.
 - C. It is wrong for those boys to set fire to that cat.
 - D. Those boys in the yard are setting fire to that cat.
 - E. Abortion after the first trimester of pregnancy is illegal in this country.

8. Choose the best example of a **non-moral value judgment**.
 - A. My wife is the most generous member of her Church.
 - B. There are more days in October than there are in November.
 - C. I wish I could go home; I hate taking examinations.
 - D. Going past the French school is the best route to Accra during the busy traffic period.
 - E. A triangle is a three-sided closed figure in the plane.

9. Circle the letter indicating which alternative is **not** a **factual statement**.
 - A. There are now seven days in the year that are bank holidays.
 - B. There were no new holidays declared last year.
 - C. It is wrong for those boys to set fire to that cat.
 - D. Those boys in the yard are setting fire to that cat.
 - E. Abortion after the first trimester of pregnancy is illegal in this country.

10. Which of the following is **not** a **value judgment**?
 - A. We should have more bank holidays.
 - B. Abortion is evil.
 - C. It is wrong for those boys to set fire to that cat.
 - D. Those boys in the yard are cruel and uncaring.
 - E. There is a traffic rule that prohibits performing U-turn at this particular junction.

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11. Circle the letter that corresponds to the best illustration of a *circular definition*.
- This object is a sphere.
 - Hypertension is blood pressure that exceeds a rate of 140 systolic and 90 diastolic.
 - Philosophy is the study of the works of Plato.
 - To be courageous is to act with courage.
 - Love is an emotional response.
12. Circle the letter corresponding to the illustration of a definition that is *too narrow*.
- Love is an emotional response.
 - Philosophy is the study of the works of Plato.
 - Reggae music is a genre that began in Jamaica as a form of political and social protest in the second half of the 20th century.
 - Religion is the opiate of the masses.
 - To be courageous is to act with courage.
13. Which of the following definitions can be criticized as being *too broad*?
- Love is an emotional response.
 - Philosophy is the study of the works of Plato.
 - Reggae music is a genre that began in Jamaica as a form of political and social protest in the second half of the 20th century.
 - A triangle is a three sided closed figure in a two dimensional plane.
 - To be courageous is to act with courage.
14. To say that an *empirical statement* is *confirmable* indicates that the statement is . . .
- false.
 - unscientific because it is a value judgment.
 - false in every possible situation.
 - a logical truth since confirmable means not contradictory.
 - scientific because it can be judged true or false on the basis of evidence.
15. A statement that is always true . . .
- is informative about the empirical world.
 - has no predictive power.
 - has predictive power.
 - is useful because it is verifiable and precise, ensuring accuracy.
 - is also called an empirical statistical hypothesis.
16. **Background information for question 16:** We say that a *verbal dispute* is a disagreement that would end if the parties to the debate all *stipulated* a definition. This shows that the *only* point of difference between them is literally the way they are using some word. But when a controversy carries underlying issues that would not be settled by the way a word is used, because there are other differences of opinion between the parties in conflict, then we say that they are involved in a *substantive disagreement*.
- Directions for question 16:** Read the following passages (A-D) and carefully evaluate their contents. Choose the alternative which exhibits a conversation that involves a strictly *verbal dispute*.
- A. Kwame: Did you meet my friend Roland? He is a Muslim just like you. He was

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ordained in the United States into the Nation of Islam.

