

Name.....Comb.....

P360/3  
Luganda

## HOLIDAY PACKAGE

### SENIOR FIVE

LUGANDA PAPER 3

Time: 1hour 30minutes

**Ekiragiro:**

- Ddamu ebibuuzo bibiri byokka

### LOZIO BBA SSESIRIA

1. Abaami Kiyingi baatuzimbidde mu muzannyo Lozio Bba Ssesiria tebeegombesa kubaganya ebirowoozo.
2. Kiyingi atusimbidde atya enneeyisa ya bannakyeyombekedde mu muzannyo Lozio Bba Ssesiria.
3. Abavubuka baganyuddwa batya mu kusoma omuzannyo Lozio Bba Ssesiria.
4. Nga weeyambisa ebyokulabirako okuva mu muzannyo, laga obutali bwenkanya obweyolekera mu muzannyo guno.

### BIKOMYE

S101/1

GENERAL PAPER

SENIOR FIVE

## HOLIDAY PACKAGE

S.5 GENERAL PAPER

Paper 1

Time: 2HOURS

### Instructions:

- ✓ Answer two questions.
- ✓ One question from section A and one questions from section B

### SECTION A

Answer one question from this section

Answers should be between 500 and 800 words in length

1. Explain the causes of domestic violence in your community and ways that can be used to control the problem. (50marks)
2. Assess the contribution of education to National development. (50marks)
3. Explain the role of women in the development of your community. (50marks)
4. To what extent has women emancipation been a reality in Uganda? (50marks)

## SECTION B

### Answer one question from this section

#### 1. Read the passage below and answer a question that follows;

Proceeding to others qualities before named, I say that every Prince must desire to be considered merciful and not cruel. He must however, take care not to misuse this mercifulness. Cesarch Norgia was considered cruel, but his cruelty had brought order to the Romagma, united it, and reduced it to peace and fearty. If this is considered well, it will be seen that he was really much more merciful than the Florentine people, who to avoid the name of cruelty, allowed Pistoia to be destroyed.

A prince, therefore, must not mind incurring the charge of cruelly for the purpose of keeping his subjects united and faithful; for with very few examples, he will be more merciful man those who, from excess of tenderness allow disorders to arise from whence spring bloodshed and rapine; for these as a rule injure the whole community, while the executions carried out by the prince injure only individuals.

And of all princes, it is impossible for a new prince to escape the reputation of cruelty, new states being always full of dangers.

Nevertheless, he must be cartiors in believing and acting, and must not be afraid of his own shadow, and must proceed in a temperature manner with prudence and humanity, so that too much confidence does not render him in cartious, and too much diffidence does not render him intolerant.

From this arises the question whether it is better to be loved more than feared, or feared, OR feared more than love. His reply is, that one ought to be both feared and loved, but as it is difficult for he two to go together, it is much safer to be feared than loved, if one of the two has to be wanting. For it may be said of men in general that they are ungrateful. Voluble dissemblers anxious to avoid danger; and covetous of gain, as long as you benefit them they are entirely yours, they offer you their blood, their goods, their life and their children, as I have said before, when the necessity is remote, but when it approaches, they revolt. And the prince who has relied solely on their words without making other preparations, is ruined, for the friendship which is gained by purchase and not through grandeur and nobility of spirit is bought but not secured, and at a pinch is not to be expended in your service.

And men have less scruple in offending one who makes himself feared; for love is held by a chain of obligation which, men being, selfish, broken their purpose, but fear is maintained by a dread of which his punishment never fails.

Still, a prince should make himself feared in such a way that if he does not as gain love, he at any rate avoids hatred; for fear and the absence" of hatred may well go together and will be always attained by one who abstains from interfering with the property of his citizens and subjects or with their women.

And when he is obliged to take the life of any one, i.e. him do so when there is proper justification and manifest reason for it; but above all he must abstain from taking the property of others, for men forget more easily the death of their father than the loss of their patrimony. Then also pretexts for seizing property are never wanting, and one who begins to live by rapine will always find some reason for taking the goods of others, where as causes for taking life rarer and more fleeting.

But when the prince is with his army and has a large number of soldiers under his control, then it is extremely necessary that he should not mind being thought civil; for without this reputation he could

not keep an army united or disposed to any duty. Among the note worthy actions of Hannibal is numbered

this, that although he had an enormous army, composed of men of all so nations and fighting in foreign countries, there never arose any dissension either among them or against the prince, either in good fortune or in bad. This could not be due to anything but his inhuman cruelty, which together with his infinite other virtues. Made him always venerated and terrible in the sight of his soldiers, and without it his other virtues would not have sufficed to produce that effect.

Thoughtless writers admire on the one hand his actions, and one the other blame the principle cause of them. And that it is true that hi other virtues would not have sufficed may be seen from the case of setpio, whose armies rebelled against him in Spain, which arose from nothing but his excessive kindness, which allowed more license to the soldiers than was consonant with military discipline.

### Questions

1. Suggest a suitable title for the passage. (02marks)
2. (i) What does the author mean by:  
“friendship which is gained by purchase and not through grandeur and nobility of spirit is bought but not secured.....” (03marks)  
(ii) “.....men forget more easily the death of their father than the loss of their patrimony”? (03marks)
3. In not more than 100words, summarize what, according to the author, i.e. required of a prince to rule effectively. (12marks)
4. Explain the meaning of the following words and phrases as used in the passage, using your own words wherever possible.
  - (i) Charge of cruelty (02marks)
  - (ii) Executions (02marks)
  - (iii) Temperature manner (02marks)
  - (iv) Wanting (02marks)
  - (v) Covetours of gain (02marks)
  - (vi) Remote (02marks)
  - (vii) Pretexts (02marks)
  - (viii) Dessimond (02marks)
  - (ix) Venerated (02marks)
  - (x) Consonant (02marks)SPGE (10marks)

Name.....Comb.....

P250/3  
GEOGRAPHY  
Senior five

## HOLIDAY PACKAGE SENIOR FIVE

P250/3 UGANDA AND FIELDWORK

TIME: 1 HOUR 45 MINUTES

### INSTRUCTIONS

- Answer 2 questions in section B.

### SECTION B: UGNADA

1. (a) For either Mt. Rwenzori or Mt. Elgon explain its formation.  
(b) Assess the contributions of mountains to the economic development of Uganda.
2. Assess the influence of volcanicity on landform evolution in Uganda. (25marks)
3. Assess the contributions of the fishing industry to the economic development of Uganda.
4. For either Lake Albert or Lake Victoria explain its formation.
5. Assess the contributions of lakes to the economic development of Uganda.

END

Name..... Comb.....

P250/2  
GEOGRAPHY  
Senior five

## HOLIDAY PACKAGE SENIOR FIVE

P250/2 UGANDA AND FIELDWORK  
TIME: 1 HOUR 45 MINUTES

### INSTRUCTIONS

- Answer all questions in section A and any 1 in section B

#### SECTION A: STATISTICS (COMPULSORY) (25 MARKS)

1. Study the table below showing the area cultivated for selected crops in Uganda between 1986 and 1990 in ('000' ha)

Year	Plantain	Cereals	Root crops	Cotton
1986	1210	896	788	180
1987	1336	855	769	140
1988	1302	872	805	99
1989	1322	1067	833	106
1990	1379	1053	819	69

- (a) Draw a comparative /group line graph to illustrate the above statistics.
- (b) Calculate the percentage increase in the area cultivated for plantains.
- (c) Outline the advantages and disadvantages of using the above method.

#### SECTION B: WORLD PROBLEMS AND DEVELOPMENTS

2. Explain the causes and effects of Desertification in Africa.
3. (a) Examine the causes of famine in the world.  
(b) Explain the measures being taken to solve the problem of famine in Africa.

Name.....Comb.....

**FINE ART**  
**Senior five**

# **HOLIDAY PACKAGE**

## **SENIOR FIVE**

STUDIO TECHNOLOGY

PAPER 4

TIME: 2HOURS

### **INSTRUCTIONS**

- Answer all questions.

1. (a) What is meant by the term an element of art and design? (2marks)  
(b) What are the importances of elements of art and design? (6marks)
2. (a) Explain the two types of textures used in visual art. (4marks)  
(b) Explain any three property of colour. (6marks)  
(c) With an help of illustrations, state 10 types of lines. (10marks)
3. (a) With 7 examples on each, explain the types of shapes. (14marks)  
(b) What is the difference between shading and tinting? (4marks)
4. (a) Differentiate between a negative space and a positive space with an help of illustrations. (4marks)  
(b) What are some of the classifications of texture? (8marks)
5. (a) Define the following types of colours with 2 examples on each. (25marks)  
Primary colours  
Secondary colours  
Tertiary colours  
Complementary colours  
Monochromatic colours  
Tint colours

Dull colours

**END**

ENTREPRENEURSHIP  
PAPER 1  
SENIOR FIVE

**HOLIDAY PACKAGE**  
**S.5 ENTREPRENEURSHIP**  
**Paper 1**  
**Time: 2HOURS**

**INSTRUCTIONS**

- Answer three questions
- Section A is compulsory
- Choose two question in section B

**SECTION A**

1. (a) (i) Distinguish between an entrepreneur and intrapreneur. (2marks)  
(ii) State two reasons why entrepreneurship is taught in schools. (2marks)
- (b) Identify four challenges faced by private business in Uganda. (4marks)
- (c) (i) Define self employment. (1mark)  
(ii) Mention three burners to entrepreneurship in your country. (3marks)
- (d) (i) Differentiate between creativity and innovation. (2marks)  
(ii) Give two stages of creative selling process.
- (e) State four sources of innovation in business. (4marks)

**SECTION B**

2. (a) Account for a high rate of unemployment in your country. (12marks)
- (b) Give four reasons why self employment is preferred to paid employment. (8marks)
3. (a) Define change? (2marks)

- (b) Describe the three types of change. (6marks)
- (c ) Examine six reasons why people resist change. (12marks)
4. (a) Discuss the components of Entrepreneurship education. (10marks)
- (b) Explain the factors considered when choosing a career option. (1marks)
5. (a) What are the features of creative people. (8marks)
- (b) Discuss the factors that hinders creativity. (12marks)

**END**

TO BE ANSWERED IN A NEW BOOK

## HOLIDAY PACKAGE

### S.5 ENTREPRENEURSHIP

#### Paper 3

Time: 1 HOUR 30 minutes

#### INSTRUCTIONS

- Answer two questions
- Section A is compulsory
- Choose one question in section B

#### SECTION A

1. Read the case study of Mungo's service station and answer the questions that follow;

Three years ago Mungo bought a service station from an old man who had run the station using old machine and hand driven pump. The sales were the best of any service station in the town. The former owner had been a very popular man in the area and had many loyal customers. Some of this popularity rubbed off on the new owner but there were a lot of people in the area who did not like Mungo.

As soon as Mungo took over the service station his business began to decline. Within a period of three years all old customers had left to the nearby service station and only a few new customers came to the service station. The biggest reason for losing sales was the attitude Mungo had towards his customers. For example when a boy came to the station with his bicycle tire and wanted air for a deflated bicycle tire, Mungo told him "Am here to sell gasoline not to give air ask your father to buy you a bicycle pump do not bother me"

Another time a man on his way to a wedding stopped for a gaso line, Mungo sold him gaso line but he was in such a hurry and seemed to be tired because of the hand pump he was using, he did not check the oil or wash the window. When the man asked Mungo to do these things Mungo did them in bad faith and grumbled about all the work he had to do. He cleaned only one window screen in spite of the fact that all windows were dirty.

After several instances like these words got around about Mungo's bad personality. Nobody wanted to buy gaso line from Mungo's service station. The successful business, Mungo had

taken over went broke after three years as most of the customers shifted to the nearby service station.

### Questions

- (a) Identify the reason why the service station got broke within three years after Mungo became the owner. (5marks)
- (b)"Never urge with a customer..." justify the statement in reference to the case study. (2marks)
- (c ) Drawing from your experience give four other unethical behaviors towards customers in day today business interactions. (4marks)
- (d) What could Mungo have done to attract more customers? (6marks)
- (e) Why did the old man succeed in a business that Mungo failed at? (4marks)
- (f) Give four factors that determine business success. (4marks)

### SECTION B

#### BUSINESS CLUB

2. With reference to your school business project operated by your school business club;
- (a) State;  
Project name (2marks)  
Vision statement (2marks)  
Mission statement (2marks)
- (b) Give six reasons for establishment of business project. (6marks)
- (c) Mention any five stake holders of your business club. (5marks)
- (d) State four responsibilities of any two stake holder mentioned in (c) above. (8marks)
3. With reference to a business project of your school business club.
- (a) (i) State the nature of the business project. (2marks)  
(ii) Give 3 routine activities of your business club. (3marks)
- (b) Identify four proposed sources of fund for the establishment of the business project. (4marks)
- (c) State four;

- (i) By-laws of the business club. (4marks)
- (ii) Rights and privileges of the members of the club. (4marks)
- (d) Draft an organization chart for your business club. (8marks)

**END**

TO BE ANSWERED IN A NEW BOOK

Name.....Comb.....

