Instructions to Candidates

a) Attempt two questions: one from Section A and another from Section B.

b) Answers should be between 500 and 800 words in length.

SECTION A
1. To what extent can rural electrification solve Uganda’s environmental problems? (50 marks)
2. To what extent is unemployment responsible for rural-urban migration? (50 marks)
3. Discuss the factors responsible for increased global warming in the world? (50 marks)
4. Under what circumstances may a strike or any form of demonstration be justified? (50 marks)

SECTION B
Answer one question from this Section.

5. Study the information provided below and answer the questions which follow.

Four people get involved in a motor accident on a certain highway. Luckily none of them dies on spot but they sustain injuries and are rushed to the nearest health facility. After administering first aid, the doctor prescribes a unit of blood to be transfused for each patient, save for one who has lost more blood and would need two units. The nearest blood bank is 100 km away and any delay puts the lives of the patient at risk. Four witnesses of the accidents volunteer to donate blood and save the lives of the accident victims.

The names of the patients are: James, Peter, Vivian and Kato. The names of the bold donors are: Ruth, Clare, John and Robert.
Blood samples of both the patients are taken for a lab test to ascertain their blood groups and establish who donates to who. The lab results are not well arranged but are recorded randomly as rough lab notes. Below is a table showing bio-medical facts about blood groups.

<table>
<thead>
<tr>
<th>Blood Group</th>
<th>Antigens (present on red blood cells)</th>
<th>Antibodies (present in the plasma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type O</td>
<td>nil</td>
<td>Anti-b and Anti-a</td>
</tr>
<tr>
<td>Type A</td>
<td>A antigen</td>
<td>Anti-b</td>
</tr>
<tr>
<td>Type B</td>
<td>B antigen</td>
<td>Anti-a</td>
</tr>
<tr>
<td>Type AB</td>
<td>A and B antigen</td>
<td>nil</td>
</tr>
</tbody>
</table>

- Type O can donate to all but only receive from Type O.
- Type A can only donate to Type A but can receive from Type A and O.
- Type B can only donate to Type B but can receive from Type B and O.
- Type AB can only donate to Type AB but is a universal recipient.

The rough lab notes indicate the following:
1. All donors (except one) are willing to offer only one unit of blood and all recipients need only one unit except one who requires two.
2. All the four blood groups are represented on either side of the patients and the donors.
3. James’ blood has antibody-b.
4. Peter is the patient who needs two units to survive but will not receive blood from Clare.
5. Robert is willing to donate two units of blood.
6. Kato’s blood group is neither A nor AB.
7. Clare can donate to all patients but she is willing to offer only one unit of blood.
8. John’s blood has neither antibody-b nor antibody-a.
9. Neither Ruth nor Robert can donate to Vivian.
10. Ruth will donate to the patient with B antigen.

Questions:

a) (i) In two separate columns, show the blood groups of each donor and each recipient. (12 marks)

(ii) Show which patient(s) each donor donated to. (05 marks)

b) (i) Which patient is a universal recipient? (01 mark)

(ii) Who is a universal donor among the four volunteers? (01 mark)

(iii) Apart from Robert, who else donated blood to Peter? (01 mark)

c) What are the causes of road accidents in your country? (10 marks)

d) What challenges are faced by medical workers in trying to save lives of accidents’ victims? (10 marks)
6. Read the passage below and answer the questions which follow. Try as much as possible to use your own words.

In a dimly lighted classroom at the University of Illinois at Chicago, students gather their belongings while listening to a professor wrap up a well-prepared lecture. With only a few minutes of class time remaining, a female student in the second row pulls a cellular phone from her coat pocket and holds it firmly in her hand. Seeing this, other students in the class start checking their phones with urgency as contagious as yawning at the ballet. One by one, students pull out their treasured phones. Some are gold in color, some are silver, some even flip open and all are new and stylish. As the professor dismisses the class, students rush to check their message.

OK, so at one point or another we all have been annoyed by somebody on a cell phone, either someone whose phone rang during class or a motorist swerving all over the road with a phone smashed between a shoulder and an ear. The fact is cell phones are everywhere. But lately it seems what was once an essential tool for important communication has become merely a toy for college kids and adults alike. And now, the accessibility and inexpensiveness of this useful technology has spawned a whole new breed of annoying Americans whose lack of cell phone etiquette clearly demonstrates the selfishness of today’s youths.

It is evident the cell phone craze has swept UIC. Just walking in campus it’s almost certainly easier now to find a person on a cell phone than somebody holding a calculator or even listening to headphones. On campus, I’ve actually witnessed students decorate their cell phones with colored covers, play video games on the phone’s display screen and even compare them with friends, just the other day as I was lounging before a class, I was surprised to hear Beethoven’s Faith Symphony emanating from a student’s pocket. Now I’ve heard plenty of bad cover songs, but none as bad as this brilliant piece being played as a series of beeps on a royal blue Nokia cell phone.

Sure, some people might read this and think, “it is just a phone. What is the big deal?” But I believe the significance of the cell phone is correlated with the value of today’s youths. Ultimately and unfortunately, this is the importance young people place on material goods and products. There is no doubt we are living in a visual age in which images encourage us to be good consumers. But we must realize we are living in a country where everything we consume is first researched by teams of experts whose main objective is increasing profits. This includes technologies such as cell phones, and today’s youth are obliviously buying into the hype and filling in a void normally reserved for spirituality and original thought.

It’s funny how things change. Since the 60s, college students are more concerned with updating their cell phones every two months and adorning their new cars with shiny chrome wheels than they are in fighting for a good cause. The cell phone culture certainly is a
selfish one. Cell phones can be a convenience, but when they are used to detach the user from the environment, it simply is unnecessary and wrong. What better way to avoid interaction with the environment and the people in it than to shield your ear with a cell phone?

As technology continues to progress, it is obvious young Americans will continue to be obedient consumers. But ultimately it **boils down** to what is important to us, and I truly hope it’s more than just the materials.

**Questions**

a) Suggest an appropriate title for the above passage. (02 marks)

b) What, according to the passage does the writer intend to communicate? (8 marks)

c) In a paragraph of not more than 100 words, summarize the disadvantages of cell phone technology. (10 marks)

d) Explain the meaning of the following words and phrases as used in the passage.

   i.  Wrap up (2 marks)
   ii. Contagious (2 marks)
   iii. A toy (2 marks)
   iv. Cell phone etiquette (2 marks)
   v. Craze (2 marks)
   vi. Valve of today’s youths (2 marks)
   vii. Obliviously (2 marks)
   viii. Hype (2 marks)
   ix. Detach (2 marks)
   x. Boils down (2 marks)

   (20 marks)

   (SPGE = 10 Marks)

**END**