241/4
HISTORY OF
SOUTH AFRICA
Paper 4
20 July 2022
2 hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

HISTORY OF SOUTH AFRICA

(c. 1000 to Independence)

Paper 4

2 hours

INSTRUCTIONS TO CANDIDATES

Attempt only **four** *questions.*

All questions carry equal marks.

Marks will be awarded for relevant and well – drawn maps, illustrations and examples.

Any extra question shall **not** *be assessed.*

1. (a) Why did the British establish themselves at the Cape? *(13 marks)*

   (b) Explain the reforms introduced by the British at the Cape. *(12 marks)*

2. (a) Explain the factors that led to the Afrikaaner exodus from the Cape to the interior of South Africa. *(13 marks)*

   (b) What were the consequences of their settlement? *(12 marks)*

3. (a) Explain the importance of King Moshesh in the history of the Basuto. *(13 marks)*

   (b) How was the Basuto nation organized? *(12 marks)*

4. (a) Describe the contribution of Christian missionaries to the development of South Africa during the 19th century. *(13 marks)*

   (b) What obstacles did the missionaries face in South Africa? *(12 marks)*

5. (a) Describe the economic changes that took place in South Africa between 1867 and 1900. *(13 marks)*

   (b) How did the changes affect the African peoples? *(12 marks)*

6. (a) Explain the causes of the Gentleman's war of 1899 - 1902? *(13 marks)*

   (b) How did this war affect the people of South Africa? *(12 marks)*

7. (a) Explain the causes of the Orlando West Junior Secondary School students riot of 1976. *(13 marks)*

   (b) What were the effects of this riot? *(12 marks)*

8. (a) Describe the contribution of Sam Nujoma in Namibia's struggle for independence. *(13 marks)*

   (b) What problems were faced by early nationalists? *(12 marks)*

END

241/1
HISTORY OF EAST AFRICA
Paper 1
20 July 2022
2 hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

HISTORY OF EAST AFRICA

(c. 1000 to Independence)

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES

Attempt only **four** *questions.*

All questions carry equal marks.

Marks will be awarded for relevant and well – drawn maps, illustrations and examples.

Any extra question shall **not** *be assessed.*

(a) Explain the factors that led to the development of the coastal states. *(13 marks)*

(b) What led to the collapse of the coastal states by the 16th century? *(12 marks)*

2. (a) Why did the Portuguese show growing interest in the East African coast? *(13 marks)*

(b) Explain the obstacles faced by the Portuguese during their stay at the coast. *(12 marks)*

3. (a) Why did the River Lake Nilotes migrate from their cradle land to East Africa? *(13 marks)*

(b) What were the effects of their migration on the people of East Africa? *(12 marks)*

4. (a) How did Ruhinda establish Karagwe Kingdom? *(10 marks)*

(b) Describe the organization of Karagwe Kingdom during the 19th century. *(15 marks)*

5. (a) Explain the factors that led to the abolition of slave trade. *(13 marks)*

(b) What were the effects of the abolition of slave trade? *(12 marks)*

6. (a) Why did Sir Harry Johnston sign a treaty with *the Kabaka of* Buganda? *(13 marks)*

(b) What were the terms of this treaty? *(12 marks)*

7. (a) Explain why the British used indirect rule to administer Uganda. *(13 marks)*

(b) How was indirect rule applied by the British before 1914? *(12 marks)*

8. (a) Why were there conflicts in Buganda between 1885 – 1900? *(13 marks)*

(b) What were the results of these conflicts? *(13 marks)*

9. (a) Explain why the Mombasa-Kisumu railway line was built in 1896? *(13 marks)*

(b) What hardships were faced by the builders? *(12 marks)*

10. (a) Explain why White settlers got interested in Kenya in the late 19th century? *(13 marks)*

(b) How did they contribute to the development of Kenya? *(12 marks)*

END

845/1
ENTREPRENEURSHIP EDUCATION
Paper 1
18 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

ENTREPRENEURSHIP EDUCATION

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt only **four** *questions.*

All questions carry equal marks

Begin each number on a fresh page.

Credit will be given to the use of relevant illustrations and diagrams.

Any extra question(s) shall ***not*** *be assessed.*

1. You have decided to start a furniture-making business in your company.

   (a) Write a letter to the Executive Director, National Environmental Management Authority (NEMA) requesting for their permission to launch the business. *(06 marks)*

   (b) State the requirements you must fulfil before obtaining a license for the business. *(06 marks)*

   (c) Design an invoice that you will use in the business. *(06 marks)*

   (d) How will your business benefit the community? *(07 marks)*

2. The following balances were extracted from the books of Tukole Enterprises as at 31/12/2010.

Particulars	**Shs**
Stock 1/1/2010	1,000,000
Premises	4,000,000
Wages and Salaries	550,000
Motor van	3,000,000
Telephone	200,000
Sales	7,400,000
Purchases	2,500,000
Returns inwards	300,000
Returns outwards	400,000
Debtors	800,000
Creditors	600,000
Bank loan	1,500,000
Cash at bank	1,950,000
Cash at hand	1,800,000
Heating and lighting	300,000
Motor repairs	600,000
Commission received	100,000
Drawings	750,000
Interest paid	250,000
Capital	8,000,000
Stock 31/12/2010	660,000

Required to:

(a) Extract Tukole Enterprises'.
   (i) Trial balance. *(05 marks)*

(ii) Trading, profit and loss account. *(12 marks)*

(b) Calculate and interpret the:

(i) stock turnover ratio. *(04 marks)*

(ii) average payment period for debts *(take 365 days for a year).* *(04 marks)*

3. You have acquired a 4-months bank loan of Shs. 100,000,000 to operate a maize processing plant. The loan attracts a 10% per month interest.

(a) Prepare a loan-repayment schedule using the reducing balance method. *(07 marks)*

(b) Explain the likely effects of the business on the environment. *(08 marks)*

(c) What factors would you consider when selecting a supplier of raw materials for your business? *(06 marks)*

(d) Outline any **four** pre-operating expenses for your business. *(04 marks)*

4. (a) Basiima Ogenze Enterprises is a VAT-registered business. During the year 2019, it had the following VAT-exclusive transactions.

- Produced clothes worth Shs 10,000,000
- Sold the same goods to Nassolo, a wholesaler for Shs 12,000,000
- Nassolo, the wholesaler, sold the same goods to Kikankane, a reailer for Shs 16,000,000.
- Kikankane, a retailer sold the same goods to Matama, the final consumer at Shs. 20,000,000.

Required, using 18% VAT rate, to calculate the:

(i) tax payable at each stage. *(12 marks)*

(ii) gross sales value to the final consumer VAT-inclusive. *(04 marks)*

(iii) VAT paid to Uganda Revenue Authority. *(03 marks)*

(b) Kitimbo is one of the employees of Basiima Ogenze enterprises. He earns gross salary of Shs. 7,200,000 per year. The employer uses a monthly PAYE tax rate below to calculate PAYE deductions.

	Chargeable income	Tax rate
1	Not exceeding Shs. 235,000	*nil*
2	exceeding Shs. 235,000 but not exceeding Shs. 335,000	10% of the amount by which chargeable income exceeds Shs. 235,000
3	exceeding Shs. 335,000 but not exceeding Shs. 410,000	Shs. 10,000 plus 20% of the amount by which chargeable income exceeds Shs. 335,000
4	exceeding Shs. 410,000	Shs. 25,000 plus 30% of the amount by which chargeable income exceeds Shs. 410,000

Required:

Calculate the annual amount of PAYE deductions for Kitimbo. *(06 marks)*

5. You are operating a brick-making project in your hometown.

(a) Draft a signpost to promote your business. *(06 marks)*

(b) Explain the factors you will consider when determining prices for your products. *(06 marks)*

(c) Place an order for machines and equipment for your business. *(06 marks)*

(d) Draft a job advert to be placed in the newspaper for the post of cashier in your business. *(07 marks)*

END

845/2
ENTREPRENEURSHIP
EDUCATION
PAPER 2
July/August 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

ENTREPRENEURSHIP EDUCATION

Paper 2

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

This paper consists of **two** Sections **A** *and* **B**.

Section **A** *is compulsory and answers to this* Section *must be precise and concise.*

Attempt only **three** *questions in* Section **B**.

All questions in Section **B** *carry equal marks*

Begin each number on a fresh page.

Credit will be given to the use of relevant illustrations and diagrams.

Any extra question(s) shall **not** *be assessed.*

Names:.....**Index No:** .....

School Exam Number: .....**Signature:**.....

553/1
BIOLOGY
(Theory)
Paper 1
1 August 2022
2 ½ hours

*Candidates should **NOT** write their Centre Name or Centre Number anywhere on this booklet*

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

BIOLOGY

THEORY

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

This paper consists of Sections **A, B** *and* **C**.

Answer **all** *questions in* Sections **A** *and* **B**, *plus* **two** *questions from* Section **C**.

Write the answers to Section **A** *in the boxes provided, answers to* Section **B** *in the spaces provided, and answers to* Section **C** *in the answer pages provided at the back of the question paper.*

FOR EXAMINERS' USE ONLY		
Section/Question		**Marks**
A		
B		
C	**Q.**	
	Q.	
TOTAL		

SECTION A (30 MARKS)

Answer all questions in this Section by putting in the answer box provided the letter corresponding to the correct answer.

1. Which one of the following is an adaptation of fruits for self-dispersal? Possession of

   A. parachute.
   B. stony / woody endocarp.
   C. sutures.
   D. sticky hairs.

2. Holozoic nutrition is a type of

   A. autotrophic nutrition.
   B. photoautotrophic nutrition.
   C. saprophytic nutrition.
   D. heterotrophic nutrition.

3. In a green plant, when the rates of respiration and photosynthesis are equal the plant will be

   A. taking in carbon dioxide.
   B. giving out oxygen.
   C. taking in carbon dioxide and giving out oxygen.
   D. giving out water vapour.

4. In a flowering plant, sugars are transported

   A. upwards in the xylem.
   B. upwards in the phloem.
   C. upwards or downwards in the phloem.
   D. upwards or downwards in the xylem.

5. The figure below shows the diagram of the apparatus that can be used to collect the gas evolved in photosynthesis.

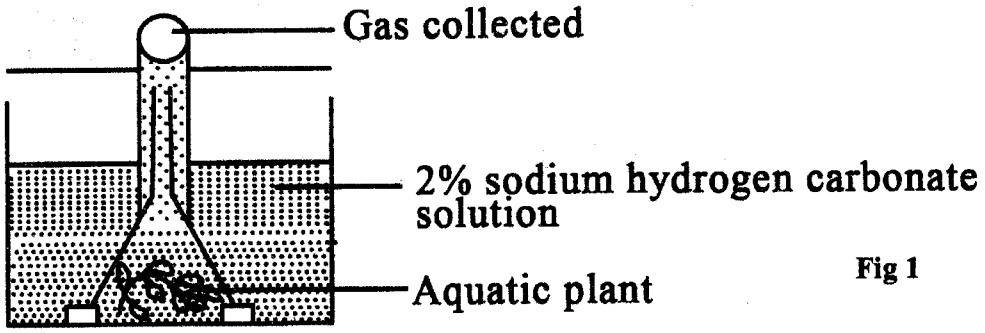


Fig 1

Which of the following would produce a large volume of gas in a given time?

   A. Increasing the temperature
   B. Increasing the concentration of sodium hydrogen carbonate
   C. Increasing both light intensity and concentration of sodium hydrogen carbonate
   D. Increasing light intensity

6. What name is given to the whole range of chemical changes which are needed just to keep an organism alive?

A. Basal metabolism.
B. Catabolism.
C. Anabolism.
D. Metabolism.

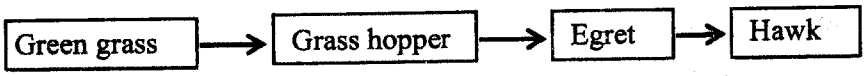
7. Iron is an important component of a balanced diet because it is needed **mainly** by

A. Nerves.
B. Bones.
C. Brain.
D. Blood.

8. When the ventricles contract, blood is forced into:

A. Aorta
B. Vena cava.
C. Pulmonary artery and aorta.
D. Pulmonary artery.

9. Below is an example of a food chain.



Which of the following would occur if a very large number of lizards were introduced in the ecosystem with this food chain?

A. All the grass would be destroyed
B. The grasshopper population would rise up
C. The Hawk population would decrease
D. Egret population would increase

10. Which one of the following is an advantage of vegetative propagation?

A. Competition between parent and offspring is minimal
B. Colonisation of new habitats is fast
C. Maintenance of parental characteristics in offspring
D. Variation among offspring occurs

11. The following are human body parts.

(i) Lungs
(ii) Skin
(iii) Kidneys
(iv) Colon

Which of the parts are **not** for excretion?