P250/1  
GEOGRAPHY  
Senior five

## HOLIDAY PACKAGE

### SENIOR FIVE PHYSICAL GEOGRAPHY PAPER 1 TIME: 2HOUR 15MINUTES

#### INSTRUCTIONS

- Section A is compulsory
- Answer two questions from section B.

#### SECTION A

1. Study the 1:50,000 (UGANDA) Malima map extract, part of sheet 52/1 series Y732 and answer the questions that follow;
  - (i) Identify the man made feature found at grid reference 094465.  
(ii) State the grid of the dam west of Nkondo. (2marks)
  - (b) Calculate the area of the water body shown on map extract (Excluding swamps) (3marks)
  - (c) Draw a sketch map of the area shown on the map extract and on it mark and name the;
    - Lakes
    - Permanent
    - Seasonal swamps
    - Dry weather roads
    - Malima town. (7marks)
  - (d)(i) Identify the economic activities taking place in the area shown on the map extract.  
(3marks)
  - (ii) Describe the relief of the area. (4marks)
  - (iii) With evidence from map extract explain the problems facing people living in the area shown on map extract. (6marks)

## **SECTION B**

### **Answer two questions**

2. (a) What is meant by plate tectonic movement? (5marks)
- (b) Explain the influence of plate tectonic movements on the development of relief landforms in East. (20marks)
3. Examine the relevance of Wegner's theory of continental drift to the understanding of the present day distribution of continents and ocean basin. (25marks)
4. Account for the formation of igneous rocks in East Africa. (25marks)
5. (a) Differentiate between igneous and metamorphic rocks. (10marks)  
(b) Explain the importance of rocks to East Africa. (15marks)

**END**

Name.....Comb.....

P250

**FASIHI YA KISWAHILI**

**Senior five**

## **HOLIDAY PACKAGE**

S.5 FASIHI YA KISWAHILI  
KARATASI LA TATU – RIWAYA (NOVELS)  
MUDA: MASAA MAWILI (2HOURS)

### **MAAGIZO**

- Jibu maswali maswali manne

### **RIWAYA YA MWAKILISHI WA WATU**

1. Jadili maudhui kumi yanayopatikana katika Riwaya ya Mwakilisha wa Watu.(alama 25)
2. Riwaya ya Mwakilishi wa Watu inatoa mafunzo gani kwa kizazi cha sasa. (alama 25)
3. Elezea sifa na tabia za wahusika wafuataao.

Odili

Mtemi Nanga

Maxwell kulamo (alama 25)

4. Kwa kurasa zisizozidi tatu jadili mtiririko wa riwaya ya mwakilishi wa watu.(alama 25)
5. Linganisha vituko katika riwaya ya Mwakilisha na vile vinanyotokea katika jamii yako. (alama 25)
6. Jadili ushawiri wa Mwanamke kama alivyochorwa na mwandishi wa riwaya hii.jadili.(alama 25)
7. (a)Ni nini dhamira ya Mwandishi wa riwaya hii.  
(b)Jadili gamba la riwaya.  
(c )Elezea mandhari ya riwaya hii. (alama 25)

**MWISHO**

Name.....Comb.....

P250/1

**FASIHI YA KISWAHILI**

**Senior five**

## **HOLIDAY PACKAGE**

S.5 FASIHI YA KISWAHILI

**PAPER 1**

MUDA: MASAA MBILI (2HOURS)

**MAAGIZO**

- Jibu maswali yote

## **1. Soma taarifa ifuatayo kisha ujibu maswali yanayofuata**

Mtu huyu wakati wa siku zake za ujana na afya yake, alikuwa akitoa sauti kubwa sana ambayo ilistusha wanyonge. Lakini sasa maskini<sup>2</sup> kuwa hasikiki hata hanong'oni! Kabla ya Isiraeli aliye mnyanya iaisha kumjia, alikua akipanua midomo na kujaribu kusema lakini hakuweza kusikika wala kueleweka. Kuinua mkono sasa ilikuwa si kazi rahisi kwake, kushika vitu ilikuwa ni shida sana. Alitumia kupunga mikono tu akitoa ishara fulani fulani, kwa upole alitaka msaada kwa wote waliomzunguka hata watoto.

Zamani mtu huyu alikuwa akiamrisha watu kumtenda mambo. Si wazee, si vijana, wote walikuwa wakimwogopa. Huko Jeshini alikokuwa kama kiongozi alipigwa saluti kuliko hata watu wafanyakyo kwa Rais malkia mfalme au sultani. Alipokaribia kifo chake mambo yalikwenda kinyume. Alijaribu kutuma watu lakini amri zake hazikutimizwa badala yake ye ye ndiye aliyetafadhalishwa na hata kuamrishwa kula. Aliogopa hata kuangalia watu, nguvu za kutumbulia watu macho kwa ukali zilikuwa zimemuishia. Alikuwa hana uwezo wa kujifanya cho chote wala wa kumfanya mtu kitu.

Kiburi cha mtu huyu alipokuwa hai kilikuwa hakimithiliki. Alisema na binadamu kama takataka tu. Mali yake aliiringia sana na hakutaka mtu aiguse. Alikuwa na uchoyo wa ajabu. Alitembea kwa maringo akitikisa shingo na kiuno. Jambo lililoshangaza watu wakati huu ni kuwa dume hilo liliigeuka kuwa kidumedume. Hakuwa na uwezo wa kuringa kwani alikwisha kazi, kiuno kilikuwa kimepigwa pasi na vidudu vya maradhi. Nguvu za kugeuzia shingo zilikuwa zimemwishia. Alitegemea kusaidiwa na watu aliowadharau zamani. Mali aliyokuwa akiiringia hakuweza kuibeba wakati wa kifo chake akabakishiwa sanda tu. Isitoshe hata baadaye mali aliyoiwacha hakuweza na wala hataweza kuwa na uwezo nayo na kusema itumiwe vipi kwani mfu hana uwezo tena wa kuamrisha.

Baada ya kumuangalia maiti na kujiwa na mawazo mengi ya kumbukumbu ya vile mtu huyo alivyokuwa zamani na vile hali ilivyokuwa wakati hue, niliamini kabisa ya wahenga kuwa ni vizuri kusema na watu vizuri ukiwa hai, hata uwe nani kwani kila mtu ana mwisho wake. Kifo hakiogopi mtu hata angalikuwa sultani, siku yako ya mwisho inaweza kuja wakati wo wote bila kwaheri wala mipango, ukafa bila ya kutoa siri zako kwa ye yote. Tutaicha miondoko yetu ya mbwembwe pamoja na akili na ujanja wa kuonea. Hatuwezi kuzibeba familia zetu wala mali zetu. Tusingahau pia kuwa asiyekuwepo na lake halipo. Tutakapofika ahera hakuna atakayetukumbuka sana duniani labda wachache tu na kwa mara chache sana na kuzidi kusahaulika miaka inavyokwenda.

Hivyo basi ni heri tusingahau kuwa kifo kinaweza kuja wakati wo wote. Tutende mambo yasiyoudhi watu wengine kwani huenda baadaye, hasa siku za mwisho wa uhai wetu, tukahitaji misaada yao. Sisi ni wasafiri hapa duniani tusidhani tutadumu milele.

kabla ya kusema, "Ameondokai baula ja kusema hayo, yule msichana akaanza kutazama huko na huko kwa woga kama mtu aliyekumbuka kitu fulani, kisha akachopoka mbio na kurudi nyumbani.

Jioni hiyo Mizengwe alirudi kama kawaida. Alipoingia tu alitambua kuwa binti yake alikuwa ametoka pale nyumbani. "Kwa nini uliondoka nyumbani?" aliuliza kwa sauti ya juu. "Baba nilikuwa na njaa!" alijitetea Jamila. Aliposikia hivyo, Mizengwe alikuja juu. Hakutaka kusikiliza sababu zozote. Akachukua mshipi na kuanza kumcharaza na *kumpapura* binti yake. Jamila *alipiga usiahi* mkali. Lakini sauti yake haikusikika huko nje kwa sababu ya sauti nyingine zilizochanganyika na ile ya mtoto.

Mizengwe aliendelea kumcharaza mwanawe bila ya huruma, ungedhani anapiga ngoma. Wakati huu yule mwanamke aliyempakulia Jamila chakula alikuwa amewaeleza wanamtaa kile kisa. Ilikuwa wazi kuwa Mizengwe alikuwa akimtesa mwanawe. Waliamua kuelekea huko labda watapata *ithibati* ya kutosha. Walipokaribia ile nyumba, wakasikia sauti za vilio zikitokea nyumbani mle. Lango la kuingilia nyumba hiyo lilikuwa limefungwa. Wakasimama pale kwa muda kabla ya kubisha kwa nguvu. Walibisha mpaka Mizengwe akasikia. Alitoka kwa hasira kama mbogo na kuja langoni.

"Mnataka nini?" aliuliza kwa hasira kubwa.

"Kuna nini huko?" waliuliza.

"Kwa nini? Mmesikia nini kwani?" aliuliza.

"Sauti ya juu ...," walimjibu.

"Ile ...ee ...ile...ile ni runinga yangu. Mimi nina shida ya masikio lazima sauti iwe juu," alisema Mizengwe. Watu waliridhika na kurudi lakini shingo upande. Mizengwe naye alirudi chumbani na kufunga mlango ndi kwa hasira.

Lakini mara ile sauti ilianza tena. Sasa ilipanda juu zaidi. Wanamtaa waliamua kurudi. Wakabisha tena kwa nguvu. Mara hii Mizengwe hakufungua. Wote kwa pamoja wakaupiga ule mlango vikumbo wakaingia ndani. Watu husema wengi wape usipowapa watachukua kwa mikono yao. Walielekea moja kwa moja mpaka chumbani.

Walipoingia ndani walipigwa na butwaa. Jamila alikuwa amekaa pale chini akilia kwa uchungu. Hawakuona runinga yoyote isipokuwa kinanda cha santuri kilichokuwa na vifaa vya kupaaazia sauti ungedhani ni ukumbi wa kuchezza densi. Walikizima kile kinanda mara moja bila kuuliza mwenyewe ruhusa. Uso na mwili mzima wa Jamila ulikuwa umeenea damu. "Wewe ni baba wa aina gani? Hii ndiyo runinga? Binti yako ndiye runinga? Unajua uchungu wa uzazi wewe?" waliuliza kwa uchungu uliochanganyika na hasira kubwa.

Baadhi ya wanamtaa walimchukua Jamila na kumpeleka katika kituo cha afya kilichokua karibu ili apate huduma ya kwanza. Wengine walielekea kituo cha polisi kupiga ripoti. Mizengwe alichukuliwa siku hiyo na kutiwa ndani akisubiri kufikishwa mahakamani kwa kosa la kumtesa mtoto. Baadaye ilitahamika kuwa mkewe alitoroka alfajiri ile kutokana na *dhuluma*

alizokuwa akitendewa na mumewe. Mara nyingi yeye na mwanawе walishinda na kulala njaa pamoja na mateso mengine ya kila aina.

Baada ya siku, kadha Jamila alijiunga na mamake mzazi na kuanza masomo yake yaliyokuwa yamekatizwa na babake. Maisha yao yalibadilika kabisa. Mizengwe aliishia kufungwa kifungo cha miaka mitano gerezani kilichoandamana na adhabu kali ya viboko na kazi ya sulubu.

### Maswali:

- (a) Ni kwa nini wakaazi wa Twaweza walishangazwa na tabia ya Mizengwe? *(Alama 02)*
- (b) Mke wa Mizengwe aliacha mme wake na mtoto we akikimbilia nini? *(Alama 02)*
- (c) Ni mateso gani yaliyomkumba Jamila baada ya kuondoka kwa mamake? *(Alama 03)*
- (d) Unafikiri mateso haya yote na tabia hii mbaya ya Mizengwe yalitokana na tabu gani? *(Alama 02)*
- (e) Mizengwe aliadhibiwa vipi alipokamatwa na wanamtaa? *(Alama 03)*
- (f) Fatanua maana ya methali ya “wengi wape usipowapa watachukua kwa mikono yao” kulingana na hadithi hii. *(Alama 03)*
- (g) Eleza maana ya maneno haya kama yalivytumiwa na kisha uyatumie kutunga sentensi zako mwenyewe. *(Alama 15)*
  - (i) kuandamana
  - (ii) kutokomea
  - (iii) ghaya
  - (iv) kurauka.
  - (v) kucharaza.