Kofi: *You mean that man we saw at the mosque today? He is not a real Muslim because he does not fast during Ramadan. How can you call him a Muslim if he is not obeying the laws of Islam? Fasting is required by the Qur'an during Ramadan.*

Kwame: *But lots of people who fast during the day at work go home and drink alcohol all night and fornicate during the rest of the year. Aren't they Muslims?*

Kofi: *No; that is exactly my point. That sort of behaviour is not what the label Muslim is meant to denote. Anybody knows that.*

B. Ama: *They say the Head of the United States is not really the President since his father was Kenyan and you have to be an American to run for president of the United States.*

Patience: *But doesn't he have a US passport? Isn't he a US citizen? He was born in Hawaii, wasn't he?*

Ama: *Yes but you should be a real American to be president, don't you think? Would you want someone who is not Ghanaian running this country? Look at what happened in the 1990s. The president then was half-Scottish, and look at all the trouble that there was in those days. No, to be our leader the man should be a real Ghanaian. I don't care what his passport says. And Americans deserve the same. If they had a real American as president they wouldn't have all these problems.*

C. Kofi: *Did you meet your TA yet?*

Kwame: *I can't. I don't have a TA.*

Kofi: *What do you mean? The one who runs the tutorial, Mr. Appiah; he's your TA.*

Kwame: *No he's not. He is a National Serviceman. So he can't be a TA.*

Kofi: *Yes he is. He's assisting the teacher in the course. So he's a Teaching Assistant. That's what 'TA' stands for.*

D. Kwadwo: *Those army personnel are helping our citizens because their presence maintains a peaceful and secure environment, thanks to the sacrifices they are making in their effective peace-enforcement strategies. They are protecting us.*

Ato: *Those soldiers are bullying us and they have been given orders to target civilian rebels who are fighting a guerrilla war, so the soldiers pose a threat to all of us. They can't tell who is a rebel and who is an innocent. Their presence increases the danger of moving where we want to go in the city. The soldiers have robbed us of our freedom.*

Kwaku: *But aren't you guys both talking about those same armed men in uniform over there? That is obvious. So what are you arguing about?*

Question 17. Read carefully the follow paragraph. Circle only ONE letter corresponding to the one alternative which best captures the nature of the passage in italics.

In 1994 a special Commando Squad came to IPS in Madina and began firing at students indiscriminately while they were in their rooms. One young woman was shot through her closed door fifteen times while she was cooking rice on a hotplate. A few years later in September 2003, fifteen Commonwealth Hall students took part in a destructive mob action because they were not happy with their water supply. They stormed the Vice-Chancellor's Lodge, assaulted the guard on duty and broke the tap on the standing pipe outside the house. Police were called on to the campus to stop the

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Vandals from destroying more property and assaulting other authorized personnel. In March 2006, non registered students came to the Legon campus and helped foment a rampage to express dissatisfaction after the election of the SRC Executives for the coming academic year. And again the police were called to come and patrol the campus in order to prevent further vandalism and related criminal activity. Earlier in 2007, threats were publicized, signed in blood, warning that if students did not get their preferred residence on campus there would be poisonings and acid attacks against university authorities and their families, and disruption of examinations. Some of these threats were carried out. The first day of examinations, some people had broken in secretly and soiled the examination venues with human faeces. Police came and kept 24 hour watch throughout the examination period last semester.

- A. A good argument containing premises supporting a conclusion.
- B. A bad argument where the premises only give a motive but not a good logical reason for believing the conclusion is true.
- C. A list of instructions, directions, or proverbial advice.
- D. A rhetorical polemic which expresses a strong feeling or opinion.
- E. A narrative reporting and commenting upon a time-ordered sequence of past events.

18. *If someone hits you on the right cheek, turn and offer him your left. For the tree that stands tall in the forest will be cut down for timber, while the gnarled and crooked tree that bends in the wind will be left alone and will outlive all the others. The wise man rarely speaks, while the fool never stops giving advice. Remember that three things are the greatest of all: faith, hope and love, but the greatest of these is love.*

- A. An expression of syllogistic fallacy.
- B. A deductive argument containing premises supporting a conclusion.
- C. An inductive hypothetical syllogism applied in theological discourse.
- D. A narrative reporting a time-ordered sequence of past events.
- E. A list of proverbial advice and aphorisms.