A. (i) and (ii)
B. (i) and (iii)
C. (ii) and (iii)
D. (ii) and (iv)

Turn Over

12. The process of cell division by meiosis takes place only in

A. Skin cells.
B. Red bone marrow.
C. Reproductive organs.
D. Lymphocytes.

13. In a food chain, the amount of energy passed from one trophic level to the next

A. increases.
B. decreases.
C. remains constant.
D. sometimes increases, sometimes decreases.

14. Which of the following gases causes acid rain?

A. Ozone.
B. Carbon monoxide.
C. Carbon dioxide.
D. Sulphur dioxide.

15. If a person with a wound contaminated by soil is given an anti-tetanus injection which contains anti-tetanus antibodies, this is an example of

A. passive immunity.
B. active immunity.
C. artificial immunity.
D. drug therapy.

16. Which of the following are the reproductive organs of a flowering plant?

A. Petals and sepals.
B. Style and stigma.
C. Pollen nucleus and egg cell.
D. Stamens and ovary.

17. The force responsible for water travelling up a tree is generated mainly by

A. evaporation from the leaves.
B. root pressure.
C. active transport.
D. osmosis.

18. In order to germinate, most seeds need

A. water, carbon dioxide, sunlight and suitable temperature.
B. water, oxygen, nitrates, and suitable temperature.
C. water, oxygen and suitable temperature.
D. water, oxygen and light.

19. In the small intestine, the villi

A. speed up digestion.
B. propel food through the intestine.
C. increase the absorptive surface.
D. secrete digestive enzymes.

20. Where in the lungs does gaseous exchange take place?

A. Alveoli.
B. Bronchioles.
C. Bronchi.
D. Trachea.

21. In a flowering plant, the spongy mesophyll is to be found in the

A. roots.
B. stem.
C. leaf.
D. fruit.

22. Why is humus (organic matter) an important part of soil?

A. Improves water infiltration.
B. Breaks down organic pollutants.
C. Converts nitrogen in the air into nitrates used by plants.
D. It is rich in nutrients, which is important for fertility.

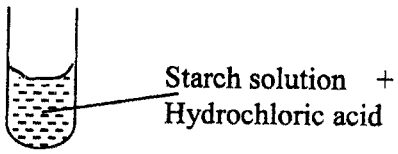
23. The following are some responses of the body to stimuli.

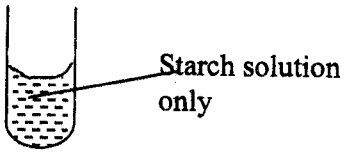
(i) Jumping in response to car tyre burst.
(ii) Balancing on a bicycle.
(iii) Walking without thinking about it.
(iv) Blinking when a particle of sand blows into the eye.

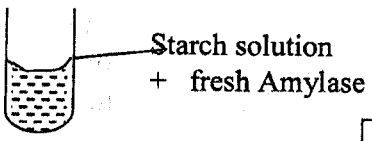
Which of the responses can be categorised as reflex action?

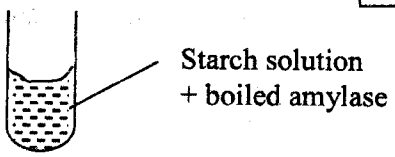
A. (i) and (iv)
B. (i) and (iii)
C. (ii) and (iv)
D. (ii) and (iii)

24. Different test tubes containing starch solution were treated in different ways as shown below. In which setup, will the starch solution turn from milky to colourless

A. 

B. 

C. 

D. 

25. Fungi have the potential to produce large numbers of offspring by

A. producing many seeds.
B. sexual reproduction.
C. producing fruits.
D. producing many spores.

26. The effect of insulin is to

A. increase the release of glucose from the liver.
B. increase the amount of glucose stored in the liver.
C. increase the amount of glucose taken up by the tissues.
D. reduce the amount of glucose stored in the tissues.

27. In the nitrogen cycle, the bacteria which can convert nitrogen in the air into nitrates are called

A. Nitrate bacteria.
B. Denitrifying bacteria.
C. Nitrifying bacteria.
D. Nitrogen-fixing bacteria.

28. Which of these is **not** a feature of natural selection?

A. Competition for resources.
B. Production of many offspring.
C. Selection by humans.
D. Variation within the population.

29. Which of the following lists contains **only** arthropods?

A. Annelids, insects, millipedes.
B. Arachnids, crustaceans, millipedes.
C. Crustaceans, insects, molluscs.
D. Insects, millipedes, nematodes.

30. In an experiment a stem of young herbaceous plant was cut into four equal strip pieces and each placed in a solution as follows;

1st into 5% salt solution
2nd into 2.5% salt solution
3rd into 1% salt solution
4th into 0.5% salt solution

All the pieces were left in the respective solutions for 1 hour. Which of the pieces is most likely to be short and flaccid?

A. 1st piece
B. 2nd piece
C. 3rd piece
D. 4th piece

SECTION B (40 MARKS)

Answer **all** *questions in this* Section.
Answers must be written in the spaces provided

31. An experiment was set up to collect the gas produced when a green plant (*elodea*) in water with sodium bicarbonate was illuminated by light from a bulb in a dark room.

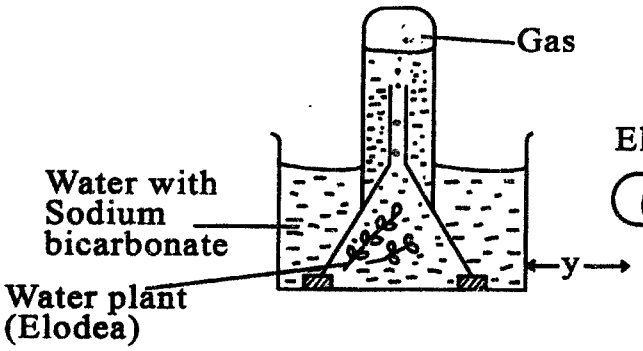


Fig 2

When the light source was placed at different distances (y increased) from the plant, the following results were obtained.

Distance *(y)* of light source from plant in cms	Volume of gas produced *(cm^3/min)*
2	1.0
4	0.50
6	0.35
8	0.25
10	0.20
12	0.18
14	0.16
16	0.12

(a) Describe the relationship between the distance of light source from the plant and the volume of gas produced per minute. *(02 marks)*

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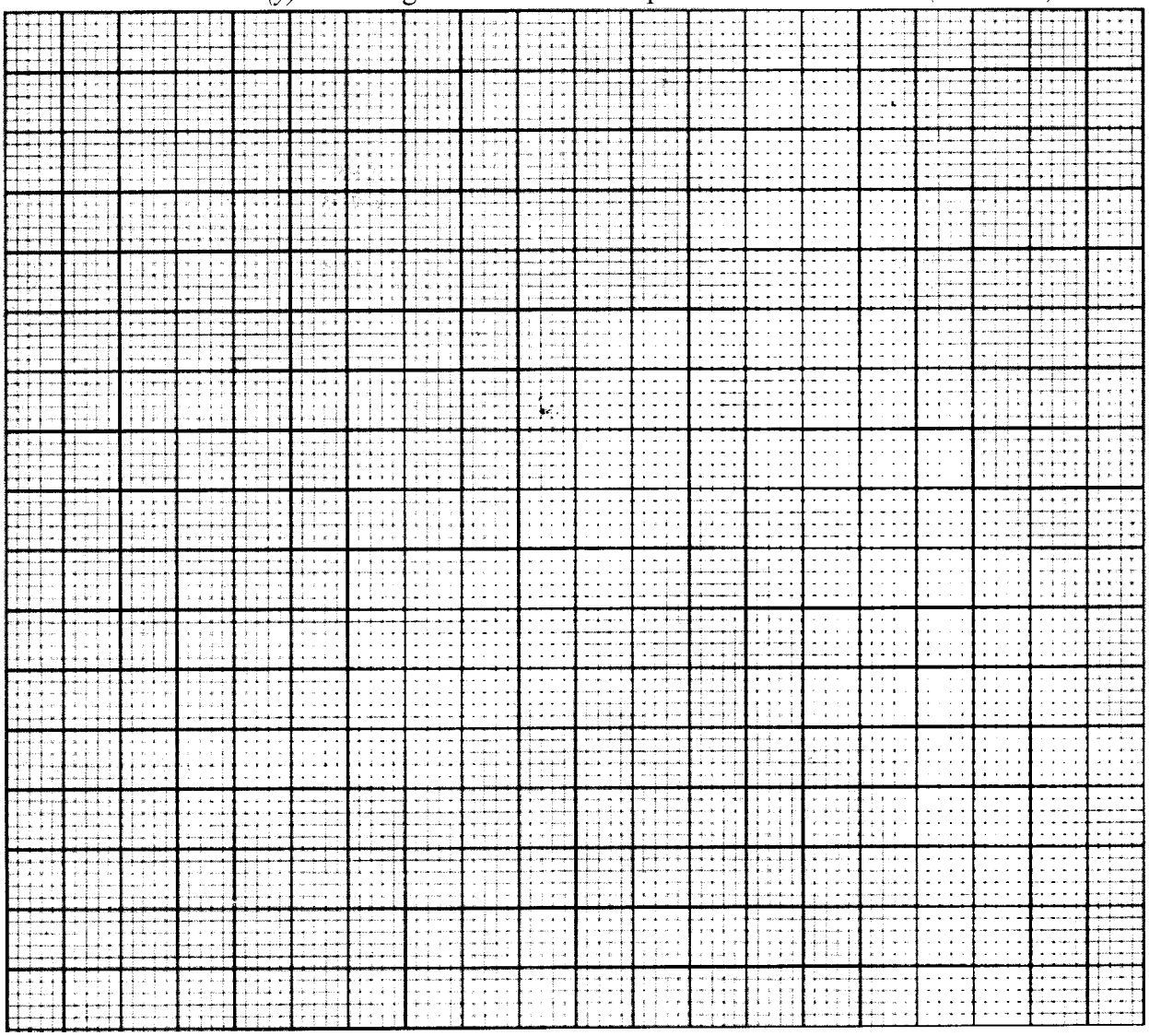
(a) Using a graph paper, plot a graph to relate of volume of a gas produced with distance *(y)* of the light source from the plant. *(08 marks)*



(b) State the name of:

(i) the process described *(01 mark)*

.....

(ii) the gas produced by the process *(01 mark)*

.....

(c) How can the rate of the process be determined? *(01 mark)*

.....

(d) What would happen to the volume of the gas produced per minute if

(i) sodium bicarbonate was completely replaced by distilled water? *(01 mark)*

.....

(ii) the temperature of water was increased from 25^0C to 40^0C? *(01 mark)*

.....

(e) Write down the equation to show the reaction taking place in the water plant. *(02 marks)*

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(f) Apart from light, state other **three** conditions and their use to the above process. *(03 marks)*

(i).....

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(ii).....

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(iii).....

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30. (a) Explain how each of the following is achieved during movement of a tilapia fish in water.

(i) Reduction of water resistance. *(02 marks)*

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(ii) Coming on the surface to feed. *(02 marks)*

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(iii) Braking in case it has been moving fast. *(02 marks)*

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(b) State **four** structural adaptations that have enabled birds to live a successful aerial life. *(04 marks)*

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33. Figure 5 shows the route taken by blood around the mammalian body.

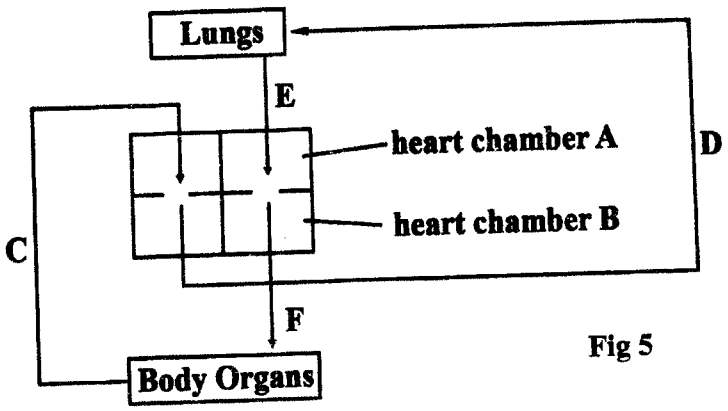

Fig 5

(a) (i) Name the heart chambers **A** and **B**.

A. ..... *(01 mark)*

B. ..... *(01 mark)*

(ii) Using information shown in Figure 5, identify the **type** of blood vessel **C**. Give a reason for your answer.

Type of vessel

..... *(01 mark)*

Reason *(01 mark)*

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(b) (i) State and explain **two** differences between the contents of the blood flowing in vessels **C** and **E**. *(04 marks)*

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(c) Suggest and explain which of the four blood vessels contains blood at the highest pressure. *(02 marks)*

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SECTION C (30 MARKS)

*Answer any **two** questions from this* Section.