2. Elezea Istirahil zifuatazo kama zinavyotumiwa katika ushairi

- Beti
- Tarbia
- Kipande
- Vina
- Mizani
- Kibwagizo
- Ukwapi
- Mwandamizi
- Arudhi
- Mleo
- Mloto

3. Soma shairi hili kasha ujibu maswali yanayolifuata

## UZALENDO

**Kukipenda kitu chako, huo ndio uzalendo  
Mtu anapenda chake, japo hakina thamani  
Hatamani cha mwenzake, na kikitia rohoni  
Chake ni furaha yake, kingakuwa kitu duni**

**Kuipenda nchi yako, huo ndio uzalendo  
Kuwa tayari daima, taifa utumikia  
Uzukapo uhasama, haraka kupigania  
Adui kuwasakama, mbali kuwatupilia**

**Kuwapenda watu wako, huo ndio uzalendo  
Uzalendo ndio ngao, ni silaha kamilifu  
Tuwe nao moyo huo, tusiwe nyoyo dhaifu  
Wale wakilinda kwao, nasi tuwe timilifu**

**Kuipenda kazi yako, huo ndio uzalendo  
Kazi tusitegee, ni uhai ni afia  
Mzalendo jitolee, hasa shamba kulimia  
Fanya kazi harambee, kwa uchumi kuinua**

**Kuipenda lugha yako, huo ndio uzalendo  
Tupendane kwelikweli, hakuna kubaguana  
Ukabila tusijali, sisi sote twafanana  
Tutumie Kiswahili, rahisi kuelewana**

**Kupenda taifa lako, huo ndio uzalendo  
Uzalendo ni upole, mapenzi kwa nchi yako  
Si ubishi wa kelele, vituko na maudhiko  
Nchi haisongi mbele, uzalendo sipoweko**

### Maswali

- (a) Chambua muundo wa shairi hili
- (b) Chambua mtindo wa shairi hili
- (c) Toa mifano ya uzalendo inayozunguziwa katika shairi hili
- (d) Chambua lugha ya shairi hili
- (e) Andiika ubeti wa kwanza katika lugha ya Nathari?

**Ushindi**

TO BE ANSWERED IN A NEW BOOK

Name.....Comb.....

P210/1  
HISTORY  
Senior five

**HOLIDAY PACKAGE**  
**SENIOR FIVE**  
**HISTORY**  
**NATIONALISM AND NEW STATES**  
**PAPER 1**

TIME: 3 HOURS

**INSTRUCTIONS:**

- Attempt any three questions.
  - Write introductions and conclusions.
1. Examine the causes and effects of military coup – de – tats in Africa.
  2. Discuss the causes and effects of Refugee crisis in African states
  3. Explain the strength and the weakness of the army in Africa.
  4. Discuss the causes and effects of the 1969 Libyan revolution.
  5. What are the causes and effects of corruption in African states?

**END**

Name.....Comb.....

**Submaths**  
**Senior five**

# HOLIDAY PACKAGE

**SENIOR FIVE**

**SUBMATHS**

Time: 2hours

## Instructions

- Attempt all questions in both sections.

### SECTION A

1. Simplify: 
$$\frac{8^{n+2} \times 4^{(2n-1)}}{2^n \times 4^{n/2}}$$
 (5marks)
2. Solve the equation:  $3\log_2 p - 6 \log_p 2 + 7 = 0$ . (5marks)
3. (a) Simplify: 
$$\frac{2 + 5\sqrt{3}}{2 - \sqrt{3}}$$
 (3marks)  
(b) Evaluate  $\log_{\frac{1}{3}}^{27}$  (12marks)
4. Express as a single logarithm and simplify your answer  $\log(x^2 - 1)^{1/2} + \frac{1}{2} \log\left(\frac{x+1}{x-1}\right)$  (5marks)
5. Solve for x in the equation:  $3(4^x) + 8(2^x) + 4 = 0$  (5marks)
6. Without using tables or calculators, simplify:  
$$\frac{1}{3-\sqrt{7}} + \frac{1}{3+\sqrt{7}}$$
 (5marks)
7. If  $\log_9(2+a) = 2$ , find the value of a. (5marks)
8. Find the value of 
$$\frac{1}{(1-\sin 45)^2}$$
 (5marks)

## SECTION B

9. The following marks were scored by martin in ten computer exercises marked out of 10.

Test	1	2	3	4	5	6	7	8	9	10
Marks	2	$x - 2$	$3\frac{1}{2}$	$X + 2$	$5\frac{1}{2}$	$2x - 4$	6	$3\frac{1}{2}$	x	$5\frac{1}{2}$

If the mean mark is 5.2

- Find: (i) the value of x  
(ii) the median mark  
(iii) The standard deviation. (15marks)

10. At 7:30am daily a link bus leaves Kampala for Masaka. The time (in minutes) taken to cover the journey was recorded over a certain period of time and was grouped as shown in the table below.

Time(mm)	80 - 84	85 - 89	90-94	95-99	100-104	105-109	110-114	115-119	120-124
Frequency (f)	10	15	35	40	28	15	4	2	1

- (a) Calculate the mean time of travel from Kampala to Masaka by the bus.  
(b) Draw a cumulative frequency curve (O-give) for the data and use it to determine.  
(i) Median time for the data.  
(ii) Number of times the bus arrived in Masaka between 9:00 – 9:25am.  
(iii) Semi-quartile range of time of travel from Kampala to Masaka. (15marks)

**END**

Name.....Comb.....

P425/1

PURE MATHEMATICS

Senior five

# HOLIDAY PACKAGE

## SENIOR FIVE

### PURE MATHEMATICS

#### Paper 1

Time: 2hours 30minutes

#### Instructions

- Attempt all questions in section A and any 3 from section B.
- Begin each answer on a fresh sheet of paper
- Mathematical tables with list of formulae are allowed
- Silent non-programmable calculators may be used.
- All necessary working must be clearly shown.

## SECTION A (40MARKS)

1. Solve the simultaneous equations

$$P + 2q - r = -1$$

$$3p - q + 2r = 16$$

$$2p + 3q + r = 3$$

(5marks)

2. Solve the equation:  $\log_{25}^{4x^2} = \log_5 (3 - x^2)$

(5marks)

3. The sum of the first n terms of a geometric progression (G.P) is  $\frac{4}{3}(4^n - 1)$

Find its  $n^{\text{th}}$  terms as an integral power of 2.

(5marks)

4. The 5<sup>th</sup> term of an arithmetic progression (A.p) is 12 and the sum of the first 5 terms is 80.

Find the first term and the common difference.

(5marks)

5. Prove by induction that:  $\sum_{r=1}^n 3^{r-1} = \frac{3^n - 1}{2}$  where n is a whole number.

(5marks)

6. Deduce the sum of the serie below;

$$2 + 12 + 36 + \dots + (n^3 + n^2)$$

(5marks)

7. Simplify:  $\frac{3(2^{n+1}) - (2^{n-1})}{2^{n+1} - 2^n}$

(5marks)

8. Solve for x and y:  $\log(x + 2y) = 1$  and  $x^2 - y^2 = -12$ .

(5marks)

## SECTION B (36MARKS)

9. (a) The function  $f(x) = x^3 + px^2 - 5x + q$  has a factor  $(x - 2)$  and has a value of 5 when  $x = -3$ .

Find p and q.

(4marks)

- (b) The roots of the equation  $ax^2 + bx + c = 0$  are  $\alpha$  and  $\beta$  form an equation whose roots are

$\frac{\alpha}{\beta}$  and  $\frac{\beta}{\alpha}$ .

(5marks)

(c) Simplify:  $\frac{\sqrt{3} - 2}{(2\sqrt{3} + 3)}$  in the form  $p + q\sqrt{3}$  where  $p, q$  are rational numbers.

10. (a) What is the smallest number of terms of the Geometric progression (G.P) 5, 10, 20, ..... that can give a sum greater than 500,000? 2

(b) Prove by induction  $\sum_{r=1}^n \frac{1}{r(r+1)} = \frac{n}{n+1}$  (4marks)

(c) Solve simultaneously  $a^3 + b^3 = 26$  and  $a + b = 2$  (4marks)

11. (a) If the equation  $x^2 + ax + p = 0$  and  $cx^2 + 2ax - 3p = 0$  have a common root, show that  $p(c+3)^2 = 5a^2(c-2)$  (5marks)
- (b) Given the polynomial  $f(x) = Q(x)g(x) + R(x)$ , where  $Q(x)$  is the quotient,  $g(x) = (x-\alpha)(x-\beta)$  and  $R(x)$  the remainder. Show that  $R(x) = \frac{(x-\beta)f(\alpha) + (\alpha-x)f(\beta)}{\alpha - \beta}$

When  $f(x)$  is divided by  $g(x)$

Hence find the remainder when  $f(x)$  is divided by  $x^2 - 9$ , given that  $f(x)$  divided by  $(x-3)$  leaves a remainder of 2 and when divided by  $(x+3)$  leaves a remainder of -3.

**(7marks)**

**END**

Name..... Comb.....

P425/2

APPLIED MATHEMATICS

Senior five

## HOLIDAY PACKAGE

### SENIOR FIVE APPLIED MATHEMATICS Paper 2

Time: 2hours 10minutes

#### Instructions

- Attempt all questions.

#### SECTION A(36MARKS)

- Given that  $P(A) = 0.6$ ,  $P(A \cup B) = 0.85$  and that events A and B are mutually exclusive, find
  - (i)  $P(B)$
  - (ii)  $P(A^1 \cap B)$(5marks)
- Find the interval within which the exact value of  $\frac{2.58}{3.4}$  is expected to lie. (5marks)
- A box contains 6 oranges and 4 mangoes if 2 fruits are picked randomly from the box one after the other without replacement, determine the probability that;
  - (i) a mango is picked the second time.
  - (ii) an orange is picked first given that a mango is picked the second time.(6marks)
- The data below represents the length of leaves in centimeters.  
4.4, 6.2, 9.4, 12.6, 10.0, 8.8, 3.8 and 13.6.  
Find the ;
  - (a) Mean length
  - (b) Variance(5marks)
- Two events A and B are such that  $P(A^1 \cap B) = 3x$ ,  $P(A \cap B^1) = 2x$ ,  $P(A^1 \cap B^1) = x$  and  $P(B) = \frac{4}{7}$ .  
Using a Venn diagram, find the value of
  - (i) X
  - (ii)  $P(A \cap B)$(5marks)
- The table below shows the values of a function f with respect to t.

T	0	0.3	0.6	1.2	1.8
F(t)	2.72	3.00	3.32	4.06	4.95

Using linear interpolation, find

- (a) F(t) when t = 0.9  
 (b) T when f(t) = 4.48.

(5marks)

7. The table below shows the expenditure of a student during the first and second terms.

Item	Expenditure		
	First term	Second term	weight
Clothings	46500	49350	5
Pocket money	55200	57500	3
books	80000	97500	8

Using first term expenditure as the base, calculate the average weighted price index to one decimal place. (5marks)

### SECTION B (34MARKS)

8. Study the table below

Frequency	20-24	25-34	35-38	39-44	45-49	50-54
density	1.2	1	2	1.5	1	0.4

- (a) (i) Construct a histogram using your data.  
 (ii) Use the histogram to estimate the mode.

(b) Calculate the mean mark. (12marks)

9. (a) Show that there exists a root of the function  $f(x) = x^2 + x - 4$  between 1 and 2.  
 (b) By using two graphs method, locate the roots of the function  $f(x) = x^2 + x - 4$ . (10marks)
10. Below are marks scored by 8 students A – H in maths, econ and geography in the end of term examinations.

	A	B	C	D	E	F	G	H
Maths	52	75	41	60	81	31	65	52
Economics	50	60	35	65	66	45	69	48
geography	35	40	60	54	63	40	55	72

Calculate the rank correlation coefficients between the performance of the students in:

- (i) Maths and economics
- (ii) Geography and maths.

In each case, comment on the correlation.

(12marks)

**END**

TO BE ANSWERED IN A NEW BOOK

Name.....stream.....

P235/1

IRE

Senior five

## HOLIDAY PACKAGE SENIOR FIVE

IRE

Paper 1

Time: 2hours 30minutes

### Instructions

- Answer any four questions.

- Allah says in Quran 97:1 “We have indeed revealed it in the night of power”. Taking the above verse as a center focus, justify the need for the revelation of the holy Quran at the time of its revelation. (25marks)
- “And those who disbelieve say, why was the Quran not revealed to him all at once” Qn 25:32, using the above verse, justify the essence behind the revelation of the Quran in bits. (25marks)
- Account for the choice of Allah to reveal the Quran in Arabia, in Arabic and to an Arab prophet giving as so many Quranic injunctions and illustrations as possible. (25marks)
- (a) God talked to Musa (Moses) in one of the modes of revelation. Give an account of this mode as mentioned in the holy Quran. (13marks)  
(b) Of what importance are the modes of revelation to mankind? (12marks)
- Discuss the stages of collection and compilation of the holy Quran. (25marks)
- The companions of the Prophet were so reluctant to put the Quran into a book form.
  - Account for this delay. (13marks)  
(b) Why did the later companions embark on this noble work of bringing the Quran together? (12marks)

Name.....stream.....