19. *There is a big football match today and Kwame always watches the matches whenever he can. But this is the only day Kwame is able to study in the library. So Kwame will either be watching the match or he must be in the library. But he is definitely not in the library; his mates saw him leave there two hours ago. So you will find him watching the match.*

- A. An expression of syllogistic fallacy.
- B. A deductive argument containing premises supporting a conclusion.
- C. An inductive hypothetical syllogism applied in theological discourse.
- D. A narrative reporting a time-ordered sequence of past events.
- E. A list of proverbial advice and aphorisms.

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20. For this passage in italics circle the letter corresponding to the correct label that you determine from this list:

95% of the students in Annex B have contracted headache, fever and painful joints in the last month. 80% patients presenting headache, fever and painful joints at the clinic were tested for malaria parasites and were diagnosed with malaria. So the doctor concluded that Yaa, who is residing in Annex B and has a headache and fever and painful joints, has malaria.

- A. a deductive argument.
- B. an inductive argument.
- C. giving instructions.
- D. polemic expression of feeling or strong opinion.
- E. a narrative.

21. For this item, read the passage in italics, and select among the alternatives A-E the best pair of inserts for the blanks, in order to make the passage contain two correct statements.

Particular statements that can be determined true or false observationally or by measuring something or some process, are called _____ because their truth can be tested directly. Statements that cannot be tested are sometimes called _____.

- A. deductive reasoning, contradictions.
- B. verifiable, reduction ad absurdum arguments.
- C. openly contested, verifiable.
- D. verifiable, empty of empirical content.
- E. none of the options (A-D) result in a passage containing two correct statements.

22. Read the following passages (A-E) and circle the letter that corresponds to a passage that illustrates an **argument**.

- A. *I hate running these lab tests. Every time I am exposed to the diseased plants I fall ill. I'm sure they hate me, or they are punishing me or something; it's disgusting how I get sick so often. Once I had a bad runny stomach and went to the toilet so often. Instead of asking me if I was working in a septic environment that was making me sick, I was sent straight to hospital and my pay check was cut because of time lost from work.*
- B. *All the students had their specimens that they had collected the field trip and it was time to go home. They had to wait for the bus. After waiting half an hour it didn't come. So someone suggested hiring a taxi. Then it was realised this would be too expensive, because of the long distance. So then someone suggested calling the bus station to see what was the matter. But they could not get the phone number. It took an hour to try to make the call, to no avail. Finally the bus came along, but it was two and a half hours late. The students were all complaining, and some even asked to get their money refunded for half of the cost of the trip. Later the bus company refused; they claimed the bus had broken down and was delayed by servicing. The students decided to take another bus company the next time they planned a field trip. The following month the field trip was scheduled and the transport came and left with them on time.*

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- C. *Sexual infidelity is prevalent these days, sad as this is to say. Even though people know better, for instance, it is said that they often have sex outside their marriage. No surveys have been conducted, but it is accepted as true that even men with several wives will have sex with women they have not married. Some prefer this practice to sex when it is legal. Clearly infidelity is abhorrent in many respects, but the traditional priests and the churches cannot do anything about it. What should be done? Infidelity is truly a great blight on society!*
- D. *The World Trade Organisation talks can proceed productively provided world trade can be made fair for all farmers. But world trade will be fair for all farmers only if the price for selling farm products on the world market is not reduced artificially. Farm product prices are reduced artificially on the world market now because big American businesses in farming receive huge subsidies from the US government. This allows them to grow an excess of cotton and sugar, which is then dumped on the world market. The US government will not stop subsidizing the big American farming businesses. So it seems clear that the WTO talks cannot proceed productively.*
- E. *A cold (catarrh) or flu (influenza) is an infection caused by a virus or it is a bacterial infection. There is no cure for it, although there are many effective antibiotics on the market. If the flu was caused by a known bacterium, with a known antibiotic, then there would be a cure for it. So the flu must be caused by a virus. A flue infection lasts no more than two weeks. If one doesn't get rid of the symptoms in two weeks, then the viral infection might have turned into a bacterial infection, such as pneumonia. If you do not treat pneumonia, you can die of it. To treat pneumonia, you need a doctor. So if one doesn't get rid of cold symptoms in more than two weeks, one should see a doctor.*