34. (a) Differentiate between epigeal and **hypogeal** germination. *(04 marks)*

(b) State the role played by the following in seed germination;

(i) adequate supply of water *(02 marks)*
(ii) favourable temperature *(02 marks)*

(c) Describe an experiment that can be carried out in the laboratory to show that germinating seeds can respire. *(07 marks)*

35. (a) Distinguish between **geotropism** and **phototropism**. *(02 marks)*

(b) Describe an experiment to show geotropism in a bean seedling. *(10 marks)*

(c) State **three** importance of the different types of tropisms in plants. *(03 marks)*

36. (a) What is meant by the term **homeostasis**? *(02 marks)*

(b) Explain the role of the following organs in temperature regulations.
(i) Liver *(04 marks)*
(ii) Skin *(07 marks)*

(c) Name any **two** other organs in the human body involved in homeostasis.

37. (a) Using a linear illustration, show how energy flows through the different feeding levels. *(03 marks)*

(b) Explain how human activities increase each of the following:
(i) Carbon dioxide in the atmosphere. *(05 marks)*
(ii) Soil erosion. *(07 marks)*

END

Names:.....**Index No:**.....

School Exam Number:.....**Signature:**.....

*Candidates should **NOT** write their Centre Name or Centre Number anywhere on this booklet*

527/1
AGRICULTURE
PRINCIPLES AND PRACTICES
(Theory)
Paper 1
19 July 2022
2 hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

The paper consists of Part **A** *and* **B**

Attempt **all** *questions in* Part **A** *and* **four** *questions in* Part **B**.

In Part **B**, *you are required to choose at least* **one** *question from each* Section.

No additional answer sheets should be provided.

FOR EXAMINERS' USE ONLY	
PART A	
Q.	
Q.	
Q.	
Q.	
TOTAL	

PART A (20 MARKS)

For Question 1 *write the letter corresponding to the best answer in the boxes provided and for questions 2 to 5 write the answers in the space provided.*

1. (a) The best method for controlling crop aphids in a crop garden is

A. weed control
B. spraying using systematic pesticides
C. crop rotation
D. spraying using contact pesticide

(b) Which one of the following is the role of magnum in the process of egg formation in poultry birds? It is the site for

A. fertilization
B. chalaza formation
C. membrane formation
D. egg shell addition

(c) The following are operations carried out in a crush except

A. feeding
B. milking
C. vaccination
D. castration

(d) Which one of the following land tenure systems discourages agricultural development?

A. state ownership
B. individual ownership
C. freehold land system
D. communal tenure system

2. (a) What is meant by **risk** as applied to farming business? *(02 marks)*

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(b) Outline **four** ways of guarding against risks in the farming business. *(04 marks)*

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3. (a) Mention **four** benefits of having a good soil structure. *(02 marks)*

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4. (a) State the signs of mastitis in a diary animal. *(03 marks)*

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(b) Suggest measures of overcoming mastitis in dairy farm. *(03 marks)*

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5. Outline **four** advantages of using a spray race in vector control on the farm. *(04 marks)*

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PART B (80 Marks)

Answer **four** *questions from this part including at least one question from each Section. Write your answers in the answer spaces provided.*

SECTION B

MECHANISM AND FARM MANAGEMENT

6. (a) Outline the advantages of mechanizing agricultural activities. *(08 marks)*

(b) Explain the reasons for the low adoption of mechanization in some parts of Uganda. *(12 marks)*

7. (a) Explain the relevance of fences in improving farming efficiency. *(10 marks)*

(b) Outline the steps followed when establishing a barbed wire fence. *(10 marks)*

8. (a) Explain the contribution of farming organizationS to agricultural development. *(08 marks)*

(b) Outline the challenges faced by farming organizations in Uganda. *(12 marks)*

SECTION C

CROP PRODUCTION

9. (a) Outline the desirable characteristics of a good pasture plant. *(08 marks)*

(b) Describe the procedure of establishing a pasture. *(12 marks)*

10. (a) Explain the effects of soil erosion on crop production. *(08 marks)*

(b) Suggest the measures that can be employed to control soil erosion on agricultural land. *(12 marks)*

11. (a) Outline the benefits of draining agricultural land. *(08 marks)*

(b) Describe the measures that can be employed to drain agricultural land. *(12 marks)*

SECTION D

ANIMAL PRODUCTION

12. (a) Explain the factors that influence feed intake in farm animals. *(12 marks)*

(b) Describe the considerations made by a farmer when mixing feed ration. *(08 marks)*

13. (a) Why is milk highly perishable? *(06 marks)*

(b) Describe the steps taken to produce high-quality clean milk on a farm. *(14 marks)*

14. (a) Why is castration important in livestock management? *(06 marks)*

(b) Explain the surgical methods of castrating bull calves. *(14 marks)*

END

456/2
MATHEMATICS
Paper 2
25 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

MATHEMATICS

Paper 2

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt **all** *questions in* Section **A** *and any* **five** *in* Section **B**.

Any additional question(s) answered shall not be marked.

All necessary calculations must be done in the answer booklet provided. Therefore, no paper should be given for rough work.

Silent, non – programmable scientific calculators and mathematical tables with a list of formulae may be used.

Graph papers **are** *provided.*

SECTION A: 40 MARKS

Attempt **all** *questions*

1. Given that $f(x) = 3(2x - 1)$, find the value of x such that $f(x) = 15$. *(04 marks)*

2. Find the equation of the line passing through (2, 2) which has a gradient of -3. *(04 marks)*

3. Express 56.5 litres in cm^3, giving the answer in standard form. *(04 marks)*

4. A dress-maker paid Shs 80,000 for $\frac{3}{5}$ of a roll of cloth. Find how much she would have paid for ¾ of the same roll of cloth. *(04 marks)*

5. $\Sigma = \{a, b, c, d, e, f, g\}$, $\mathbf{A} = \{a, d, e, f, g\}$, $\mathbf{B} = \{a, c, e, g\}$

Find: (i) $\cap(\mathbf{AUB})$ *(01 mark)*

(ii) $\cap(\mathbf{A'nB})$ *(03 marks)*

6. Given that 720 US dollars to Ushs 2,592,000. Find the:

(i) rate of exchange; *(02 marks)*

(ii) equivalent of Ushs 360,000 in US dollars. *(02 marks)*

7. A car driver covered a distance of 60 km at $100kh^{-1}$. A lorry driver covered the same distance but took half an hour more. Calculate the average speed of the lorry driver. *(04 marks)*

8. y is known to be inversely proportional to the square of x. when $y = 2$, $x = 2$. Find the value of x when $y = 32$. *(04 marks)*

9. Solve the inequality $20 < 2(3x - 2) \leq 44$ and represent the solution on a number line. *(04 marks)*

10. Make q the subject of the formula $p = r\sqrt{1 - q^2}$. *(04 marks)*

SECTION B (60 MARKS)

Answer any **five** *questions from this* Section

11. 120 students were asked to write down which of the three fruits, Bananas *(B)*, Pineapples *(P)* and Mangoes *(M)* they liked. 9 students did not like any of the three fruits. 92 liked *B*, 87 liked *P* and 79 liked *M*. 75 liked *B* and *P*, 68 liked *P* and M and 72 liked *M* and *B*.

(a) Represent the information on a Venn diagram.

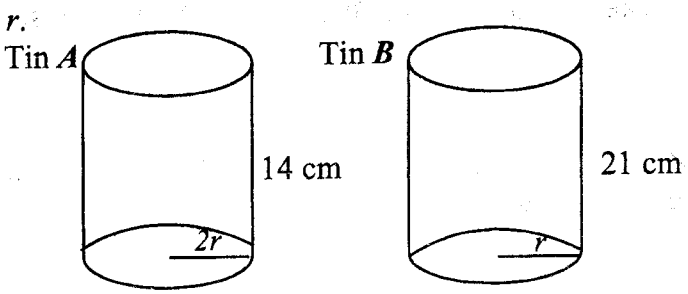
(b) Determine the number of students who liked:

(i) all the three fruits,

(ii) only B,

(iii) more than one of the fruits.

15. Two cylindrical tins ***A*** and ***B*** have heights 14 cm and 21 cm. Their base radii are $2r$ and r.

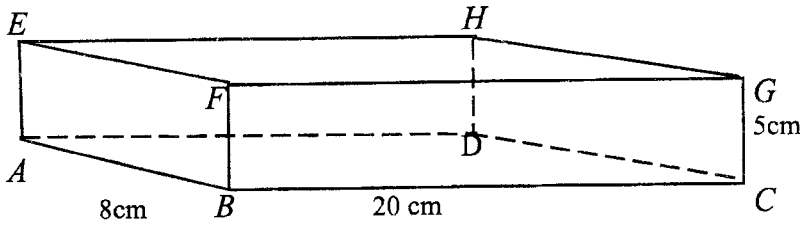


(a) Form an expression in r for the volume of each tin. *(04 marks)*

(b) Hence find the ratio *volume of tin A: volume of tin B.* *(02 marks)*

(c) Find the volume of r for which the volume of one tin exceeds volume of the other by 2.75 litres. Take $= \pi = \frac{22}{7}$ *(05 marks)*

16. The diagram below shows a cuboid. $AB = 8$ cm, $BC = 20$cm and $CG = 5$ cm.



Calculate the:

(a) length of BD

(b) length of BH

(c) angle between the line BH and the plane $ABCD$.

(d) angle between the planes HBC and $ABCD$.

(12 marks)

17. Sarah has a maximum of Shs. 800,000 today to spend on making necklaces. She will make two types of necklaces — type A which costs Shs 100,000 each and type B at Shs 80,000 each. Sarah plans to make more necklaces of type B than of type A. She also wants at least 2 necklaces of type A and a total of over 6 necklaces of both types.

(a) Assuming she makes x necklaces of type A and y necklaces of type B, write down the inequalities in x and y for the information given above. *(04 marks)*

(b) Show on a graph the region of points which satisfy the inequalities above. *(04 marks)*

(c) Sarah's profit on the necklaces is given by the expression $300x + 200y$. Find how many necklaces of each type she should make in order to realize maximum profit and calculate the maximum profit. *(04 marks)*

END

273/1
GEOGRAPHY
PAPER 1
27 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

GEOGRAPHY

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

The paper has two Parts: Part **I** *and* Part **II**

Part **I** *and* Section **A** *are compulsory.*

Attempt only **one** *question from* Section **B** *of* Part **II.**

Answers to all questions must be written in the answer booklets provided.

PART I: 30 MARKS
OBJECTIVE TYPE QUESTIONS

1. The existence of rock strata in East Africa's rocks shows that the rocks are

   A. igneous.
   B. sedimentary.
   C. metamorphic.
   D. plutonic.

2. The sudden decline in East Africa's forex earnings from tourism is mainly due to

   A. inadequate capital to develop tourist sites.
   B. low income levels of the nationals.
   C. the global economic recession.
   D. COVID-19 pandemic

3. Which one of the following crops is a raw material to industries making insecticides?

   A. Cloves
   B. Sisal
   C. Pyrethrum
   D. Wattle

4. The following are characteristics of acidic lava except: It

   A. is highly immobile.
   B. is viscous.
   C. has a high content of silica.
   D. forms high steep-sided features.

5. The most lucrative invisible export from Uganda to Kenya is

   A. maize
   B. eggs
   C. cement
   D. electricity

6. The main reason for encouraging fish farming in Uganda is to

   A. increase household income.
   B. generate employment opportunities.
   C. increase food production.
   D. boost foreign exchange earnings.