P360/1  
LUGANDA  
Senior five

**HOLIDAY PACKAGE  
SENIOR FIVE**  
**LUGANDA**  
**Paper 1**  
**Time: 2hours**

**Instructions**

- *Ddamu nga bwolagiddwa mu buli kitundu.*

**EKITUNDU A**

Ebibuuzo byonna byabuwaze mu kitundu kino

1. (a) Golola ensobi ezikoleddwa mu mpandiika mu bigambo bino.
  - (i) eggwanga
  - (ii) munywaanyi
  - (iii) Omusaambwa
  - (iv) Omulilo
  - (v) Emputa

(obubonero 5)
- (b) Laga amateeka g'oluganda agafuga empandiika ya l or r.  

(obubonero 4)
- (c) Amannya ago wammanga galage mu bungi.
  - Embira
  - Otulo
  - Obusungu
  - Embaata
  - Eddagala

(obubonero 5)
- (d) Nebyokulabirako laga engeri ezenjawulo lwetuwangaala n'empeerezi emu.  

(obubonero 8)
- (e) Wandiika ebigambo bitaano ebyewaggula ku tteeka erifuga Nnampawengwa singa eba egatiddwako ensirifu.  

(obubonero 5)

(f) Laga amateeka g'oluganda ageekunsa ku nkozes a y'ennukuta ezomunnyindo.

(obubonero 3)

1

## EKITUNDU B

Kola nnamba 2(a) oba 2(b)

2. (a) Laga obukulu bw'emmuli mu buwangwa bw'Abaganda. (obubonero 20)  
Oba
- (b) Nyonnyola ku ngeri ez'enjawulo ez'empuliziganya Abaganda ze beeyambisa mu  
buwangwa okwetusaako obubaka. (obubonero 20)
3. (a) Ku bisoko ebyo wammanga londako bitaano onnyonnyole amakulu gaabyo.  
(i) Okwoza n'oyanika mu ttaka.  
(ii) Okumurungusa eddigobe  
(iii) Okusiiga omuntu enziro  
(iv) Okulya obutaala  
(v) Okukyusa obuwufu  
(vi) Okutunza omuntu mu bigambo  
(vii) Okutambula nga weerinnyako  
(viii) Okuba omufumbakafu (obubonero 5)
- (b) Ku bisoko ebukuweereddwa londako bitaano (5) obukozese mu sentensi  
eziggyayo obulungi amakul gaabyo.  
(i) Okuyisa ensaano ku mazzi  
(ii) Okuliira ku nsiko  
(iii) Kimyanku okuba omugabe  
(iv) Okuggulira oluggi ku ppata  
(v) Obutaba na mugongo  
(vi) Obukaba na mugongo  
(vii) Obukaba okusiiwa omuntu  
(viii) Enjuba okugolooba  
(ix) Enjala omukuulamu omuntu olulimi (obubonero 10)
4. (a) Maliriza engero ttaano (5) ky zikuweereddwa wammanga nga bwe zoogerwa.  
(i) .....galiibwa mujjukiza  
(ii) Ssentamu nkadde.....  
(iii) Ekirya atabaala.....

- (iv).....nga ggwe okagogombodde.
- (v)Omukisa mpewo.....
- (vi).....lugaba azitunga kiro
- (vii).....emmuli kazitwala bukiika
- (viii)Akutwala ekiro.....(obubonero 5) 2

(b) Ku ngero ezo wammanga londako ttaano (5) onnyonnyole amakulu gaazo ag'omunda.

- (i) Ow'ensalambi akukwasa mu nnyama
- (ii) Owoobusa ngabi, n'ataafumite akootakoota
- (iii) Abanakunabanaku bamanyagana, empologoma bwerwala ensiri y'erumika
- (iv) Obuyise bw'omu ensegga yebika
- (v) Akanaafa tekawulira ΠΠombe.
- (vi) Amaaso amati gabuuza nnyinimu
- (vii) Embwa yange tebba g'eyita ku lwaniko lwa taba
- (viii) Ebirwa bikyuka, amalusu gafuuka engeregeze.

**BIKOMYE**

**“ENNINDIRIZA!”**

Name.....stream.....

P360/2  
LUGANDA  
Senior five

**HOLIDAY PACKAGE  
SENIOR FIVE  
LUGANDA  
Paper 2**  
Time: 2hours 30minutes

**Instructions**

- *Olupapula lulimu ebitundu bibiri: A ne B.*
- *Ekitundu A kya buwaze.*
- *Mu kitundu B londako nga bw'olagiddwa*

**EKITUNDU A**

**EKITUNDU A**  
*Ddamu 1(a) ne 1(b)*

1(a) Kyusa ekitundu kino okizze mu Luganda.

(obubonero 15)

Last Saturday, I was a groomsman at a wedding. As we stood up to leave the saloon to board our cars to go to the church, the groom collapsed and started vomiting what appeared to be saliva. His body was shaking and he could not speak properly.

We rushed him to a clinic and after he was assessed, the doctor advised us to buy him a bottle of soda and something to eat.

The doctor explained that the groom had low blood sugar because he had taken long without eating. We were told that his last meal had been lunch of the previous day. He had not had supper and had also missed breakfast.

We fed the groom, as the doctor has advised, and after he had rested for sometime, his condition stabilized and we went ahead with the wedding.

What surprised us was that the groom was fine throughout the day and the wedding went on well, although we were about one hour late for church.

*(Extracted from New Vision Monday March 23 2015. Article written by Nicholas Nanyeenya)*

TO BE ANSWERED

*1(b) Kyusa ekitundu kino okizze mu Lungereza*

(obubonero 15)

Enkola y'ekizaalaggumba yeettanirwa nnyo ensangi zino. Enkola eno abakyala bagikozesa nga bagenderera okuleka ebbanga eggere nga tebannazza ku mwana.

Abamu balekawo ebbanga lya mwaka gumu, ebiri oba esatu nga tebannazza ku mwana, ate abalala bayinza okusinzaawo.

Omusawo omukugu mu kuzaalisa akolera mu ddwaliro ly'e Mengo agamba nti, "Abakyala bona kyandibadde kirungi bettanira enkola eno kubanga ebayamba okutegekera amaka gaabwe."

Wabula abakyala bakubirizibwa bulijjo okugenda mu malwaliro, bakeberebwwe olwo balyoke bafune enkola etaakose mibiri gyabwe.

Okunoonyereza kwazudde ng'abakyala bangi abakozesa enkola eno nga tebakebereddwa bafunye ebizibu omuli; okuvaamu omusaayi omungi nga bali mu nsonga, okugeejjuuka ate abamu okutoniwa cnyo.

**EKITUNDU B**  
*Kola nnamba 2(a) oba 2(b)*

**2(a) Ku mitwe egikuweereddwa, londako gumu oguwandiikeko emboozzi ya bigambo 350. (Buli mutwe gwa bubonero 30)**

- i) Emmwanyi gye weesiga
- ii) Obusimu bubuliwendi nkufuna bwe buvaako obutabanguko mu maka ensangi zino.  
Kubaganya ebirowoozo.
- iii) Nafa ekitiibwa!
- iv) Omuganda n'ekitooke

**Oba**

**2(b) Ku mitwe egikuweereddwa, londako ebiri (2) buli gumu oguwandiikeko emboozzi nga bw'olagiddwa. (Buli mutwe gwa bubonero 15)**

- i) Wandiikira mukwano gwo ali mu ssomero eddala ebbaluwa ng'omwagazisa akyuse aje ku ssomero ggwe ly'osomeramu. (Kozesa ebigambo 150 – 200)
- ii) Kitwale nti ggwe muwandiisi w'olukiiko olutegeka embaga ya Lubega Ahmed, owandiike ebiteeso by'olukiiko lwe mwalimu nga mutema empenda ez'okutegeka embaga. (Kozesa ebigambo 150 – 200)

- iii) Obaddewo ng'omusajja alwana ne musajja munne olw'omukazi era oluvannyuma omu n'atema munne olubale. Wandiika sitatimenti gye wandikoze ku poliisi. (Kozesa ebiligambo 200)
- iv) Ggwe minisita w'ebyenjigiriza mu gavumenti ya Ssabasajja, oyitiddwa ku mukolo gw'okujagulizaako essomero erimu olw'okuyita obulungi ebigezo. Wandiika by'onooyogera. (Kozesa ebiligambo 200)

**BIKOMYE WANO**

Name..... stream.....

**Physics**  
**Paper 1**  
**Senior five**

**HOLIDAY PACKAGE**  
**SENIOR FIVE**  
**PHYSICS**  
**Paper 1**  
**Time: 2hours**

**Instructions**

- *Attempt all questions*
- *Assume where necessary*
- *Acceleration due to gravity ( $g=9.81ms^{-2}$ )*
- *Density of water  $\rho=(1000Kgm^{-3})$*

1. (a) (i) Define dimensions of physical quantity. (1mark)

(ii) In the gas equation

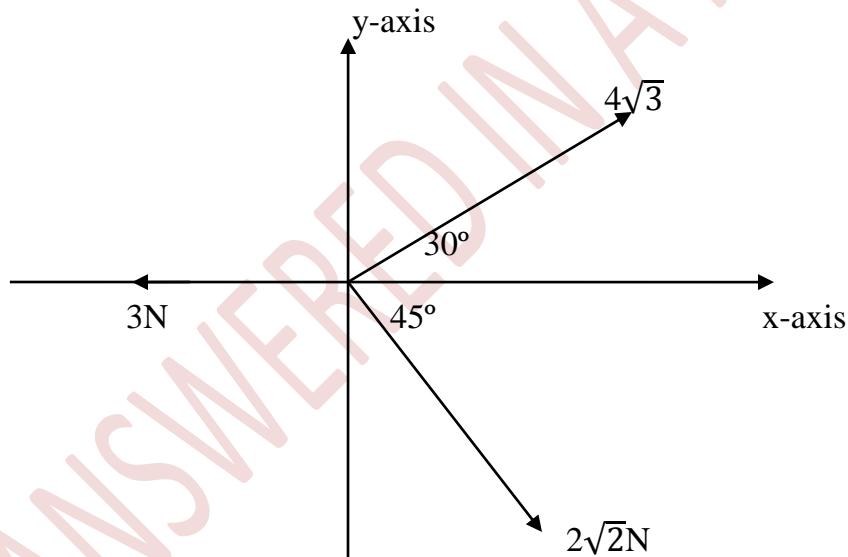
$$\left( P + \frac{a}{V^2} \right) (V - b) = RT$$

Where  $P$  = pressure,  $V$  = volume,  $T$  = absolute temperature and  $R$  = gas constant,  
what are the dimensions of the constants  $a$  and  $b$ . (4marks)

- (b) A particle is projected from a point on a horizontal plane with a velocity  $U$ , at an angle  $\theta$  above the horizontal range.  $R_{\text{max}}$  is given by  $R_{\text{max}} = \frac{U^2}{g}$  where  $g$  is the acceleration due to gravity. (4marks)
- (c) (i) Define solid friction? (1mark)
- (ii) State and explain the laws of solid friction. (6marks)

1

(iii) The diagram below shows three forces  $3\text{N}$ ,  $4\sqrt{3}\text{N}$  and  $2\sqrt{2}\text{N}$  acting on a particle at the origin.



Calculate

- (i) Magnitude of the resultant force. (4marks)
- (ii) Angle the resultant makes with the x-axis.
2. (a) State Newton's laws of motion? (3marks)
- (b) Use Newton's law of motion to show that when two bodies collide their momentum is conserved. (4marks)

- (c) Two balls P and Q travelling in the same line in opposite directions with speeds of  $6\text{ms}^{-1}$  and  $15\text{ms}^{-1}$  respectively make a perfectly inelastic collision. If the masses of P and Q are 8kg and 5kg respectively find;
- (i) Final velocity of p (4marks)  
(ii) Change in kinetic energy (4marks)
- (d) (i) What is an impulse of a force? (1mark)  
(ii) Explain why a long jumper should normally land on sand. (4marks)
3. (a) (i) State the law of conservation of linear momentum.  
(ii) Use Newton's laws to derive the law in (a) (i). (4marks)
- (b) Distinguish between elastic and inelastic collision. (1mark) 2
- (c) An object X of mass M moving with a velocity of  $10\text{ms}^{-1}$  collides with a stationary object Y of equal mass. After collision, X moves with a speed U at an angle of  $30^\circ$  to its initial direction, while Y moves with a speed V, at an angle of  $90^\circ$  to the new direction of X.
- (i) Calculate the speed U and V. (5marks)  
(ii) Determine whether the collision is elastic or not. (3marks)
- (d) (i) Define uniform acceleration (1mark)  
(ii) With the aid of a velocity time graph, describe the motion of a body projected vertically upwards. (3marks)
- (iii) Calculate the range of a projectile which is fired at an angle of  $45^\circ$  to the horizontal with a speed of  $20\text{ms}^{-1}$ . (2marks)
4. (a) (i) State the thermometric property used in the constant volume gas thermometer. (1mark)  
(ii) Give two characteristics of a good thermometric property. (2marks)
- (b) (i) Describe the steps taken to set up a Celsius scale of temperature for a mercury-in-glass thermometer. (4marks)  
(ii) State four disadvantages of mercury in-glass thermometer. (2marks)

(c) A resistance thermometer has a resistance of  $21.42\Omega$  at the ice point,  $29.10\Omega$  at the steam point and  $28.11\Omega$  at some unknown temperature  $\theta$ . Calculate  $\theta$  on the scale of this thermometer. (3marks)

(d) The resistance  $R\theta$  of platinum varies with the temperature  $\theta^\circ\text{C}$  as measured by the constant volume gas thermometer according to the equation.

$$R\theta = 50.0 + 0.17\theta + 3.0 \times 10^{-4} \theta^2.$$

(i) Calculate the temperature on the platinum scale corresponding to  $60^\circ\text{C}$  on the gas scale. (6marks)

(ii) Account for the difference between the two values and state the temperature at which they agree. (2marks)

**END**

Name.....comb.....