23. Which of the following (A-D) is not a good deductive or inductive argument? Circle the correct letter.

- A. *The politician wants votes. You can see he is corrupt by the way he treats his wife. My wife and his wife are good friends and believe you me, this is not a man you can trust with your money. So don't trust any politician—this man is clearly one of them, and he is a rogue from the day he was born.*
- B. *Anytime plants have been sprayed with the chemical insecticide NOPEST according to the instructions, the leaves grow twice in number compared to plants that are not sprayed with the same insecticide. So we conclude that this insecticide not only kills pests but promotes leafy growth in plants properly treated with the chemical.*
- C. *In a sample of 20 patients in London who ate meat infected with the lethal bacterium, and who contracted the human equivalent of mad cow disease, 15 of the patients died of eating the infected meat. The study was repeated in another major city on a different continent, and a sample of Asia, The study shows that 75% of people contracting the human equivalent of mad cow disease will die of eating infected meat.*
- D. *There is a big football match today and Kwame always watches the matches whenever he can. But this is the only day Kwame is able to do his laundry. So Kwame will either be watching the match or he must be doing his laundry. He is not doing his laundry; so you will find him watching the match.*
- E. *All of the passages A-D above constitute good arguments.*

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For items 24 and 25, identify the statement that follows validly as a conclusion from the passage in *italics* if the italicized statements are regarded as premises.

24. *All the people taking this exam are intelligent. All intelligent people get slightly nervous when they take an exam. Therefore . . .*
- A. One should never take an examination if one is intelligent.
 - B. All nervous candidates sitting for examinations are intelligent.
 - C. All the people taking this exam are slightly nervous.
 - D. All slightly nervous people do well on exams.
 - E. None of the statements A-D follow as a conclusion from the italicized statements.
25. *Citrus fruits contain vitamin C. Oranges are citrus fruits. Another name for vitamin C is ascorbic acid. Therefore:*
- A. The only true citrus fruits that exist are oranges.
 - B. Ascorbic acid is most plentiful in oranges than in pineapples.
 - C. The only foods containing ascorbic acid are citrus fruits.
 - D. Oranges contain ascorbic acid.
 - E. None of the above follows deductively from the given premises.

For the italicized passages that follow as items 26-29 evaluate each text and decide the best way to evaluate it by choosing the best description among (A-E).

26. *This policy cannot be worth anything for our low income country since it was developed by a research team paid by the IMF and the World Bank. Such research is designed to defend the fiscal activities of the rich countries and big corporations whose monies are invested in the World Bank; so any such policy will be designed to suit the interests and satisfaction of those that want their investments in World Bank loan-granting and related projects to be profitable, that is all.*
- A. A set of instructions.
 - B. A hasty generalisation.
 - C. A genetic fallacy.
 - D. An ad hominem.
 - E. Appeal to the masses.
27. *HIV causes AIDS; my pastor said so, and he is a very trustworthy man who never does wrong; so it must be true. And everyone I know believes it, so surely it must be true.*
- A. A deductive syllogism and an induction.
 - B. A hasty generalisation and a genetic fallacy.
 - C. A genetic fallacy and an ad hominem.
 - D. An ad hominem and an appeal to the masses.
 - E. A narrative and a good inductive argument.
28. *The 'Boko Haram' terrorist group is the world's greatest danger to civilised democracy. It must be so; since Asamoah Gyan said so and he is the captain of the Blackstars and travels to many countries.*
- A. An appeal to illegitimate authority.
 - B. A hasty generalisation.
 - C. A genetic fallacy.
 - D. An ad hominem.
 - E. Appeal to the masses.