7. Deep-widened craters in volcanic areas of East Africa are also known as

   A. crater lakes.
   B. explosion craters.
   C. calderas.
   D. summit craters.

8. Coral limestone along the East African coast is an example of ..... formed sedimentary rocks.

A. organically-
B. chemically-
C. intrusively-
D. mechanically-

9. The feature formed when lava in a volcanic pipe is exposed by denudation is called a

A. lava plain
B. ash and cinder cone
C. basalt dome
D. volcanic plug

10. The most suitable industry to establish in a wattle tree growing area is a . . . . industry.

A. textile
B. pulp and paper
C. leather tanning
D. furniture-making

11. Chemical weathering is dominant in the basin areas around lake Victoria mainly because they

A. have soft rocks.
B. are hot and wet.
C. are dry and hot.
D. are low-lying.

12. Road transport is commonly used in East Africa because it is

A. fast.
B. cheap.
C. flexible.
D. safe.

13. Which of the following is not characteristic of fault lakes? They are

A. large.
B. long.
C. salty.
D. deep.

14. Which one of the following features is found in the torrent stage of a river?

A. Deltas.
B. Meanders.
C. Waterfalls.
D. Levees.

15. The main crop grown at Kilombero valley irrigation scheme in Tanzania is

A. Sugar cane.
B. Rice.
C. Wheat.
D. Cotton.

16. The arrangement of soils along a slope from the hilltop to the valley is also called soil . . . . . .

A. structure.
B. texture.
C. catena.
D. profile.

17. A body of water enclosed by spits and sand bars is called a / an

A. cuspate foreland.
B. lagoon.
C. ox bow lake.
D. bay.

18. The rapidly-increasing population in Kabale is mainly caused by

A. polygamy.
B. ignorance about birth control measures.
C. improved health facilities.
D. high fertility rate.

19. The volcanic soils on Kisoro plains in south western Uganda are said to be . . . soils.

A. azonal
B. zonal
C. intrazonal
D. loam

20. Which one of the following areas in East Africa is known for wheat growing?

A. Uasin Gishu
B. Kericho
C. Bugiri
D. Kisumu

21. The most common type of fish caught in lake Tanganyika is

A. Luciolates.
B. Tilapia.
C. Nile perch.
D. Dagaa.

22. Which one of the following minerals is not mined in the rift valley areas of East Africa?

A. Limestone
B. Gold
C. Soda ash
D. Salt

23. Lines to show atmospheric pressure on climatic maps are known as

A. isonephs.
B. isohyets.
C. isotopes.
D. isobars.

24. The area in East Africa known for using the drilling method in extracting minerals is

A. Buliisa.
B. Shinyanga.
C. Mwadui.
D. Magadi.

25. Trees in savanna areas of East Africa have rough thick barks mainly to

A. store nutrients for growth.
B. provide strength.
C. store water.
D. protect trees from intense heat.

26. Landslides on the slopes of mount Elgon are mainly caused by

A. volcanic activity.
B. heavy rainfall.
C. earthquakes.
D. steep slopes.

27. Which one of the following ports is found on Lake Tanganyika?

A. Mtwara
B. Bukoba
C. Kigoma
D. Mwanza

28. The following are processes of physical weathering except

A. exfoliation.
B. oxidation.
C. block disintegration.
D. frost action.

29. Which one of the following is not a characteristic of equatorial climate?

A. It has a small diurnal temperature range.
B. It has a large diurnal temperature range.
C. It receives monomodal rainfall.
D. Rainfall is moderate.

30. Which one of the following lakes in East Africa is volcanic?

A. Kyoga
B. Bisina
C. Mutanda
D. Kwania

PART II

MAPWORK, PHOTOGRAPH INTERPRETATION AND FIELDWORK

Answer **four** *questions from this* **Part** *including questions* **1**, **2** *and* **3** *which are compulsory.*

SECTION A

COMPULSORY QUESTION: MAP WORK (20 Marks)

Answer all parts of this question.

1. Study the **1: 50,000 (UGANDA) NABYESO** map extract part of sheet 45/2 Edition 1 – U.S.D and answer the questions that follow.

(a) (i) State the grid reference of the bore hole at Ayabi. *(01 mark)*

(ii) Identify the feature found at grid reference ***843993***. *(01 mark)*

(b) (i) Measure and state the distance in kilometers of the dry weather road from the road junction at Arwotcek grid reference ***827942*** to Abeja grid reference ***801023***. *(02 marks)*

(ii) Calculate the area covered by Lake Kwania west of eating 80 excluding the permanent swamp. *(03 marks)*

(c) Draw a sketch map of the area shown on the map extract and on it mark and name:

(i) Lake Kwania
(ii) permanent swamps
(iii) **two** seasonal swamps
(iv) vegetation types
(v) transport routes

(07 marks)

(d) (i) Identify the economic activities carried out in the area shown on the map extract. *(02 marks)*

(ii) Describe the relationship between relief and drainage in the area shown on the map extract. *(04 marks)*

2. **PHOTOGRAPH INTERPRETATION: COMPULSORY QUESTION**

Study the photograph provided below and answer the questions that follow.

(a) (i) Identify the type of photograph. *(01 mark)*

(ii) Give reasons for your answer. *(02 marks)*

(b) (i) What economic activity is carried out in the middle ground? *(01 mark)*

(ii) Describe the factors that favoured the economic activity identified in (b) (i) above. *(05 marks)*

(c) Explain the problems faced by the workers shown in the photograph. *(04 marks)*

(d) Giving evidence from the photograph, name any **one** area in east Africa where the photograph could have been taken. *(02 marks)*

COMPULSORY QUESTION:

FIELDWORK (15 Marks)

3. For any fieldwork study you have conducted as a group or individual:

   (a) State the:

   (i) topic *(01 mark)*
   (ii) objectives of the study. *(02 marks)*

   (b) Draw a sketch map of the area studied and on it mark and name:

   (i) Physical features

   (ii) Land use activities

   (06 marks)

   (c) Explain the skills you obtained during the study. *(03 marks)*

   (d) Describe the relationship between relief and human activities in the area of study. *(04 marks)*

SECTION B:

EAST AFRICA: 20 Marks

Answer only **one** *question from this* Section

4. (a) Distinguish between **sedimentary rocks** and **metamorphic rocks.** *(04 marks)*

   (b) Describe how sedimentary rocks are formed. *(05 marks)*

   (c) (i) Identify any **two** examples of sedimentary rocks found in East Africa. *(02 marks)*

   (ii) Explain the economic importance of sedimentary rocks to the development of East Africa. *(06 marks)*

   (d) Outline the problems faced by people living around rock areas of East Africa. *(03 marks)*

5. Study the table below showing East Africa's population between 1997 and 2001 and answer the questions that follow.

Year	1997	1998	1999	2000	2001
Population *(000,000)*	80	82	84	86	88

Source: World Bank (2003), African Development Indicators, Washington DC

(a) Draw a line graph to represent the information in the table. *(08 marks)*

(b) Describe the trend in the population between 1997 and 2001. *(02 marks)*

(c) Explain the factors leading to the population trend described in (b) above. *(06 marks)*

(d) Outline the problems resulting from rapid population growth in East Africa. *(04 marks)*

6. (a) Draw a sketch map of East Africa and on it mark and name:

(i) The equator,

(ii) The East African rift valley

(iii) Highlands: Rwenzori and Kilimanjaro

(iv) Nairobi city

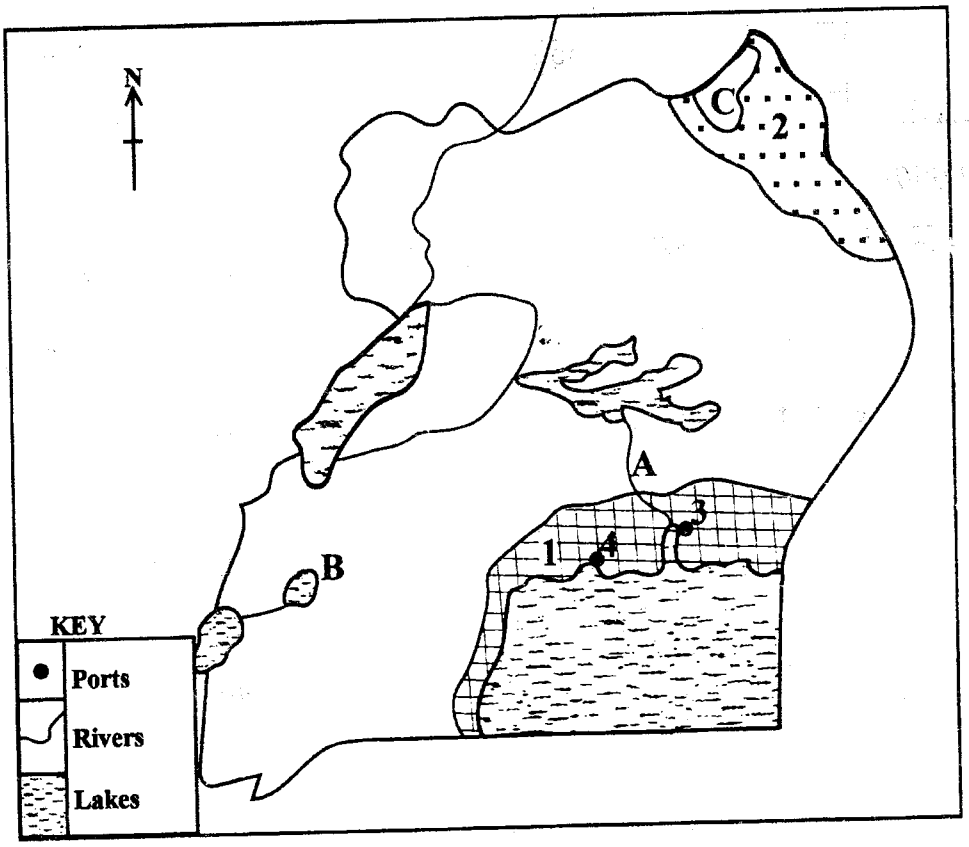
(07 marks)

(b) Describe the process that led to the formation of mountain Kilimanjaro. *(06 marks)*

(c) Explain the effects of mountains on the climate of the surrounding areas. *(04 marks)*

(d) Outline the problems faced by mountainous areas of East Africa. *(03 marks)*

7. Study figure I below: Map of Uganda and answer the questions that follow.



(a) Name the:
(i) Climate zones *1* and *2*. *(02 marks)*
(ii) Water bodies *A* and *B*. *(02 marks)*
(iii) Ports *3* and *4*. *(02 marks)*
(iv) National park *C* *(01 mark)*

(b) Describe the characteristics of climate *1*. *(05 marks)*

(c) Explain the factors influencing East Africa's climate. *(06 marks)*

(d) Outline the problems faced in any **one** climatic region in (a) (i) above. *(02 marks)*

END

Name..... **Index No:** .....

School Exam Number:.....**Signature:**.....

545/2
CHEMISTRY
Paper 2
22 July 2022
2 hours

*Candidates should **NOT** write their Centre Name or Centre Number anywhere on this booklet*

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

CHEMISTRY

Paper 2

2 hours

INSTRUCTIONS TO THE CANDIDATES

Section **A** *consists of 10 – structured questions. Attempt* **all** *questions in this* Section.

Answers to Section **A** *must be filled in the spaces provided.*

Section **B** *consists of* 4 *semi – structured questions. Attempt any* **two** *questions from this* Section. *Answers to this* Section *must be written in the answer pages provided overleaf.*

In both Sections, *all your working must be clearly shown.*

1 mole of any gas occupies 22,400 cm^3 at s.t.p.

1 mole of any gas occupies 24,000 cm^3 *at room temperature.*

[$S = 32$, $N = 14$, $O = 16$, $C = 12$, $H = 1$]

FOR EXAMINERS' USE ONLY

1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL

SECTION A: (50 MARKS)

1. (a) State the suitable method used to separate components of the following mixtures:

(i) Barium sulphate and Barium chloride. *(01 mark)*

.....

.....

(ii) Potassium carbonate and Potassium hydrogen carbonate. *(01 mark)*

.....

.....

(b) A small amount of sodium chloride was shaken with a large volume of water in a beaker.

(i) State what was observed. *(01 mark)*

.....

.....

(ii) Name the suitable method that can be used to obtain sodium chloride crystals from the mixture formed. *(01 mark)*

.....

.....

(c) A few drops of lead(II) nitrate solution were added to the resultant mixture in (b) above and the mixture warmed. State what was observed. *(01 mark)*

.....

.....

2. The atomic numbers of elements *P*, *Q* and *R* are 9, 13 and 14 respectively.

(a) Write the electronic configuration of the ions formed by;

(i) *P*. *(½ mark)*

.....

(ii) *Q*. *(½ mark)*

.....

(b) Atoms of elements *P* and *Q* combine to produce compound *S*, while atoms of elements *P* and *R* combine to form compound *T*. Write the chemical formula of:

(i) *S* *(01 mark)*

.....

(ii) *T* *(01 mark)*

.....

(c) Draw a diagram showing how atoms *P* and *Q* combine to form *S*.

(02 marks)

.....

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3. (a) (i) Name **one** substance which reacts with dilute sulphuric acid to produce copper(II) sulphate. *(01 mark)*

.....

(ii) Write equation for the reaction that takes place. *(1½ marks)*

.....

.....

(b) When 1.50 *g* of copper(II) sulphate crystals, $CuSO_4.nH_2O$ were heated gently, 0.96 *g* of the anhydrous salt were produced. Determine the value of *n*. *(Cu = 64, S = 32, O = 16, H = 1)* *(2½ marks)*

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4. (a) Name the conditions under which water readily reacts with magnesium. *(01 mark)*

.....

.....

.....

(b) (i) State what was observed in (a) above. *(01 mark)*

.....

.....

.....

(ii) Write equation for the reaction.

.....

(1½ mark)

.....

(b) Dilute sulphuric acid was added to the products of the reaction in (a).

(i) State what would be observed when soap solution was added to the resultant mixture.

.....

(½ mark)

.....

(ii) Write ionic equation for the reaction in (c) (i) above. *(1½ marks)*

.....

.....

5. (a) When sodium peroxide was dissolved in water, a colourless solution ***Q*** was formed.

(i) Name the colourless solution, ***Q***.

.....

(½ mark)

(ii) Write equation for the reaction leading to the formation of the colourless solution.