P235/4

IRE

Senior five

# HOLIDAY PACKAGE

## SENIOR FIVE

### IRE

### Paper 4

**DURATION: 2HOURS 30MINUTES**

#### **INSTRUCTIONS:**

- Attempt any four questions.
1. To what extent did the conditions in Arabia contribute to the Arabs occupation of the East African coast?
  2. “The similarity between Islam and African traditional religions contributed to the spread of Islam at the coast of East Africa”. Discuss.
  3. (a) Examine the factors that led to the Arabs settlement at the coast of East Africa.  
(b) How did the Arabs settlement at the coast contribute to the spread of Islam in the region?
  4. (a) Give an account for the Portuguese invasion of East African coast?  
(b) How did their occupation of the Coast affect the progress of Islam in the region?
  5. Why did Islam take so long to penetrate the interior yet it was the first foreign religion to be introduced at the coast of East Africa?
  6. Analyze the traditional beliefs and practices of the East African people prior the coming of Islam.
  7. To what extent did Islam influence the people of East African Coast?

8. To what extent was the Arab traders a factor towards the progress of Islam at the coast of East Africa?

**END**

Name..... Comb.....

**Physics  
Paper 2  
Senior five**

## **HOLIDAY PACKAGE SENIOR FIVE**

PHYSICS  
PAPER 2  
TIME: 2HOURS

### **INSTRUCTIONS**

- Answer all questions.

1. (a) (i) Differentiate between transverse waves and longitudinal waves giving one example in each case. (3marks)
- (ii) Define the terms amplitude and wave length as applied to wave motion.(2marks)
- (b) Draw a diagram to show how circular waves can be reflected by a concave barrier. (2marks)
- (c) The distance between 20 successive troughs of water waves produced at a frequency of 50Hz is 38cm. Calculate the velocity of the same waves. (2marks)
- (d) The displacement in metres of plane progressive wave is given by the equation

$$\left\{ \quad \right\}$$

$$Y = 0.5 \sin \pi (200t - \frac{20x}{17})$$

Find

- (i) Wave length and (2marks)  
(ii) Speed of the wave (2marks)

(e) Give two differences between mechanical waves and electromagnetic waves. (2marks)

2. (a) (i) Differentiate between a virtual image and real image. (2marks)

(ii) Explain why a parabolic mirror is used in search lights other than concave mirrors.

(3marks)

(b) Use a geometrical ray diagram for a concave mirror to derive the relation

$$\frac{1}{f} = \frac{1}{u} + \frac{1}{v} \text{ using a finite object.} \quad (3\text{marks})$$

(c) (i) Define the term linear magnification. (1mark)

(ii) A concave mirror of focal length 15cm forms an erect image that is three times the size of the object. Determine the object and its corresponding image position. (3marks)

(d) Describe the principle for operation of a sextant. (4marks)

3. (a) (i) Define the terms electromotive force and internal resistance of a cell. (2marks)

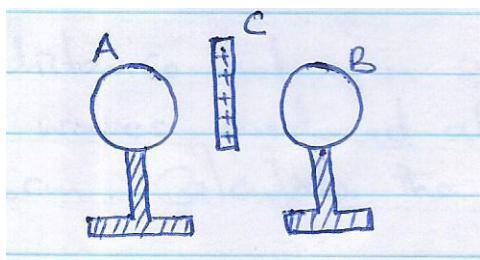
(ii) Explain how temperature and length affects the resistance of a metallic wire. (4marks)

(b) Describe an experiment to verify Ohm's law. (5marks)

(c) (i) Define the term temperature coefficient of resistance. (1mark)

(ii) The resistivity of a certain wire is  $1.6 \times 10^{-7} \Omega \text{m}$  at  $30^\circ\text{C}$  and its temperature co-efficient of resistance is  $6.0 \times 10^{-3} \text{K}^{-1}$ . Calculate the resistivity at  $80^\circ\text{C}$ . (3marks)

4. (a) (i) State the law of electrostatics. (1mark)  
(ii) Explain how objects get charged by rubbing. (3marks)  
(b) The diagram shows two metallic spheres A and B placed apart and each supported on an insulating stand. A positively charged plate C is placed mid-way between them but without touching them.



B is momentarily earthed in the presence of C.

Finally C is withdrawn.

- (i) Draw the spheres at the end of the operation and show the charge distribution over them. (2marks)
- (ii) On the same diagram sketch the electric field pattern in the region of the spheres. (2marks)
- (iii) Explain the change in p.d between the spheres as the spheres are moved further apart. (2marks)
- (iv) Describe an experiment to show that excess charge resides outside a hollow conductor. (2marks)
- (d) Describe an experiment to show that excess charge resides outside a hollow conductor. (5marks)

**END**

Name.....Comb.....

Literature  
Paper 2  
Senior five

## HOLIDAY PACKAGE SENIOR FIVE

LITERATURE

PAPER 2

TIME: 2HOURS

### Instructions:

- Attempt only **two** questions. Question **one** is **compulsory**

#### FRANCIS IMBUGA: AMINATA

1. Read the following passage and answer the questions after it.

**Aminata** : What is it my dear?  
**Mulemi** : Hmm! Aah, Aminata!  
**Aminata** : What has the board done?  
**Mulemi** : Welcome home!  
**Aminata** : Thank you. What about the board?  
You were throwing the darts as if you  
Were bent on hurting the board.  
**Mulemi** : Where is the evidence?  
**Aminata** : The lines across your face  
Where are children?  
**Mulemi** : Must be outside playing.  
**Aminata** : In this kind of weather?  
**Mulemi** : Freedom of choice. It is their right  
**Aminata** : My uncle should be here to  
Hear you talk of rights. That's a  
Word he is allergic to, rights  
**Mulemi** : But you made him see sense,  
didn't you?  
**Aminata** : You know I did not go to Membe

to make anyone see sense  
no, I merely went there to  
Formally receive my gift of soil.

**Mulemi** : And did you formally receive it?

**Aminata** : No. It looks like it will have  
to be a court case. Jumba is  
a fox, I tell you. Now they have  
a fantastic story about the  
grave and why they had to  
cement it in a hurry. According to  
them, our late father died after he had changed his mind  
about the cementing of his grave. The old man is  
supposed to have called the two of them  
Ababio and my uncle, to his bedside two days  
before he died. That is when he supposedly  
talked to them about the burial arrangements.  
Ababio is even ready to swear by the grave that  
this is the absolute truth.

**Mulemi** : What about the will? That is  
what is important.

**Aminata** : (*Sarcastic*) In Membe, what is  
written down on a piece of paper is of  
no consequence whatsoever.  
They want the evidence of the living not the dead.

### Questions

- (a) What leads to this passage? (8marks)
- (b) What is the character of Aminata in the passage? (6marks)
- (c) Identify and explain the effectiveness of the dramatic techniques used in the passage. (12marks)
- (d) How important is this passage to the development of the rest of the plot? (8marks)

2. With examples, discuss the theme of male domination in the play, Aminata. (33marks)

3. Discuss the character of Jumba as portrayed by the playwright in Aminata. (33marks)

**END**

Name.....Comb.....

Literature  
Paper 1  
Senior five

## HOLIDAY PACKAGE SENIOR FIVE

LITERATURE

PAPER 1

TIME: 2HOURS

### Instructions:

- Attempt both questions

1. Read the following passage and answer the questions that follows;

### RULE OF LAW

Does it matter if the IGP doesn't know Kiboko squad?

Hello Dr. Besigye,

Did I hear you were beaten in the clock tower area? This is not new to you and your following. What bothers me is that the stick-wielding, mean-looking young men are not known to the Inspector General of Police and his forces. What did the opposition expect my good IGP to proclaim? That he knows them? Even a drunkard in his right senses would not know them depending whether he is intoxicated by signature, power, Tyson, Tonto or waragi brands! Most importantly, anyone moderately intoxicated by president lager would not know, I promise you.

Fellow country women and men, do you remember those stones that were arrested in our heavily guarded parliament by our ‘police’ allegedly smuggled in by an inter-party cooperation woman without arresting her? Okay, they arrested the stones but haven’t told me and the people of Arua who locked the chambers. Did you know that at one point Joseph Kony’s Kaunda suit was arrested? Oh! is it captured? Chances are that anyone who can arrest Kony’s Kaunda suit can arrest stones. The similarity is in their difference. They are either in UPDF regalia or police outfits depending on the political situation.

The other day, my son, prince Boni, denied licking sugar yet his lips were covered with crystals. Mummy, me, sugar, no! Proclaimed Boni, although his sister reminded him that lying is ungodly. I

walked him into the mirror and he was quick to say it was the cat that was licking sugar and since he carried it, chances were that it rubbed its head on his lips, that was why I was innocently accusing him. Magical! Is he an IGP material? God save me! I have always reminded my friends that lies are not sustainable. Ever heard the expression, "If you want to lie and lie well, never eat pumpkins?"

How come the Kiboko squad is never restrained by the police! If Mr. Semakula, self –proclaimed head of the Kiboko squad takes up the role of the cops, then we need to see the memorandum of understanding he signed with Kale Kayihura's institution. Chances are that, this is a useful partnership between the police and the Kiboko squad to keep law and order in the thriving democracy growing at eight percent per annum. This will help us assess the budget of the police accordingly.

I tell you most solemnly, the IGP who doesn't know the Kiboko squad, could be knowing who is fathering which child in those unipots which married offecers are sharing, separated by 'thick' walls called curtains. Ever wondered why some children's eyes and ears (EEs) are exactly like those of their mothers' neighbours or is it housemates in case of shared unipots?

One day the Kiboko squad will fly the EE test direction. On that day, who will be the head of the denial or confirmation ministry? During the Wamala era, where were these gangs? Today, we can't know who a police officer is; they are dressed like anything depending on occasion. Kayihura, these denials are temporary, truth is so powerful that however long it takes, it will emerge. God bless.

Ms. Abia-Bako –Woman MP, Arua (Daily monitor June 24 2010)

#### Questions

- (a) What is the subject matter of the passage? (7marks)
- (b) Comment on the writer's attitude towards the squad and the officers in charge. Support your answer with close reference to the passage. (8marks)
- (c) Discuss the major aspects of style/stylistic devices in this passage. (12marks)
- (d) What feelings does this passage arouse in you and why? (6marks)

#### SECTION II

##### GIVE

He removed his handkerchief  
Mopped his face;  
Looking at the camera  
He said:  
Give! If you want blessings!  
The lord loves a cheerful giver!  
Are you poor?  
Give and it shall be given back;  
A hundred fold...over flowing  
WHEN you don't give

You steal from the lord!  
Malachi 3...says;  
“Give generously”  
Woman! Are you barren?  
Have you been giving to the lord?  
Give! The lord will open your womb”,  
Frothing at the mouth,  
He lifted the offertory bags  
And admonished:  
Coins, coins!  
Why do you give coins to the lord?  
Give the kind that does not make noise  
To disturb the lord’s ear!”  
He forgot the poor woman  
Who gave her all:  
Two very small copper coins  
Mightily impressing lord.

The service is soon over  
He gets into his Mercedes Benz  
His wife and children in tow  
While we, covered in a cloud of dust,  
Walk home mightily blessed,  
Mightily determined to give henceforth,  
To please the Lord;  
To rid us of this gnawing hunger;  
To give us beautiful mansions, cars...  
Like our pastor’s.

Nyambura Njuguna.

### Questions

- (a) Identify the speaker in the poem. (3marks)
- (b) Comment on the poetic devices used in the poem (12marks)
- (c) What life’s lessons can the reader draw from the poem? (8marks)
- (d) Comment on the following aspects in the poem.
- (i) Tone (4marks)
  - (ii) Mood (4marks)
  - (iii) Intention (2marks)

Name.....Comb.....

P235/3

IRE

Senior five

## HOLIDAY PACKAGE SENIOR FIVE

IRE

PAPER 3

TIME: 2Hours 30minutes

### Instructions:

- Attempt only four (4) questions.
1. Explain the contributions of caliph Abubakar to the progress of Islam from the time of his conversion to his death.
  2. Examine the achievements of Muawiya bin Abu-sufian to the progress and consolidation of the Umayyad dynasty.
  3. The reign between 685 – 705 is referred to as the golden age of the Umayyads. Justify the statement.
  4. Examine the contributions of Umar bin Abdul Aziiz to the progress of the Umayyad dynasty.
  5. Discuss the social, political and economic organization of the Umayyad dynasty.
  6. Discuss the factors that led to the rise of the Abbasids dynasty to power.
  7. Examine the achievements of Abu.Jafar al-Mansoor to the progress of the Abbasids dynasty.