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29. *Everyone has got a Land Cruiser four wheel drive automobile now who can afford it. So it must be the best car made which is available in this country.*

- A. A good inductive argument.
- B. A hasty generalisation.
- C. A genetic fallacy.
- D. An ad hominem.
- E. Appeal to the masses.

30. Assess this passage and identify it by circling ONE letter corresponding to options A – E.

Kwaku speaks French and Spanish and English fluently, as well as Ewe. Kwame speaks Japanese very well and he also speaks English and Fanti fluently. Kwaku and Kwame are Charlie's only best friends. Clearly, all of Charlie's best friends speak more than two languages. Anyone speaking more than two languages fluently is considered to be 'cosmopolitan.' So Charlie's best friends are all cosmopolitan.

- A. Argument.
- B. Imperative.
- C. Narrative.
- D. Rhetorical.
- E. None of the above.

31. Characterize the italicized statement:

The hen may know before the cock when dawn will come, but it is the cock who crows.

- A. Factual.
- B. Proverbial.
- C. Imperative.
- D. Interrogative.
- E. Emotive expression.

32. How would you best classify the statement in italics given the labels provided?

Water is H₂O.

- A. Lexical definition.
- B. Stipulative definition.
- C. Operational definition.
- D. Ostensive definition.
- E. Theoretical definition.

33. Find the alternative that expresses the missing premise in this syllogism:

All cats are mammals. So all cats need oxygen.

- A. Oxygen is given off by trees in the process of photosynthesis.
- B. All cats have fur.
- C. All mammals need oxygen.
- D. None of the options generate a valid argument.
- E. The suppressed premise is not listed as A, B or C above.

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34. Choose among the following alternatives and circle the letter corresponding to a passage or a statement that contains no argument, *neither an inductive nor a deductive type*:

- A. Kwame is not going to do well on his exams, because he is a heavy drinker and most students who drink heavily do poorly on their exams.
- B. An even number is divisible by 2 without remainder, and since 7,008,956,784 is divisible by two, this means that it is even.
- C. There is an important examination today and Kwame always studies hard before his examinations whenever he can. Kwame will either be with his father or studying for his examination. He is not with his father at the hospital; so you will find him studying for the exam.
- D. Protozoa are microscopic life forms that lived long ago under water. The first five rocks from the hills of Obuasi studied show evidence of fossilized protozoan life. The sixth and seventh rocks have no such fossils, but the eighth, ninth and tenth rocks studied from Obuasi also had fossils of protozoan life. When these fossils are carbon tested, they are found to be four million years old. So it appears that the rocks in Obuasi must have been under water at least four million years ago.
- E. If Guinness is willing to sponsor a Hall Week for millions of cedis, then someone ought to convince them to help the students to finance campus transport. What about asking Guinness, or Coca Cola, or Unilever Brothers, or any of the regular sponsors to help improve the transport system to and from and around the campus? Does anything matter to Legon students besides grabbing a quick and easy degree while conducting a promising social life?

35. Consider the passage in italics and circle the letter corresponding to the BEST option for evaluating the passage:

The Sociology Students Association made a study through the Sociology Department to see if there was any relation between revealing dress and a breakdown of morality of college women. They discovered through very discrete investigations in Volta Hall that 2 of the women known to have very rich older men as boyfriends who support them with fancy clothes and expensive holidays off campus, also they wear very short skirts and revealing, tight blouses. One of these women is said to have taken a short break from her studies to get an abortion. So clearly we can conclude that this wave of provocative dressing that has hit the Legon campus is corrupting the morality of the students.

- A. The conclusion follows from the premises in an enumerative induction based on a good sample.
- B. Since the sample is insufficient in size, the conclusion drawn is called a hasty generalisation.
- C. The sample is insufficient in size so the argument is called a syllogistic fallacy.
- D. Since the sample is irrelevant the hypothesis is said to be biased.
- E. The sample is irrelevant since the researcher is clearly biased.

END