.....

(1½ marks)

.....

.....

(b) ***Q*** was added dropwise until in excess to aluminium sulphate solution.

(i) State what was observed.

.....

(1½ marks)

.....

(ii) Write the formula of the complex anion of aluminium formed.

.....

(½ mark)

.....

(c) A few drops of dilute nitric acid were added to the resultant mixture in (b) above. State what was observed.

.....

(½ mark)

.....

.....

.....

6. During the manufacture of sulphuric acid by the contact process, sulphur dioxide is catalytically oxidised to sulphur trioxide according to the following equation:

$$2SO_{2\,(g)} + O_{2\,(g)} \rightleftharpoons 2SO_{3\,(g)} \quad \Delta H^{\theta} = -197KJmol^{-1}$$

(a) (i) Name **one** source of sulphur dioxide and **one** source of oxygen used in the contact process. *(01 mark)*

.....

.....

(ii) State the industrial conditions used to obtain maximum yield of sulphur dioxide. *(01 mark)*

.....

.....

.....

(b) Sulphur trioxide formed is dissolved in concentrated sulphuric acid to form a compound ***T***.

(i) Write the chemical formula of ***T***. *(½ mark)*

.....

.....

(ii) Give a reason why sulphur trioxide is not dissolved in water to produce sulphuric acid. *(01 mark)*

.....

.....

(c) Write equation to show how ***T*** can be converted to sulphuric acid. *(01 mark)*

.....

.....

.....

7. Compound ***Z*** contains 1.55 *g* of phosphorus and 2.00 *g* of oxygen.

(a) Calculate the

(i) empirical formula of ***Z***. *(P = 31, O = 16)* *(02 marks)*

.....

.....

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.....

(ii) molecular formula of ***Z***. *(Relative formula mass of **Z** is 142)* *(01 mark)*

.....

.....

.....

(b) When compound ***Z*** was dissolved in water, a colourless solution was formed.

(i) State what would be observed if a spatula endful of potassium carbonate was added to the colourless solution formed. *(½ mark)*

.....

.....

(ii) Write ionic equation for the reaction that took place. *(1½ marks)*

.....

.....

.....

8. (a) Define the term **molar enthalpy of combustion**. *(01 mark)*

.....

.....

.....

(b) Ethanol burns in oxygen according to the following equation

$C_2H_5OH_{(l)} + 3O_{2\,(g)} \longrightarrow 2CO_{2\,(g)} + 3H_2O_{(l)} \quad \Delta H^{\theta} = -1360\ KJmol^{-1}$

Calculate the mass of ethanol required to raise the temperature of $1000cm^3$ of water by 98.0^0C. *(S.H.C of water = 4.2, density of water = 1.0 gcm^{-3} and C =12, O = 16, H = 1)* *(3½ marks)*

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(c) From the equation above, state **one** use of ethanol. *(½ mark)*

.....

.....

9. Dilute sodium sulphate solution was electrolysed between graphite electrodes.

(a) Name the:

(i) anions in the solution; *(01 mark)*

.....

.....

(ii) cations in the solution *(01 mark)*

.....

.....

(b) (i) Write ionic equation for the reaction that took place at the positive electrode. *(1½ marks)*

.....

.....

(ii) State what was observed at the negative electrode. *(½ mark)*

.....

.....

(c) State how the gaseous product at the positive electrode can be tested. *(01 mark)*

.....

.....

.....

10. Excess potassium iodide solution was added to a solution containing 2.35 g of lead(II) nitrate. *(Pb = 207, N = 14, O = 16, I = 127)*

(a) State what was observed. *(½ mark)*

.....

.....

.....

(b) Write equation for the reaction that took place. *(1½ marks)*

.....

.....

.....

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.....

.....

(c) Calculate the mass of the solid formed. *(3½ marks)*

.....

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SECTION B: 30 MARKS

Attempt **two** *questions from this* Section

11. (a) What is meant by the term **rate of reaction**? *(01 mark)*

(b) Explain how the following factors affect the rate of reaction:

(i) temperature *(03 marks)*
(ii) concentration *(03 marks)*

(c) In an experiment to investigate the rate of reaction of magnesium with dilute sulphuric acid, a flask containing excess magnesium powder and sulphuric acid was weighed after every 10 minutes. The results were recorded in the table below.

Time *(mins)*	0	10	20	30	40	50
Mass of flask + contents *(g)*	95.9	64.5	39.0	24.4	15.0	11.9

(i) Plot a graph of mass of flask and contents against time. *(04 marks)*

(ii) Determine the rates of reaction after 15.0 and 27.5 minute respectively. Comment on your results. *(04 marks)*

12. (a) Define the terms:

(i) acid *(01 mark)*
(ii) normal salt *(01 mark)*
(iii) base *(01 mark)*

(b) Write the chemical formula of both a normal salt and an acid salt of calcium. *(01 mark)*

(c) Describe how lead(II) sulphate can be prepared in the laboratory beginning with lead(II) carbonate. *(Your answer should include equations for the reactions)* *(6½ marks)*

(d) A sample of sodium hydrogen carbonate was heated and the product(s) passed through calcium hydroxide solution for a long time. Write equation for the reaction that took place.

(4½ marks)

13. (a) (i) Explain how a pure and dry sample of ammonia can be prepared in the laboratory starting from ammonium sulphate.

(05 marks)

(ii) Write equation for the reaction leading to the formation of ammonia.

(1½ marks)

(b) State what would be observed when dilute ammonia solution is added dropwise until in excess to

(i) copper(II) sulphate

(ii) iron(III) chloride

(1½ marks)

(c) Write ionic equation for the reaction that took place in (b) (ii) above.

(01 mark)

(d) Write equations to show how ammonia can be converted to nitric acid.

(1½ marks)

14. (a) (i) Write equation(s) for the reaction(s) that take place when iron(II) sulphate crystals, $FeSO_4.7H_2O$ are heated strongly until no further change.

(4½ marks)

(ii) State what would be observed in (a) (i) above.

(03 marks)

(b) Describe how the solid product in (a) above can be converted to iron.

(1½ marks)

(c) Describe the reactions of iron with:

(i) oxygen
(ii) chlorine
(iii) dilute hydrochloric acid.

(2½ marks)
(2½ marks)
(2½ marks)

(d) State **one** use of iron.

(½ mark)

END

Names:.....**Index No:** .....

School Exam Number:.....**Signature:**.....

*Candidates should **NOT** write their Centre Name or Centre Number anywhere on this booklet*

545/1
CHEMISTRY
Paper 1
22 July 2022
1 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

CHEMISTRY

Paper 1

1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

*This paper consists of **50** objective – questions.*

Attempt **all** *questions.*

You are required to write the correct answer **A**, **B**, **C** *or* **D** *in blue or black ink in the boxes provided on the right hand side of each question.*

Do not use pencil.

Molar gas volume at s.t.p = 22.4 dm^3 or 22,400cm^3.

Molar gas volume at room temperature = 24.0dm^3 or 24000cm^3.

C =12, H = 1, Cu = 63.5, S = 32, O = 16, Mg = 24, K = 39, N = 14

FOR EXAMINER'S USE ONLY

1. The substance formed when chalk dust is shaken with a large amount of water is called a

A. solution
B. suspension
C. solvent
D. solute

2. Which of the following particles are responsible for conducting electricity in molten copper?

A. Ions
B. Protons
C. Neutrons
D. Electrons

3. Oxygen is collected by gas syringe method because it;

A. is less dense than air
B. is denser than air
C. is almost as heavy as air
D. does not react with air

4. When a mixture of Zinc powder and a solution containing compound ***R*** was allowed to stand for some time, there was no observable change. ***R*** is

A. $MgSO_4$
B. $CuSO_4$
C. $AgNO_3$
D. $FeSO_4$

5. Which one of the following is a product of electrolysis of brine?

A. Sodium nitrate
B. Sodium hydroxide
C. Sodium carbonate
D. Sodium Sulphate

6. The gas which decolourises both potassium manganate(VII) and bromine water is

A. ethene
B. methane
C. hydrogen chloride
D. carbon monoxide

7. The full symbol of the atom of an element ***T*** is $^{19}_{9}T$. What is the number of protons in the ion formed by ***T***

A. 7
B. 8
C. 9
D. 10

8. A solution containing Zinc ions will form;

A. a reddish-brown precipitate with magnesium
B. white precipitate with dilute sulphuric acid
C. white precipitate soluble in excess potassium hydroxide solution
D. green precipitate insoluble in ammonia

9. Which one of the following acids can react with a base to produce a normal salt only?

A. CH_3COOH
B. H_2SO_3
C. H_2SO_4
D. H_2C0_3

10. Which one of the following substances is used to bleach sugar?

A. Chlorine
B. Calcium chloride
C. Sulphur dioxide
D. Sodium sulphate

11. The percentage by mass of oxygen in sodium carbonate crystals, $Na_2CO_3.10H_2O$ is [Na = 23, C = 12, O = 16, H = 1]

A. 16.8%
B. 35.5%
C. 67.8%
D. 72.7%

12. Sulphur dioxide behaves as an oxidizing agent when it reacts with;

A. concentrated nitric acid
B. hydrogen sulphide
C. iron(III) sulphate
D. potassium dichromate

13. Magnesium reacts with chlorine, when heated, according to the equation.

$$Mg_{(s)} + Cl_{2\,(g)} \longrightarrow MgCl_{2\,(s)}$$

The volume of chorine in litres at s.t.p that will react completely with 0.6g of magnesium is *(1 mole of a gas occupies 22400cm^3 at s.t.p, Mg =24)*

A. $\frac{0.6}{24} \times 22.4$
B. $\frac{0.6}{24} \times \frac{22.4}{2}$
C. $\frac{0.6}{22.4} \times 24$
D. $\frac{0.6}{22.4} \times \frac{24}{2}$

14. When 2.0g of substance ***W*** *(Rmm = 60)* were burnt, the heat produced raised the temperature of 1000g of water by 18.6^{0}C. The molar heat of combustion of ***W*** in joules is *(The S.H.C of water is 4.2jg^{-1} ^{0}C^{-1})*

A. $\frac{1000\times4.2\times18.6\times2.0}{60}\ KJmol^{-1}$
B. $\frac{18.6\times60\times1000}{2.0\times4.2}\ KJmol^{-1}$
C. $\frac{18.6\times2.0\times1000}{4.2\times60}\ KJmol^{-1}$
D. $\frac{4.2\times18.6\times60}{2.0}\ KJmol^{-1}$

15. Which one of the following does not produce a white precipitate with lead(II) nitrate solution?

A. Dilute sulphuric acid
B. Dilute hydrochloric acid
C. Excess sodium hydroxide solution
D. Excess ammonia solution

16. Which one of the following reactions shows the oxidizing property of nitric acid?

A. $PbO_{(s)} + 2HNO_{3(aq)} \longrightarrow Pb(NO_3)_{2\,(aq)} + H_2O_{(l)}$
B. $CaCO_{3(s)} + 2HNO_{3(aq)} \longrightarrow Ca(NO_3)_{2\,(aq)} + CO_{2\,(g)} + H_2O_{(l)}$
C. $NaOH_{(aq)} + HNO_{3(aq)} \longrightarrow NaNO_{3(aq)} + H_2O_{(l)}$
D. $Cu_{(s)} + 4HNO_{3(aq)} \longrightarrow Cu(NO_3)_{2\,(aq)} + 2N0_{2(g)} + 2H_2O_{(l)}$

17. The atomic numbers of elements *Q, R, T* and *X* are 8, 9, 16 and 19 respectively. Which one of the following pairs of elements will form ions with the same number of charges?

A. *Q* and *R*
B. *T* and *X*
C. *X* and *R*
D. *Q* and *T*

18. Which one of the following substances will dissolve in water to form a solution that liberates hydrogen gas with magnesium ribbon?

A. NH_4Cl
B. Na_2O_2
C. CH_3COOK
D. CaO

19. Which one of the following is the formula of an unsaturated hydrocarbon?

A. C_2H_6
B. C_3H_8
C. C_4H_{10}
D. C_5H_8

20. Which one of the following salts **cannot** be prepared by direct synthesis method?

A. $FeCl_2$
B. $MgCl_2$
C. $FeCl_3$
D. $AlCl_3$

21. $15cm^3$ of 0.14M hydrochloric acid reacted completely with $25cm^3$ of potassium carbonate solution. What is the concentration of the potassium carbonate solution in moles per litre? *(Reaction ratio of HCl: K_2CO_3 is 2:1)*

A. $\frac{15\times0.14}{25\times2}$
B. $\frac{15\times0.1\times2}{25}$
C. $\frac{15\times0.1\times2}{1000\times25}$
D. $\frac{15\times0.1}{25}$

22. Which one of the following equations shows formation of hardness in water?

A. $Ca(HCO_3)_{2\,(aq)} \longrightarrow CaCO_{3(s)} + CO_{2(g)} + H_2O_{(l)}$
B. $CO_{2(g)} + H_2O_{(l)} + CaCO_{3(s)} \longrightarrow Ca(HCO_3)_{2(aq)}$
C. $CO_{2(g)} + Ca(OH)_{2(aq)} \longrightarrow CaCO_{3(s)} + H_2O_{(l)}$
D. $CaCO_{3(s)} \longrightarrow CaO_{(s)} + CO_{2(g)}$

23. The number of moles of chloride ions in $50cm^3$ of 2.0M aluminium chloride solutions is

A. 0.1
B. 0.2
C. 0.3
D. 0.4

24. Which one of the following mixtures will react when heated?

A. Magnesium oxide and iron
B. Iron (III)oxide and copper
C. Zinc and aluminium oxide
D. lead(II)oxide and magnesium

25. Gas *Y* was bubbled through aqueous solution of Iron(II) chloride, and the green solution turned to yellow. What is gas *Y*?