**END**

Name.....Comb.....

**History of Europe  
Senior five**

# **HOLIDAY PACKAGE**

## **SENIOR FIVE**

HISTORY

PAPER 3

TIME: 3HOURS

### **INSTRUCTIONS**

- Attempt 4 questions.
1. Assess the role of the peasants in the outbreak of the French revolution.
  2. Examine the impact of the following events in France.
    - (i) The estates general meeting May 5, 1789.
    - (ii)The storming of Bastilles, July 14, 1789.
    - (iii)The civil constitution of the clergy July 1790.
    - (iv)The declaration rights of man and citizens August 27.
    - (v)The March of women October 5, 1789.
  3. Why was France at war with the rest of Europe between 1793 and 1802?
  4. Account for the outbreak of the reign of terror in France from 1792 – 1794.
  5. “The achievements of the Directory government have been grossly under estimated” Discuss.
  6. Assess the significance of the 1789 French revolution on Europe up to 1848.
  7. To what extent was luck responsible for Napoleon’s rise to power in 1799?
  8. “Napoleon the great” To what extent is this a justifiable description of Napoleon Bonaparte?

**END**

Name.....Comb.....

Literature  
Paper 3  
Senior five

## HOLIDAY PACKAGE

**SENIOR FIVE**

Literature

PAPER 3

TIME: 2HOURS

### **INSTRUCTIONS**

- Answer all questions in this question paper.

TO BE ANSWERED IN A NEW BOOK

## **SECTION A**

### **1    BLOSSOMS OF THE SAVANNAH: H.R. Ole Kulet.**

Resian stared at him. She already knew what he was to say next.

"No," she said flatly.

"You are a very lucky child as I said," he continued, ignoring her protest.

"I am delighted to tell you that my good friend and business associate Oloisudori Loonkiyaa has approached me asking that he marries you. You know he is..."

At first she was stunned like one hit by a bolt of lightning. Then suddenly she began to shout. She threw her head back and screamed so loudly one would have thought she was engulfed in a ball of fire. She hollered, shrieked and shrilled, saying all sorts of things to express outrage. She cried, accusing her father of hatred and betrayal by betrothing her to Oloisudori. Her father stared at her in horror. But she would not stop, she shouted even more and screamed like one possessed with demented spirits. After a moment of frozen immobility, her father suddenly pushed back his chair, moved fast from behind the desk and slapped her face, sending her reeling back so that she almost fell. She stared at him in disbelief. He slapped her again backhanded.

"That should teach you never to talk like that to your father," he said fuming, his nostrils flaring and his eyes glittering with anger.

"It is better you kill me, Papaai!" she cried out outrageously. "You'll better kill me than hand me over to your monster friend. Yes, kill me right now!"

He watched her with distaste as she heaved her shoulders and blew her nose. She tried to control the flow of her tears but she could not. By then there was a multitude of people, standing and milling around the building, peeping curiously, wondering what was happening inside.

"I may as well tell you, my dear child," her father said in a low angry growl, "I have taken dowry from Oloisudori. You are now his wife whether you like it or not!"

TOBL

In silence, Resian turned and walked to the door opened it, and stepped into the corridor. Then as she walked through the shop, she lifted her voice, still hoarse and screamed, attracting the attention of everyone. She looked back and saw her father following her, his eyes bulging out with anger. He strode briskly and sharply towards her. She quickened her step away from him but as she walked, she repeated her words.

"You hear me, *Papaai*? I said I'd rather die than get married to a monster, who is an *ol-ushuushi* like Oloisudori. Never! Never! If I don't die and I live to be eighty, I will still go to the university. I'll go to Egerton University, *Papaai*, I tell you! I hope you will be there to witness my graduation. But for now, I can as well reveal to you, that I have told your friend Oloisudori what I think of him. Yes, he is a monster, he is a gangster, he is a bank robber and an extortionist per excellence!"

## 20. Questions

- a) What are the events that lead to the extract?
- b) Discuss the themes in the extract.
- c) How is the message portrayed in the extract?
- d) Discuss the significance of the extract to the rest of the novel.

## SECTION B

Attempt one question from this section

2. Discuss the character of Resian and Tayiyo as portrayed in **blossoms of the Savannah** by H.R Ole Kulet.

**END**

Name.....Comb.....

Biology  
Paper 1  
Senior five

## HOLIDAY PACKAGE

### SENIOR FIVE

Biology  
PAPER 1  
TIME: 2HOURS

#### INSTRUCTIONS

- Answer all questions in this question paper.
- Answers for section A should be fixed in the table below.
- Answers for section B should be written in the spaces provided.

1		11		21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

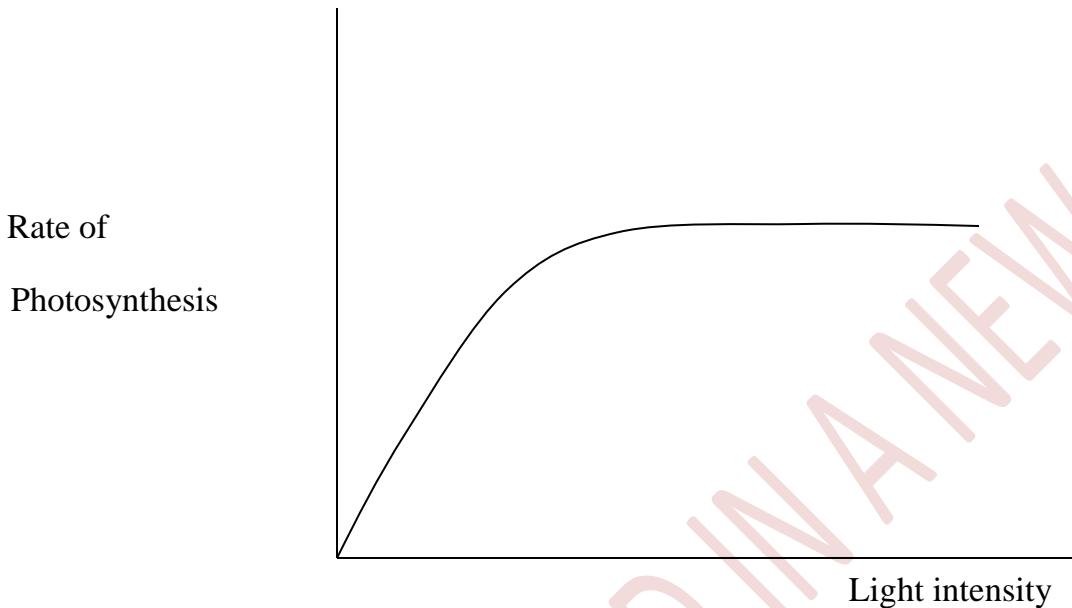
#### SECTION A

1. Which one of the following is a characteristic of members of the Monera Kingdom?
  - A. possession of a true nucleus
  - B. Being single celled
  - C. possession of flagella
  - D. being heterotrophic
2. The number of trophic levels in a food chain is mainly determined by the
  - A. efficiency of energy transfer between levels
  - B. Biomass of the producers

- C. net productivity of the ecosystem
- D. species diversity in the ecosystem

1

3. The figure below shows the rate of photosynthesis against light intensity.

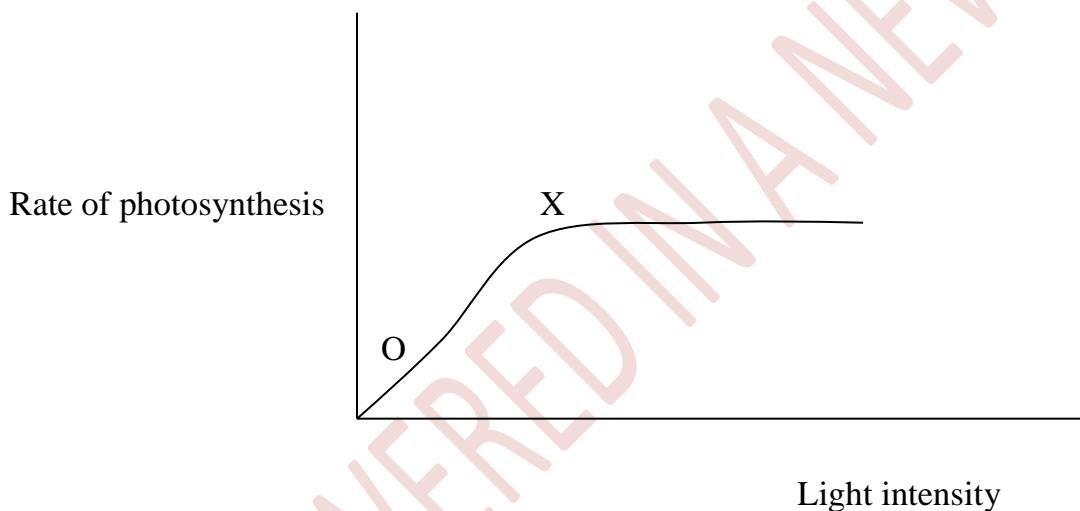


Which one of the following statements is the cause of flattening of the curve?

- A. Photosynthetic pigments are saturated with light
  - B. Too much carbondioxide is available.
  - C. The plant has attained its maximum rate of photosynthesis
  - D. There is a factor other than light which is limiting the rate of photosynthesis.
4. The biomass of consumers is always less than that of producers because?
- A. producers have to support consumers
  - B. consumers have a low productive rate
  - C. energy is lost through body processes of consumers
  - D. consumers are small in size
5. Which one of the following does not occur during photorespiration?
- A. oxygen is used up
  - B. wasteful loss of carbon as carbondioxide
  - C. carbondioxide is used up
  - D. wasteful loss of energy
6. In sponges, the different types of cells are independent of each other in function because

- A. the different cells show division of labour  
 B. collar cells maintain the flow of water  
 C. sponges are made up of collar of flagellates  
 D. the cells are not coordinated.
7. Which one of the following is not used to describe a population of organisms?  
 A. Density      B. Biodiversity      C. size      D. distribution
- 2
8. The function of the nucleoli in a cell is to form  
 A. the nuclear membrane  
 B. ribosomes  
 C. the spindle during nuclear division  
 D. centrioles
9. The figure below represents the structure of
- 
- A. Amino acid      B. glucose      C. ribose      D. fatty acid
10. Which of the following is the correct sequence representing the action of nitrifying bacteria?  
 A. nitrites → nitrates → ammonium salts  
 B. Ammonium salts → nitrites → nitrates  
 C. nitrites → ammonium salts → nitrates  
 D. ammonium salts → nitrates → nitrites
11. Some sporophytes contain a mixture of haploid, diploid and triploid cells at some point. This condition only occurs in  
 A. flowering plants      B. mosses      C. ferns      D. conifers

12. Which one of the following equations shows the correct relationship between gross primary productivity (GPP) and net primary productivity (NPP) in plants?
- A.  $GPP = NPP - \text{photosynthesis}$
  - B.  $NPP = GPP - \text{photosynthesis}$
  - C.  $GPP = NPP - \text{plant respiration}$
  - D.  $NPP = GPP - \text{plant respiration}$
13. Which one of the following occurs during the light dependent stage of photosynthesis?
- A. formation of ADP
  - B. Production of  $\text{NADPH}_2$
  - C. Formation of PGAL
  - D. Production of  $\text{NADP}^+$
14. The graph below shows the rate of photosynthesis at different light intensities



The factor limiting the rate of photosynthesis between point O and X is

- A. Light intensity
- B. carbondioxide
- C. temperature
- D. oxygen

15.  $\text{C}_3$  plants are less efficient than  $\text{C}_4$  plants in fixing carbondioxide at low carbondioxide and high oxygen partial pressures because.
- A.  $\text{C}_3$  plants use more energy
  - B. In  $\text{C}_3$  plants, energy is lost
  - C. RUBP carboxylase is inactivated by high oxygen partial pressures
  - D. PEP carboxylase has a high affinity for oxygen
16. Which one of the following features characterizes the Omnivore gut?
- A. large divided stomach
  - B. Poorly developed appendix and caecum
  - C. long pouched colon
  - D. short ileum and colon