A. displacing agent
B. acidic gas
C. reducing agent
D. oxidising agent

26. Which one of the following solutions contains the same number of hydrogen ion on the number of moles of sodium ions in $50cm^3$ of a 0.2M sodium sulphate solution, Na_2SO_4?

A. $200cm^3$ of 0.1M HNO_3
B. $150cm^3$ of 0.2M H_2SO_4
C. $100cm^3$ of 0.5M HCl
D. $50cm^3$ of 1M H_3PO_4

27. The mass of oxalic acid *($H_2C_2O_4$)* required to prepare $250cm^3$ of 1.5M solution of the acid is *(H=1, C=12, O=16)*

A. $\frac{1.5\times250}{1000\times90}$
B. $\frac{1000\times250}{90\times1.5}$
C. $\frac{90\times250}{1000\times1.5}$
D. $\frac{1.5\times250\times90}{1000}$

28. Exposure of chlorine water to sunlight leads to formation of

A. HOCl
B. H_2
C. O_2
D. CO_2

29. The preparation of sulphuric acid by contact process is similar to preparation of ammonia from nitrogen and hydrogen in that both involve

A. low pressure and low temperature
B. high pressure and high temperature
C. low pressure and high temperature
D. high pressure and low temperature

30. 0.4g of metal hydroxide, *MOH* reacted completely with $20cm^3$ of a 0.5M nitric acid. The relative formula mass of *MOH* is

A. $\frac{0.5\times20}{0.4\times1000}$

B. $\frac{1000\times0.5}{0.4\times20}$

C. $\frac{0.4\times1000}{0.5\times20}$

D. $\frac{0.4\times20\times0.5}{1000}$

31. The atomic number of element *T* is 7. The atomic number of the element that is immediately below *T* in the same periodic table is

A. 12
B. 13
C. 14
D. 15

32. Lead(II) nitrate was heated and the residue allowed to cool. Which one of the following is the colour the residue?

A. Black
B. Yellow
C. White
D. Brown

33. An acid H_3A reacts with sodium hydroxide solution according to the equation.

$$H_3A_{(aq)} + 3NaOH_{(aq)} \longrightarrow Na_3A_{(aq)} + 3H_2O_{(l)}$$

$20cm^3$ of 0.1M sodium hydroxide required *y* cm^3 of 0.06M solution of acid. The value of *y* is

A. $\frac{20\times0.1}{3X0.06}$

B. $\frac{20\times0.1\times3}{0.06}$

C. $\frac{0.06\times3}{20\times0.1}$

D. $\frac{20\times0.06}{3\times0.1}$

34. The reaction between lumps of calcium carbonate and dilute hydrochloric acid can be made to proceed faster by;

A. using much volume of dilute hydrochloric acid
B. using little mass of calcium carbonate
C. grinding lumps of calcium carbonate before use
D. adding iron powder to the mixture

35. The electronic configuration of elements *P, Q, R* and *S* are *2, 4; 2, 6; 2, 8, 2* and *2, 8, 7* respectively. Which elements react together to form a compound with high melting points?

A. *P* and *S*
B. *Q* and *R*
C. *Q* and *S*
D. *P* and *Q*

36. Which one of the following equation shows a reduction process?

A. $2H^+_{(aq)} + 2e \longrightarrow H_{2(g)}$
B. $2Cl^-_{(aq)} \longrightarrow Cl_{2(g)} + 2e$
C. $Cu_{(s)} - 2e \longrightarrow Cu^{2+}_{(aq)}$
D. $HCl_{(aq)} \longrightarrow H^+_{(aq)} + Cl^-_{(aq)}$

37. Which one of the following ions will form a white precipitate with acidified barium nitrate solution?

A. $CO_3^{2-}(aq)$
B. $Cl^-(aq)$
C. $HCO_3^-(aq)$
D. $SO_4^{2-}(aq)$

38. The formula of the complex ion formed when excess sodium hydroxide solution is added to aluminium oxide is

A. $Al(OH)_3^-$
B. $Al(OH)_4^-$
C. $Al(OH)_3^{2-}$
D. $Al(OH)_4^{2-}$

39. Which one of the following is the concentration in grams per litre of a solution containing 0.05 moles of sodium chloride in $50cm^3$? *(Na=23, Cl = 35.5)*

A. $\frac{0.05 \times 50}{1000 \times 58.5}$
B. $\frac{0.05 \times 1000 \times 58.5}{50}$
C. $\frac{0.05 \times 50 \times 58.5}{1000}$
D. $\frac{1000 \times 50}{58.5 \times 0.05}$

40. The formation of plastic from ethane is an example of

A. vulcanization
B. neutralisation
C. condensation polymerisation
D. addition polymerisation

Each of the questions 41 to 45 consists of an assertion (statement) on the left hand side and the reason on the right hand side

A. If both the assertion and the reason are true statements but the reason is a correct explanation of the assertion.
B. If both the assertion and the reason are true statements but the reason is not a correct explanation of the assertion.
C. If both the assertion is true but the reason is not correct statement.
D. If both the assertion is not correct but the reason is a correct statement.

INSTRUCTIONS SUMMARISED

	Assertion	Reason
A.	True	True and is a correct explanation
B.	True	True but is not a correct explanation
C.	True	Incorrect
D.	Incorrect	Correct

41.	Diamond and graphite are isotopes of carbon	**because**	they both burn in air to produce carbon dioxide	
42.	Sodium carbonate decomposes on heating to form its oxide and carbon dioxide	**because**	Sodium belongs to group I in the periodic table.	
43.	Hydrogen chloride is collected by downward displacement of air	**because**	hydrogen chloride is denser than air.	
44.	When dry ammonia is passed over heated lead(II) oxide, the reddish-brown solid turns grey	**because**	ammonia is a reducing agent.	
45.	In extracting sodium from molten sodium hydrochloride, calcium chloride is added	**because**	Calcium chloride increases the melting point of sodium chloride	

In each of the questions **46** to **50** one or more of the answers given may be correct. Select

A. If 1, 2 and 3 only are correct
B. If 1 and 3 only correct
C. If 2 and 4 only correct
D. If 4 only is correct

46. Which of the following elements form more than one oxide?
1. Nitrogen
2. Sulphur
3. carbon
4. Calcium

47. Which one of the following is/are formed when dilute nitric acid is reacted with a metal oxide?
1. Water
2. Oxygen
3. Nitrate of the metal
4. Nitrogen dioxide gas

48. Oxidation is the process by which
1. electrons are removed from a substance
2. hydrogen is removed from a substance
3. oxygen is added to a substance
4. electrons are added to a substance.

49. Which of the following substance will be dehydrated by concentrated sulphuric acid?
1. Ethanol
2. Graphite
3. Sugar
4. Lime

50. Which of the following solution has the same concentration of sodium hydroxide in moles per litre? *(Na = 23, O = 16, H = 1)*
1. Dissolving 2g of sodium hydroxide in 250cm^3 of water
2. Diluting 25cm^3 of 2M sodium hydroxide solution to 250cm^3 of solution
3. Dissolving 8g sodium hydroxide in one litre of water
4. Diluting 100cm^3 of 2M sodium hydroxide to 250cm^3 of solution.

END

273/2
GEOGRAPHY
Paper 2
27 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

GEOGRAPHY

Paper 2

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt **four** *questions.*

Choose **two** *questions from Part* **I** *and* **two** *from Part* **II**

In Part **II**, *only* **one** *question should be chosen from any one region.*

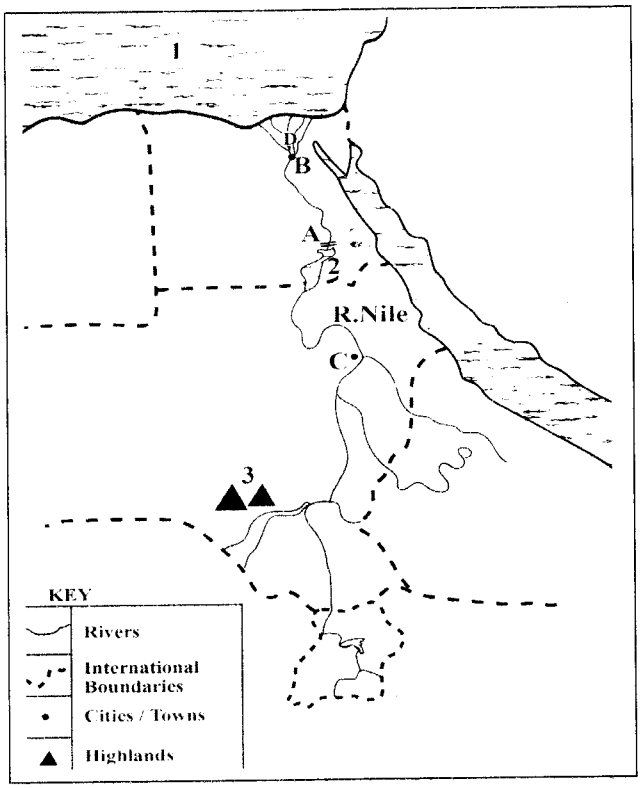
Any extra questions **shall not** *be assessed.*

PART I

REST OF AFRICA

Answer **two** *questions from this* **Part**.

1. Study Figure I: Map of the Nile basin provided and answer the questions that follow.



(a) Name the:
   (i) Water bodies *1* and *2*.
   (ii) Dam *A*.
   (iii) Towns *B* and *C*.
   (iv) Highland *3*.
   (v) Delta *D*.

(07 marks)

(b) Explain the importance of the Nile basin to the development of Africa.
(06 marks)

(c) Describe the factors that have limited navigation most rivers in Africa.
(08 marks)

(d) Suggest possible measures to improve navigation along rivers in Africa.

(04 marks)

2. Study Table I below showing forest cover in selected African countries (2000 – 2010) and answer the questions that follow.

Country	Forested area as a % of total land area	
	2000	2010
Gabon	85.4	85.4
Dem. Rep. of Congo	69.4	68.0
Rep of South Africa	5.7	4.7
Liberia	48.1	44.9
Senegal	46.2	44.0
Ghana	26.8	21.7

Adapted: World Bank (2012/13), African Development Indicators, Washington DC p57

(a) Calculate the percentage change in forest cover for each country between 2000 and 2010. *(06 marks)*

(b) Draw a line graph to show the percentage land area under forest cover in 2010. *(08 marks)*

(c) (i) Identify the country with the
- highest
- lowest

percentage change in forest cover between 2000 and 2010. *(02 marks)*

(ii) Explain the factors leading to the highest percentage change in the country identified in (c) (i) above. *(06 marks)*

(d) Outline the measures being taken to conserve forests in Africa. *(03 marks)*

3. (a) Draw a sketch map of the Gezira irrigation scheme and on it mark and name:
(i) Towns: Sennar and Khartoum
(ii) Rivers: Blue and White Nile
(iii) Crop transport routes
(iv) Jabel Aulia Dam
(v) Irrigation areas: Gezira and Managil extension
(09 marks)

(b) Outline the aims of the Gezira irrigation scheme. *(04 marks)*

(c) Describe the factors that favoured the establishment of the Gezira irrigation scheme. *(06 marks)*

(d) Explain the problems that resulted from the establishment of Gezira irrigation scheme. *(06 marks)*

4. (a) Distinguish between **drifting** and **purse seining**. *(08 marks)*

(b) Identify any **two**:

(i) marine fish species caught in Africa. *(02 marks)*

(ii) modern fish preservation methods used in Africa. *(02 marks)*

(c) Describe the physical factors favouring the growth of the fishing industry in Africa. *(08 marks)*