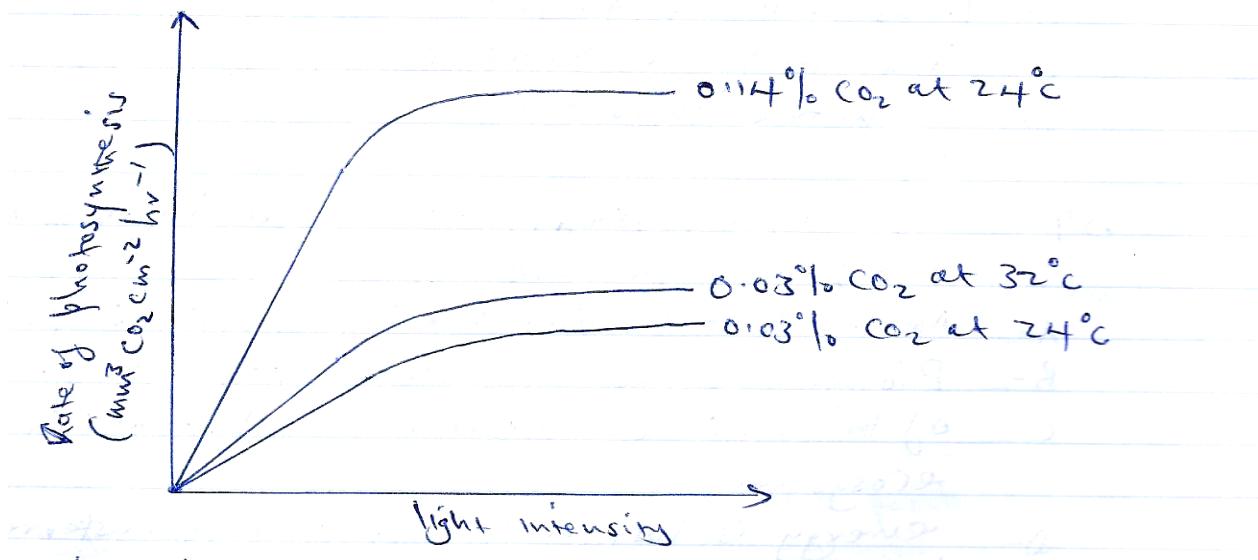
17. Which one of the following factors reduces inter specific competition in a community?
- A. resource portioning
  - B. high intraspecific competition
  - C. large number of species
  - D. similar predator-prey strategies among the species
18. When a lipid is combined with a phosphate group, it becomes
- A. saturated
  - B. a complex molecule
  - C. water soluble
  - D. amphoteric
19. Photorespiration does not occur in C<sub>4</sub> plants because they?
- A. use phosphoenol pyruvic acid for fixing carbondioxide
  - B. mainly grow at high altitudes
  - C. are more abundant in cold regions
  - D. have succulent leaves which lower the internal temperature
20. Which one of the following phyla has a dominant gametophyte?
- A. chlorophyta
  - B. spermatophyte
  - C. pteridophyta
  - D. bryophyte
21. The figure below shows a pyramid of numbers of a food chain.
- 
- The most likely mode of nutritional relationship between producers and primary consumers is?
- A. Mutualistic
  - B. symbiotic
  - C. parasitic
  - D. autotrophic
22. In Bryophytes, gametes are produced by
- A. gametophytes through mitosis
  - B. sporophytes through meiosis
  - C. sporophytes through mitosis
  - D. gametophytes through meiosis
23. Photosynthetic bacteria differ from green plants in that
- A. they lack chlorophyll

- B. their source of energy is through oxidation of hydrogen sulphide  
C. their source of energy is through oxidation of iron salts  
D. their sources of hydrogen is hydrogen sulphide
24. Fats yield more energy per unit mass molecule than carbohydrates because fats possess.  
A. more carbon atoms  
B. more hydrogen atoms  
C. fewer carbon atoms  
D. fewer oxygen atoms
25. Which one of the following classes does a centipede belong to?  
A. Arachnida      B. diplopoda      C. chilopoda      D. crustacean
26. Which one of the following pairs of reactants is not required for the light-independent reactions of photosynthesis?  
A. NADPH and ATP  
B. ATP and carotenoids  
C. RUBP and free oxygen  
D. carbondioxide and enzymes
27. Which one of the following enzymes is not secreted by the lining of the ileum?  
A. lipase      B. sucrase      C. enterokinase      D. lactase
28. An adaptation by plants to obtain nitrogen include all the following except?  
A. Mycorrhiza on plant roots  
B. bacteria in root nodules  
C. possession of aerial roots  
D. being insectivorous
29. Which one of the following is a difference between fungi and plants?  
A. fungi are heterotrophic while plants are autotrophic  
B. plant cells contain plastids while those of fungi do not  
C. fungi produce a sexually while plants produce sexually  
D. fungi cells are not divided unlike those of plants
30. Net primary productivity in  $C_4$  plants is higher than that in  $C_3$  plants because?  
A.  $C_4$  plants have a higher turn – over rate  
B. energy accumulates at a higher rate in  $C_4$  plants  
C. phosphorylation occurs in  $C_3$  plants  
D. the rate of respiration is higher in  $C_3$  plants.

31. Which one of the following ecological pyramids may be used to determine productivity in an ecosystem?
- A. pyramid of energy
  - B. pyramid of biomass
  - C. pyramid of numbers
  - D. pyramid of productivity
32. The first carbohydrate made in photosynthesis is?
- A. ribose sugar
  - B. ribulose
  - C. phosphoglyceric acid
  - D. phosphoglyceraldehyde
33. Which one of the following constitutes the most energy transfer?
- A. praying mantis feeding on flies
  - B. aphids feeding on plant sap
  - C. cat feeding on small mammals
  - D. beetle larvae feeding on dung
34. A probable function on the endoplasmic reticulum is
- A. facilitate intracellular transport of materials
  - B. facilitate intracellular transport of materials
  - C. act as a template in protein synthesis
  - D. enable substances diffuse against concentration gradient.

6

35. Which one of the following is illustrated in the figure below;



- A. With increase in light intensity, the rate of the photosynthesis increases until temperature becomes a limiting factor.
- B. Rate of photosynthesis increases with an increase in the carbon dioxide concentration.
- C. With increase in light intensity, the rate of photosynthesis increases indefinitely.
- D. Rate of photosynthesis increases with an increase in light intensity until carbon dioxide concentration becomes a limiting factor.
36. Which one of the following organisms does not belong to the same phylum as the rest?
- A. tape worm      B. liver fluke      C. planaria      D. leech
37. Which one of the following has the greatest biomass in an ecosystem?
- A. tertiary consumers      B. primary producers  
C. secondary consumers      D. primary consumers
38. Sucrose is a non-reducing sugar because it
- A. it is not fully digested  
B. lacks reducing groups  
C. is a disaccharide molecule  
D. is a ketose sugar
39. In any ecosystem, a continued input of energy is required because?
- A. matter is continually used in metabolic process  
B. biological succession occurs very slowly  
C. of the continued increase in population in the ecosystem  
D. energy is lost each time it is transferred between organisms
40. Which one of the following explains why digestion of fats does not occur in the human stomach?
- A. absence of fat digesting enzymes  
B. low pH for the fat digesting enzymes  
C. high pH for the fat digesting enzymes  
D. absence of bile salts that emulsify the fats.

7

### SECTION B

41. (a) Define the following terms relating to photosynthesis? (2marks)

(i) absorption spectrum

(ii) Action spectrum

(2marks)

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(b) (i) By means of a scheme, show how products of light phase are produced during non-cyclic phosphorylation. (4marks)

(ii) Name two important products produced during this stage. (2marks)

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42. (a) In the space provided below draw the structure of the two monomers of glucose molecules.  
(i) Alpha glucose (3marks)

(ii)Beta glucose

(3marks)

(b)State any four functions of monosaccharides.

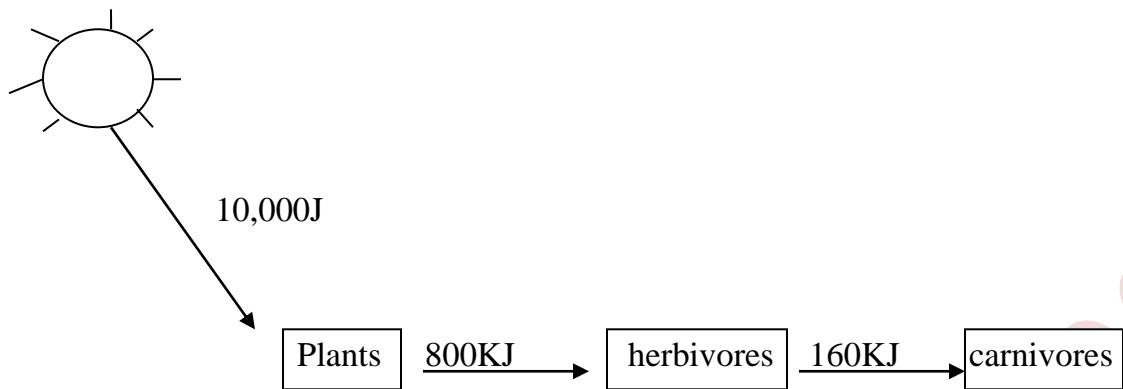
(2marks)

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(c )Give any four functions of water as an important component of life.(2marks)

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43.



(a) Assuming 10% of the energy received by the herbivores is lost, calculate the energy retained.

(3marks)

(b) Explain why

(i) Energy transfers from herbivores to carnivores is more efficient than that from producers to herbivores.

(3marks)

(ii) The efficiency of energy transfer from herbivores to carnivores is less than 100%. (2marks)

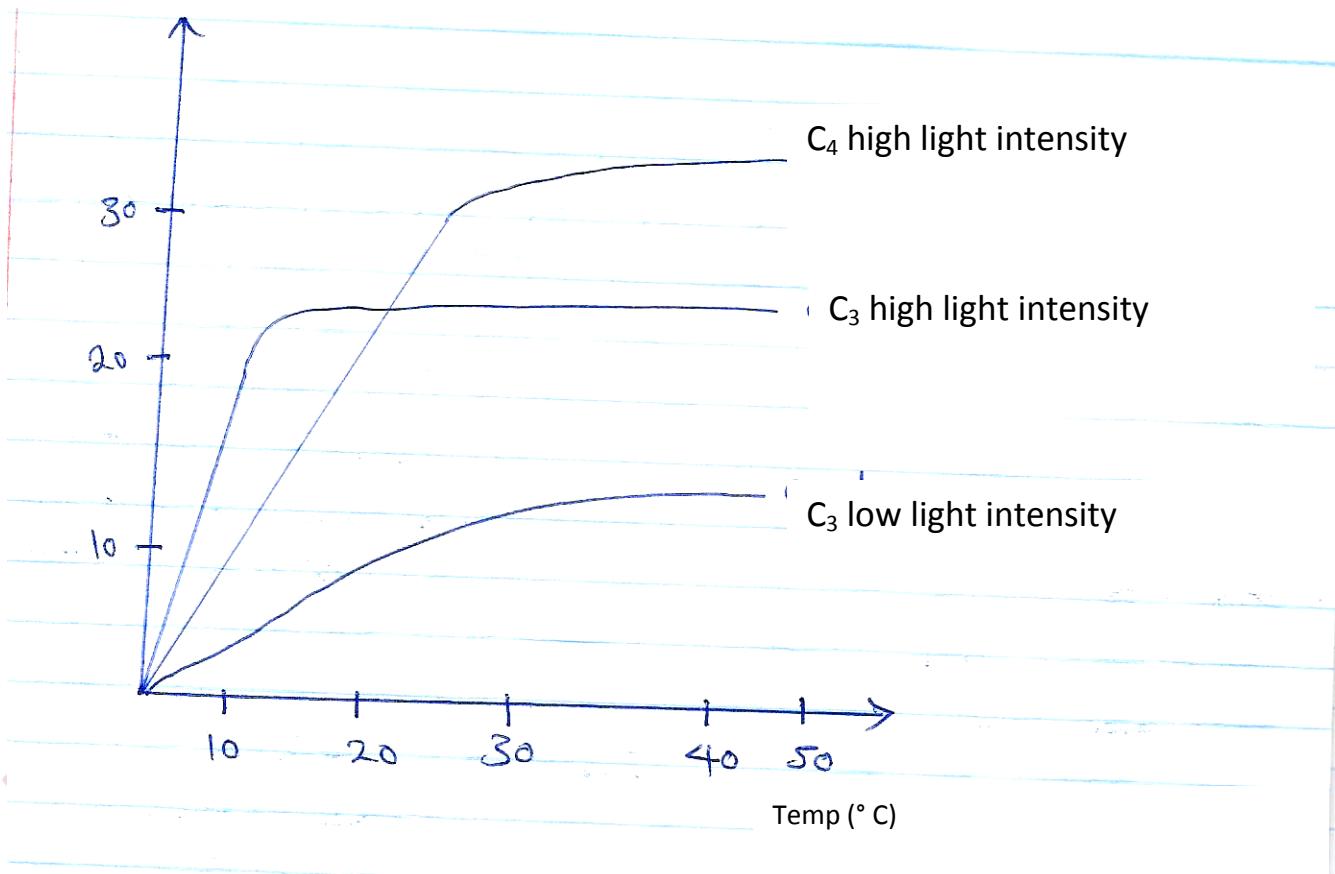
(c) State the factors which limit the numbers of trophic levels in a food chain.

44. (a)(i) State the law of limiting factor as applied in photosynthesis. (2marks)

(ii) Name any three factors that affect the rate of photosynthesis other than temperature and light.

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(b) The figure below shows the variation of the rate of photosynthesis with temperature in C<sub>3</sub> and C<sub>4</sub> plants at different light intensities.