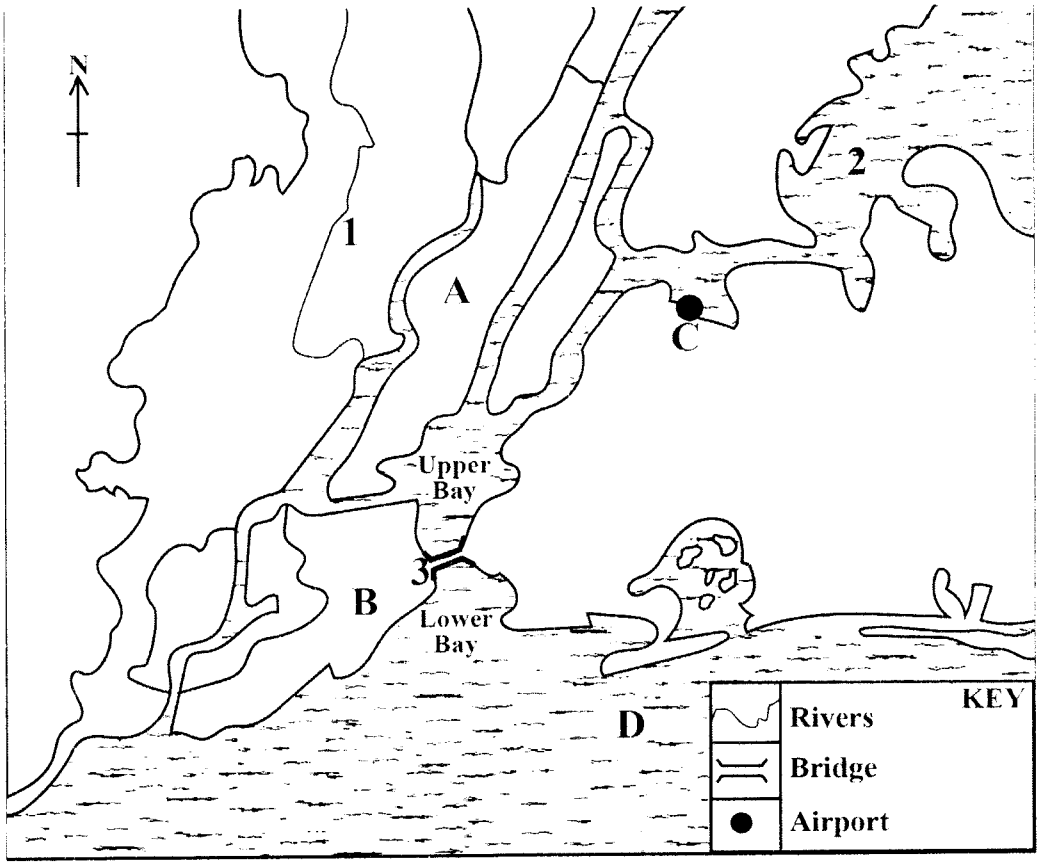
(d) Outline the measures being taken to promote fishing activities in Africa. *(05 marks)*

PART II: STUDIES IN DEVELOPMENT

Answer **two** *questions from this* **Part**

REGION I: NORTH AMERICA

5. Study Figure II below showing the site of New York City and answer the questions that follow.



(a) Name the:
(i) Islands *A* and *B*
(ii) Rivers *1* and *2*
(iii) Airport *C*
(iv) Bridge *3*
(v) Water body *D*

(07 marks)

(b) Describe the factors favouring the growth of New York City.

(08 marks)

(c) Explain the problems resulting from urbanization in the USA.

(06 marks)

(d) Outline the steps being taken to solve the problems in (c) above.

(04 marks)

6. Study table II below showing climate of the Canadian prairies and answer the questions that follow.

Months	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Temp ^{0}C	-19	-15	10	02	15	19	22	17	15	11	-2	-12
Precipitation	22	22	30	35	65	78	78	63	58	38	27	22

(a) Draw a suitable graph to represent the information in the table.

(08 marks)

(b) Explain the influence of climate on the Canadian prairies. *(06 marks)*

(c) (i) Identify the main crop grown on the Canadian prairies. *(01 mark)*

(ii) Describe the factors favouring crop growing on the Canadian prairies. *(05 marks)*

(d) Explain the benefits of arable farming to the people of Canada.

(04 marks)

7. (a) Draw a sketch map of new England and on it mark and name:

(i) States: Massachusetts and Rhode Island
(ii) Rivers: Connecticut and Merrimack
(iii) Towns: Boston and New Bedford
(iv) Lake Chaplain
(v) Long Island

(08 marks)

(b) Identify any **two** industries found in:

(i) Boston
(ii) New Bedford

(04 marks)

(c) Explain the benefits of industries in New England. *(08 marks)*

(d) Outline the factors limiting the growth of industries in New England. *(04 marks)*

REGION II: RHINE LANDS

8. Study Table III showing energy production in Germany (2005) and answer the questions that follow.

Table III: Germany: Energy Production (2005)

Type of Energy	% of Total Energy
Coal	49.8
Gas	11.3
Oil	1.7
Hydro power	3.2
Nuclear power	26.6
Others	7.4

Adapted: World Bank (2008), World Development Indicators, Washington DC p166-68

(a) Draw a pie chart to represent the information given in the table above. *(09 marks)*

(b) Identify
(i) any one coal mining area
(ii) least amount of energy produced in Germany. *(02 marks)*

(c) Describe the factors that have favoured the development of the coal mining sector in Germany. *(06 marks)*

(d) Outline the:

(i) environmental problems resulting from mining in Germany. *(04 marks)*

(ii) steps being taken to solve the problems in (d) (i) above. *(04 marks)*

9. (a) Draw a sketch map of Switzerland and on it mark and name:

(i) Relief divisions: Alps and central plateau
(ii) Rivers: Rhine and Rhone
(iii) Tourist sites: Lausanne and arosa
(iv) Lake Constance

(08 marks)

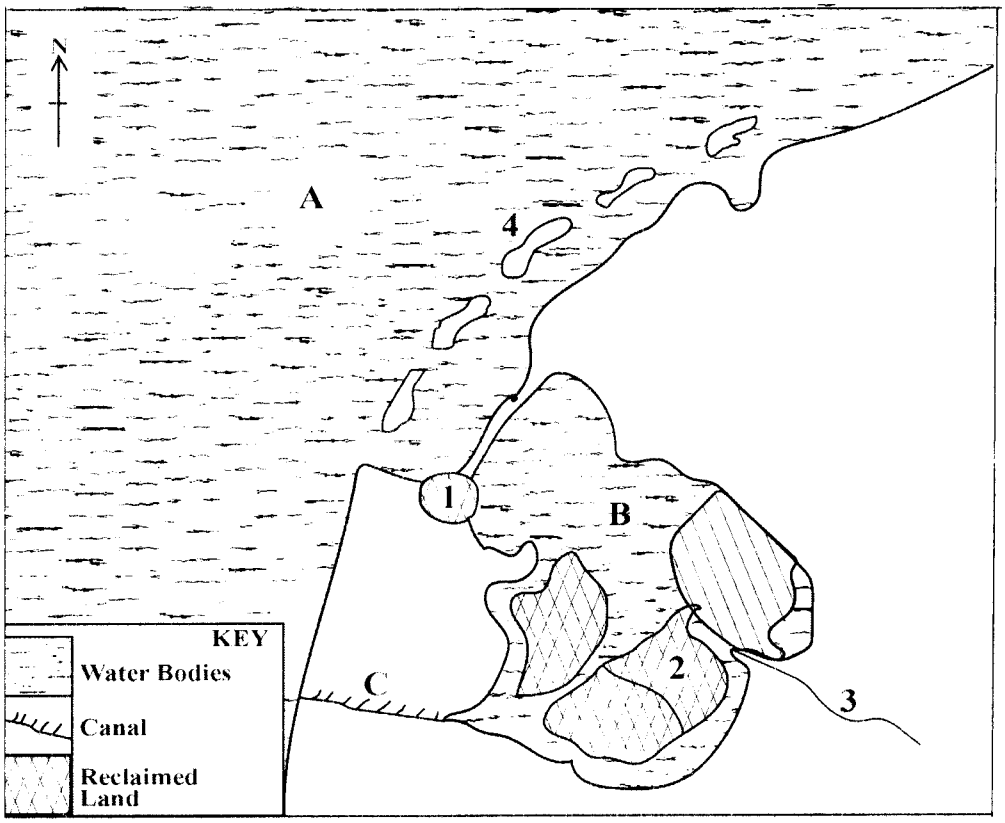
(b) (i) Identify any **two**
- winter and
- summer

tourist activities carried out in Switzerland. *(04 marks)*

(ii) Describe the factors favouring the growth of the tourism industry in Switzerland. *(06 marks)*

(a) Outline the
(i) problems facing the Swiss tourist sector. *(04 marks)*
(ii) measures taken to promote tourism in Switzerland. *(03 marks)*

10. Study Figure 3: Map showing reclaimed land by the Zuider Zee project and answer the questions that follow.



(a) Name the:

(i) Polders *1* and *2*
(ii) Sea *A*
(iii) River *3*
(iv) Lake *B*
(v) Islands *4*
(vi) Canal *C*

(07 marks)

(b) Describe the conditions that favoured the establishment of the Zuider Zee project. *(08 marks)*

(c) How is reclaimed land used in the Netherlands?

(d) Outline the
(i) problems faced during the utilization of reclaimed. *(05 marks)*

(ii) measures being taken to solve the problems in (d) (i) above. *(05 marks)*

REGION III: CHINA

11. (a) Draw a sketch map of China and on it mark and name.

(i) Areas receiving
- heavy rainfall
- low rainfall

(ii) North Sea and Yellow Sea

(iii) Rivers Huang He and Yangtse Kiang.

(iv) Tropic of cancer

(08 marks)

(b) Explain the factors influencing rainfall distribution in China. *(06 marks)*

(c) Describe the land use activities carried out in areas that receive

(i) heavy rainfall. *(03 marks)*

(ii) low rainfall. *(03 marks)*

(d) Outline the problems faced by the people living in areas receiving heavy rainfall in China. *(05 marks)*

12. Study table IV below showing China's population living in selected cities in 2011 and answer the questions that follow.

Table IV: China's Population living in Selected Cities

Urban centres	**Population**
Shanghai	18,665,000
Shenyang	5,325,000
Kumming	3,200,000
Nanjing	4,230,000
Beijing	14,170,000

Adapted: World City Information ; https://www.city-infos.com/list of urban areas by population

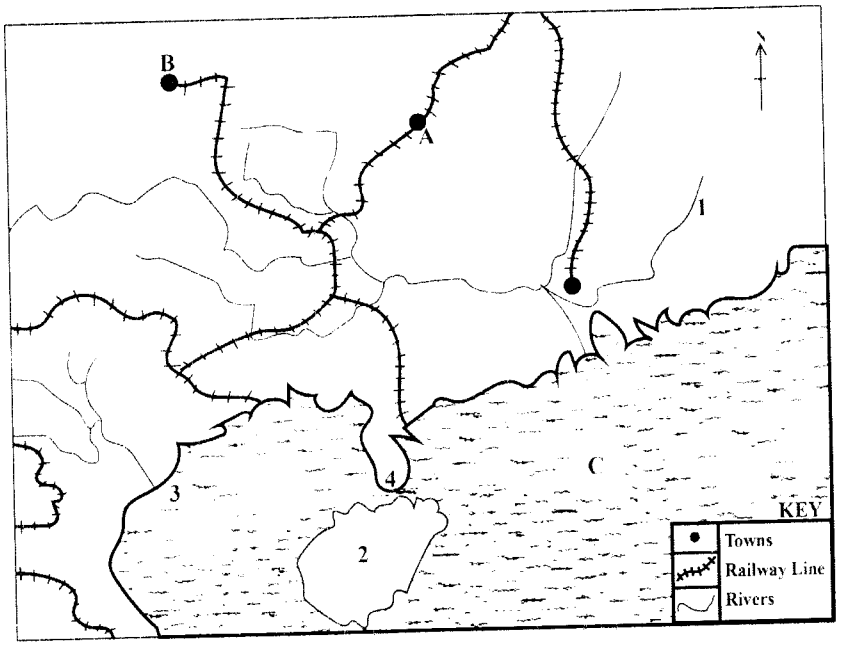
(a) Draw a bar graph to represent the information in the table. *(07 marks)*

(b) Identify the city with the
(i) largest population
(ii) lowest population
(02 marks)

(c) Giving examples, describe the conditions influencing population distribution in China. *(08 marks)*

(d) Explain problems faced by people living in cities with large population China. *(08 marks)*

13. Study Figure 4: Map of the Sikiang river basin and answer the questions that follow.



(a) Name the:

(i) Cities ***A*** and ***B***
(ii) River ***1***
(iii) Waterbody ***C***
(iv) Island ***2***
(v) Gulf ***3***
(vi) Peninsula ***4***

(07 marks)

(b) Explain the contribution of the Sikiang river basin to the development of china. *(08 marks)*

(c) Outline the problems faced by the people around the Sikiang river basin. *(06 marks)*

(d) Suggest possible solutions to the problems identified in (c) above. *(04 marks)*

END

456/1
MATHEMATICS
Paper 1
25 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

MATHEMATICS

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt **all** *questions in* Section **A** *and any* **five** *in* Section **B**.