- (i) Using the figure, state how different temperatures affect the rate of photosynthesis in C<sub>3</sub> and C<sub>4</sub> plants at high light intensity. (3marks)
- .....

- (ii) Explain the differences in the effect of temperature on rate of photosynthesis in C<sub>3</sub> and C<sub>4</sub> plants at high light intensities stated above. (2marks)

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45. (a) What do you understand by Biological pest control? (2marks)

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- (b) What considerations must be before application of a biological pest control method? (2marks)

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- (c ) (i) State two ways in which chemical pest control methods can upset ecosystem.(2marks)

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(ii) Suggest two reasons why pests may eventually flourish after a period of pesticide application.  
(2marks)

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(d) Suggest three characteristics of a good pesticide.  
(3marks)

12

TO BE ANSWERED IN A NEW BOOK

Name..... Comb.....

**Chemistry  
Paper 2  
Senior five**

# **HOLIDAY PACKAGE**

## **SENIOR FIVE**

Chemistry

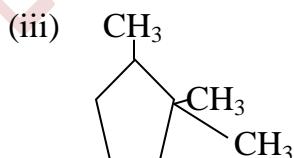
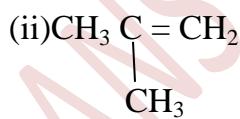
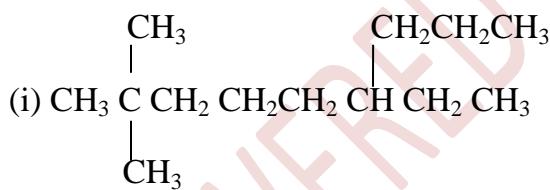
PAPER 2

TIME: 2HOURS

### **INSTRUCTIONS**

- Answer all questions in this question paper.
- Answers must be written on the answer sheets provided.

1. (a) Give the IUPAC names of the following structural formulae. (3marks)



- (b) On complete combustion of 8.000g of hydrocarbon Y, 25.755g of carbondioxide was formed. The vapour density of Y is 41 and its functional group is the same as that of ethane.
- (i) What is a hydrocarbon? (1mark)

- (ii) Calculate the empirical formula of Y. (3marks)
- (iii) Determine the molecular formula of Y. (1mark)
- (iv) Write the structural formula and name of Y. (2marks)
2. (a) Explain what is meant by the term first ionization energy? (3marks)
- (b) State and explain the four factors that affect the first ionization energy. (4marks)
- (c) The first ionization energies of the elements of period 2 are shown in the table below.

Element	Li	Be	B	C	N	O	F	Ne
Atomic number	3	4	5	6	7	8	9	10
First ionization energy ( $\text{Kjmol}^{-1}$ )	519	900	799	1090	1400	1310	1680	2080

- (i) Plot a graph of first ionization energy against atomic number. (4marks)
- (ii) Explain the shape of the graph. (6marks)
- (iii) Explain the trend in the first ionization down group/elements. (3marks)
3. (a) Define the following terms and in each case give an example
- (i) Nucleophile (2marks)
- (ii) Functional group (2marks)
- (iii) Positive inductive effect (2marks)
- (b) (i) What is meant by a carbocation? (1mark)
- (ii) Explain the trend in the order of stability of different types of carbocations. (4marks)
- (c) When 0.0291g of compound T was burnt, it burnt with a non-sooty flame, producing 0.0581g of carbon dioxide and 0.023g of water. When 0.140g of T was vapourised at 20°C and 740mmHg, it occupied a volume of 39.5cm<sup>3</sup>.
- (i) Why did it burn with a non-sooty flame? (1mark)
- (ii) Calculate the empirical formula of T. (3marks)
- (iii) Determine the molecular formula of T. (3marks)

- (iv) Given that T and ethanoic acid have a common functional group, write the structural formula of T and hence identify the functional group in it. (2marks)
3. (a) The first eight ionisation energies of an element B are shown below;
- Ionization energies/KJmol<sup>-1</sup>
- | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | 8 <sup>th</sup> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 786             | 1580            | 3230            | 4360            | 1600            | 20000           | 23600           | 29100           |
- (i) Explain what is meant by the term first ionization energy.
- (ii) State the factors that determine the value of the first ionization energy.
- (iii) To which group in the periodic table does element B belong? Give a reason for your answer.
- (b) (i) Explain what is meant by the term electronegativity.
- (ii) State the factors that determine the value of electronegativity of an element.
- (c) Explain how the following factors affect the value of electronegativity of an element.
- (i) Atomic radius
- (ii) Nuclear charge
- (iii) The screening effect of the inner electrons.
- (d) Explain the difference between electronegativity and electron affinity.

Name.....Comb.....

Biology  
Paper 2  
Senior five

## HOLIDAY PACKAGE SENIOR FIVE

BIOLOGY

THEORY

PAPER 2

Time: 2hours 30minutes

### INSTRUCTIONS

- *This paper consists of section A and B.*
- *Answer question one in section A plus three others from section B.*
- *Candidates are advised to read the questions carefully, organize their answers and present them precisely ad logically, illustrating with well labeled diagrams wherever necessary.*

## SECTION A : (40 MARKS)

1. Two groups of maize seeds were germinated and grown in different culture solutions. Group A were provided with a complete nutrient solution while Group B were provided with a solution lacking magnesium. An extract of photosynthetic pigments was made from leaves of each group of seedlings at the end of three weeks. Figure 1 is the absorption spectra obtained from the extracts.

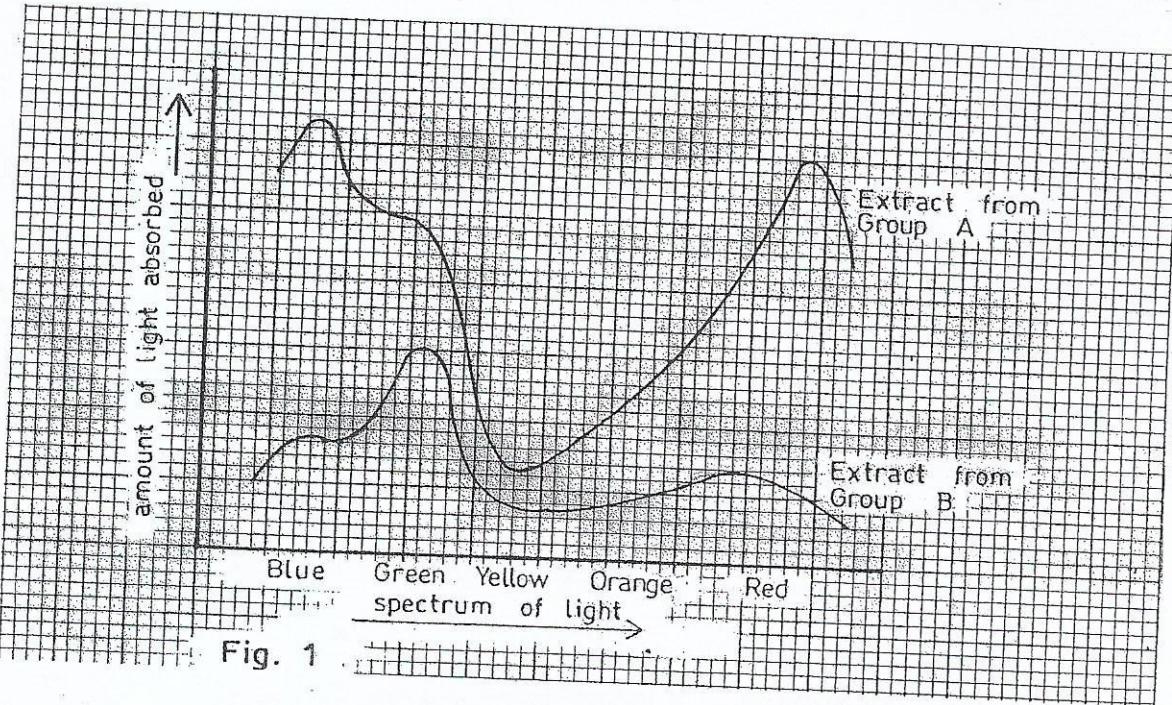


Fig. 1

In another experiment, six identical shoots of pond weed were placed in separate test tubes of pond water in which a dilute solution of sodium hydrogen carbonate had been added. Each test tube was then exposed to light which had passed through a different coloured filter. The light in all cases was from a 40 watt bulb, placed 40 cm from the test tube. The time taken for 20 bubbles to leave the cut end of each shoot was recorded three times and the average results are recorded in Table 1.

**Table 1**

Colour of filter	Average time taken to release 20 bubbles in seconds	Number of bubbles released per minute.
Violet	58	
Blue	40	
Blue-green	62	
Green	132	
Yellow	96	
Orange-red	70	

Use the information to answer the questions that follow:

- (a) Compare the light absorption by extract from Group A and that from Group B across the light spectrum. (8 marks)
- (b) Explain the light absorption across the light spectrum for each extract. (9 marks)
- (c) How does a coloured filter affect light passing through it? (1 mark)
- (d)
  - (i) Copy and complete Table 1, by calculating the number of bubbles released by each shoot per minute. (3 marks)
  - (ii) Plot a graph to show the relationship between the colour of the filter and the rate at which bubbles are released. (6 marks)
- (e)
  - (i) Compare your graph with that in figure 1, and state the relationship between the two; (2 marks)
  - (ii) What conclusion can you draw from the relationship? (2 marks)
- (f) State what would be observed if the distance between the bulb and the test tubes was gradually reduced. Explain your answer. (4 marks)
- (g) Explain why
  - (i) the type of bulb and the distance of the bulb from the test tubes were kept constant. (1 mark)
  - (ii) a dilute solution of sodium hydrogen carbonate was added to pond water in the test tubes. (2 marks)
  - (iii) there were three measurements made on each shoot rather than a single one. (1 mark)
  - (iv) measuring the rate of photosynthesis by counting bubbles is not an accurate method. (1 mark)

## **SECTION B (60MARKS)**

**Answer any three questions**

2. (a) Giving an example in each case, explain what is meant by each of the following;
- (i) Saprophytes. (2½marks)
- (ii) Chemo autotrophs (2½marks)
- (b) Compare saprophytes and parasites. (10marks)
- (c) Explain importances of saprophytism to human life. (5marks)
3. (a) What is meant by a food chain? (2marks)
- (b) Explain how energy flows through an ecosystem. (8marks)
- (c) How does temperature influence the distribution of organisms. (10marks)
4. (a) Describe the biological function of amino acids. (5marks)
- (b) Describe how amino acids form apolypeptide. (9marks)
- (c) How do inhibitors change the rate of enzyme controlled reactions. (6marks)
5. Outline the processes involved in synthesis of carbohydrates in plants. (20marks)
6. (a) What is meant by alternation in generation? (4marks)
- (b) Give a detailed account of alternation of generation in a named bryophyte or pteridophyte. (16marks)

Name.....Comb.....

**IRE  
PAPER 2  
Senior five**

## **HOLIDAY PACKAGE SENIOR FIVE**

**IRE**

**PAPER 2**

**Time: 2hours 30minutes**

### **INSTRUCTIONS**

- *Attempt four numbers only.*

1. (a) Define the term Hadith?  
(b) Assess the significance of Hadith to the Muslims community?
2. The collection and compilation of Hadith was a gradual process. Discuss.
3. (a) Account for the little recording of Hadith during the prophet's time.  
(b) Discuss the methods used in diffusion of Hadith during the prophet's time.
4. (a) Discuss the characteristics of the early Hadith compilers.  
(b) Explain why unlike the current Hadith books, the early Hadith books are almost out of circulation.
5. "Both the holy Quran and Prophet's traditions are synonymous", Discuss.
6. (a) Account for the factors that led to the collection, compilation and preservation of Hadith.  
(b) The collection and compilation of prophet's tradition was a tedious process. Discuss.
7. Analyze the contribution of the following to the revival and purity of Hadith literature.
  - (a) Prophet Muhammad and his companion.  
(b) Later Hadith compilers.
8. Describe the biography and contribution of Imam Malik bin Anas to the development of science of Hadith.

**END**

Name.....Comb.....

**ENTREPRENEURSHIP**  
**Paper 2**  
**Senior five**

## **HOLIDAY PACKAGE SENIOR FIVE**

BOOK

**S.5 ENTREPRENEURSHIP EDUCATION P230/2**  
**PAPER 2**  
**Duration: 1 Hour**

**INSTRUCTIONS:**

Answer **all** questions.

1. You are operating a furniture workshop in your home town;
  - (a) Outline the requirements of business.
  - (b) Design a signpost for your business.
  - (c) Prepare a budget for your business.
  - (d) Design a business card for your business.
  
2. You own a washing bay in your home locality;
  - (a) Mention different books or records you will keep.
  - (b) If you are to acquire a loan for business; write a loan application to a manager of Centenary bank for a loan to finance your business.
  - (c) Mention the benefits you will enjoy as a result of proper book-keeping.
  - (d) Prepare an advert for your business.

**END**