Any extra question(s) answered shall **not** *be marked.*

All necessary calculations must be done in the answer booklet provided. Therefore, no paper should be given for rough work.

Silent, non – programmable scientific calculators and mathematical tables with a list of formulae may be used.

Graph papers **are** *provided.*

SECTION A: 40 MARKS

Attempt **all** *questions*

1. Solve the equation: $5x^{2/3} = 80$ *(04 marks)*

2. The mean of the numbers 3, 5, 8, 1, 5, x and 7 is 5. Determine the:

(i) value of x *(02 marks)*
(ii) median of the numbers. *(02 marks)*

3. Given that $P = \begin{pmatrix} 6 & -2 \\ 4 & -1 \end{pmatrix}$ find $P^2 - P$. *(04 marks)*

4. A number is selected at random from the set { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10}. Find the probability that the number is a

(i) triangular number. *(02 marks)*
(ii) factor of 72. *(02 marks)*

5. The size of the exterior angle of a regular polygon is 90^0 less than the interior angle. Find the

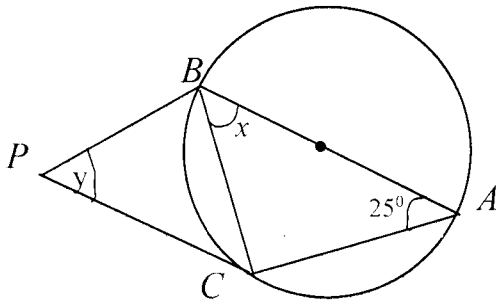
(i) size of the interior angle. *(02 marks)*
(ii) number of sides of the polygon. *(02 marks)*

6. Given that $\text{Cos}\theta = \frac{3}{5}$, find $2\text{Sin}\theta - \text{Cos}\theta$. *(04 marks)*

7. A rectangular plot of land $(x + 2)$ metres by $(x - 3)$ metres has an area of 104m^2. Find x. *(04 marks)*

8. Given that $a * b = a^2 - 3b$, evaluate $3 * (2 * 1)$. *(04 marks)*

9. In the diagram $\overline{AB}$ is a diameter of the circle. $\overline{MB}$ and $\overline{MC}$ are tangents and angle BAC = 25^0. Find the values of x and y. *(04 marks)*



10. Solve the equation: $\frac{x+1}{3} - \frac{x-2}{4} = \frac{x}{6}$ *(04 marks)*

SECTION B

Answer any **five** *questions from this* Section

11. The table below shows marks obtained by 40 pupils in a mathematics exam.

16	17	21	14	36	41	31	49
37	11	35	34	42	45	28	46
23	36	35	44	43	32	29	47
26	28	40	33	29	32	41	24
18	38	39	27	38	20	37	33

(a) Draw a frequency distribution table for the marks, starting with the class of 10 – 14. *(07 marks)*

(b) State the:

(i) modal class *(01 mark)*

(ii) class width *(01 mark)*

(iii) median class *(01 mark)*

(c) Calculate the mean mark. *(02 marks)*

12. A triangle PQR has vertices $P\ (4, 2)$ $Q\ (1, 5)$ and $R\ (1, -2)$. Its image under a transformation matrix M has vertices P' $(8, 4)$ $Q'\ (2, 10)$ and $R'\ (2, -4)$.

(a) Find the matrix and describe the transformation fully. *(05 marks)*

(b) Triangle $P'Q'R'$ is then transformed by the matrix $N = \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$ to give triangle $P''Q''R''$. Find the coordinates of $P''Q''R''$. *(04 marks)*

(c) Determine a single matrix that would map triangle $P''Q''R''$ back into triangle PQR. *(03 marks)*

13. (a) Copy and complete the table below for $y = (3x + 1)(2x - 5)$.

x	-1	0	1	2	3	4
$3x + 1$	-2	—	—	—	10	—
$2x - 5$	-7	—	—	—	—	—
y	14		-12		10	

(04 marks)

(b) Use your completed table to draw a graph of $y = (3x + 1)(2x - 5)$ with a scale of 2 cm for 1 unit on the x-axis and 2cm for 5 units on the y-axis. *(03 marks)*

(c) Draw on the same axes the line $y = 5$. *(01 mark)*

(d) Use the two graphs above to solve the equation $6x^2 - 13x - 10 = 0$. *(04 marks)*

14. A rectangular field 115 m long has an area of 8625 m^2. It is fenced with posts 5m apart, with a post at each corner. Four lines of wire are nailed to the posts. Find:

(a) the number of posts needed. *(04 marks)*

(b) the length in metres of wire used for the four lines. *(03 marks)*

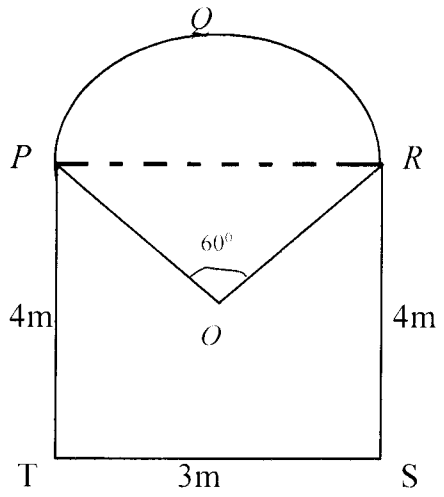
(c) the cost of fencing the field if each post costs Shs 5,000; the wire costs Shs 850 per metre and labour cost is Shs 100,000. *(05 marks)*

15. (a) Evaluate: $\begin{pmatrix} 3 & 5 \\ 0 & 1 \end{pmatrix} - \begin{pmatrix} 2 & 6 \\ 1 & -3 \end{pmatrix} \begin{pmatrix} 4 & 8 \\ 3 & 1 \end{pmatrix}$ *(02 marks)*

(b) Given that A = $\begin{pmatrix} 1 & 3 \\ 5 & 3 \end{pmatrix}$ B = $\begin{pmatrix} 3 & 1 \\ 5 & -1 \end{pmatrix}$ and C = $\begin{pmatrix} p & 0 \\ 0 & q \end{pmatrix}$ and that AB = BC, determine the value of p and q. *(06 marks)*

(c) Solve for x and y: $\begin{pmatrix} 3 & -2 \\ 2 & 3 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 4 \\ -6 \end{pmatrix}$ *(04 marks)*

16. A doorway of a church is made up of a circular arc PQR which subtends an angle of 60^0 at the centre O; two upright bars PT and RS each of length 4m, and a horizontal bar ST of length 3m. Using $\pi = 3.142$, find the area of the doorway in m^2. *(12 marks)*



17. Two airports A and B are 280 km apart, B being north of A. An aircraft starts from A, flies for 160km to C on a bearing of 060^0. By calcualtion, find the:

(a) distance of C East of AB. *(03 marks)*

(b) distance of C from B. *(04 marks)*

(c) bearing in which the aircraft must fly to reach B. *(05 marks)*

END

223/1
CHRISTIAN RELIGIOUS EDUCATION
(Christian Living Today)
Paper 1
18 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

CHRISTIAN RELIGIOUS EDUCATION

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt **five** *questions choosing* ***one*** *from each of the Sections* **A**, **B**, **C**, **D** *and* **E** *in all.*

All questions carry equal marks

Any extra question shall **not** *be assessed.*

SECTION A

LIVING IN A CHANGING SOCIETY

1. (a) How has the Ugandan society changed today? *(12 marks)*

   (b) As a Christian, how can you react to such changes? *(08 marks)*

2. (a) Give reasons to explain why many Ugandans are choosing to work abroad. *(10 marks)*

   (b) What Christian advice can you give to workers in poor countries? *(10 marks)*

3. (a) 'In the early days of Christianity, the church disapproved of some leisure activities.' Mention some of them. *(08 marks)*

   (b) Why did the early church reformers disapprove of some leisure activities of their time? *(12 marks)*

SECTION B

ORDER AND FREEDOM

4. (a) How was justice promoted and maintained in the African traditional society? *(10 marks)*

   (b) What Biblical teachings can help one to promoe justice in the society? *(10 marks)*

5. (a) How did Reverend Ezekiel Apindi of Kenya prove his servanthood during his ministry? *(08 marks)*

6. (b) Using the Bible as an example, show how modern Christians can serve their communities. *(12 marks)*

7. In what ways did the Israelites show their loyalty and disloyalty to God in the Old Testament? *(20 marks)*

SECTION C

LIFE

8. (a) Explain the particular moments in African tradition where people expressed joy. *(10 marks)*

(b) Identify the events in the Old Testament that brought happiness to the people. *(10 marks)*

9. (a) Explain the views held in your community about unending life. *(10 marks)*

(b) In what ways do Christians prepare themselves for life after death? *(10 marks)*

10. (a) Explain the successes Uganda has attained since independence. *(12 marks)*

(b) What benefits have Ugandans acquired from such successes? *(08 marks)*

SECTION D

MARRIAGE AND COURTSHIP

11. (a) Explain the problems common in modern families today? *(10 marks)*

(b) How is the church helping families deal with the problems? *(10 marks)*

12. (a) What forms of inequalities exist between male and female sexes in your society? *(08 marks)*

(b) Show how the New Testament promotes equality of all persons. *(12 marks)*

13. (a) What are the causes of marriage instabilities in the present situation? *(10 marks)*

(b) Explain the Christian advice to couples intending to divorce. *(10 marks)*

SECTION E

MAN'S RESPONSE TO GOD THROUGH FAITH AND LOVE

14. (a) How did people in African traditional society search for God? *(10 marks)*

(b) In which ways did people in the Old Testament prove their belief in God? *(10 marks)*

15. (a) Describe the ways in which the Jews evaded God during the times of Jesus. *(12 marks)*

(b) Why did the Jews reject Jesus as the Messiah? *(08 marks)*

16. (a) Show the ways in which God was involved in the life of Israelites in the Old Testament. *(10 marks)*

(b) How did Jesus' followers get involved in the affairs of society after his resurrection? *(10 marks)*

END

612/4
IPS
IMAGINATIVE
COMPOSITION
Paper 4
23 July 2022
3 hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

INTEGRATED PRODUCTIVE SKILLS

IPS ART AND CRAFT

ORIGINAL IMAGINATIVE COMPOSITION IN COLOUR

Paper 4

3 hours

INSTRUCTIONS TO CANDIDATES:

Attempt **ONE** *question.*

The Art teacher should supply the candidates with cards measuring 5cm wide by 12cm long with which the candidates will demarcate the area at the top right – hand corner of the front surface of the paper. In this area, the candidate's name, school number and personal number, in that order must be written clearly. This area **must not** *be painted.*

Candidates must be informed that ***ruling*** *by any means is forbidden, except when marking off space for the name.*

You are required to make an original composition based on **one** *of the subjects given overleaf. Bear in mind that quality of composition, imagination, feeling and originality rather than literal interpretation are the main objectives of this paper.*

(a) You must not, on any account, reproduce other people's work.
(b) Candidates' name and question number attempted must be written at the back of the paper.
(c) Your composition should fill or approximately fill your sheet of paper.

Candidates are advised against writing their Centre name and Centre number on answer sheets.

SUBJECTS

1. Scuffle at a village borehole

2. The best cassava harvest

3. At a railway station. Some passengers are seen hastily buying food from local vendors while others bid farewell to their friends and relatives.

4. Prayer moments

5. Stuck in the floods.

6. It is a busy day at a local market.

7. A security officer seen running after a group of hawkers in the city.

8. Court in session.

END

612/5
IPS
CRAFT A
Paper 5
5 August 2022
5 ¼ hours

ENTEBBE JOINT EXAMINATION BUREAU

Uganda Certificate of Education

INTEGRATED PRODUCTIVE SKILLS

ART AND CRAFT

CRAFT A

Paper 5

5 hours 15 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt only **one** *alternative.*

Indicate the alternative attempted on your answer sheet.

Indicate your Index number and School given Number. **Candidates are advised against writing their Centre name and Centre number on answer sheets.**

1. In an area measuring 16 cm by 20 cm, design a menu card for 'Pocket Friendly Hotel' located in Maputo town. The items served at the hotel include:

Rice and beans	Shs. 2,500
Katogo and black tea	Shs. 5,000
Chicken luwombo	Shs. 15,000
Mineral water	Shs. 3,000
Cocktail juice	Shs. 5,000
Dip-fried fish	Shs. 10,000
Matooke and beef	Shs. 4,500

Use only **three** colours of your choice.

2. In a space 30 cm x 25 cm in only three colours, design a well-repeated pattern for wrapping birthday presents of your three- year old sibling. "Happy Birthday (name)" should form part of your design.

3. In an area 15 cm by 18 cm, design a badge for FUTURE STARS INFANT SCHOOL with the motto; "Toil to Achieve."

Use white and black plus **one** other colour of your choice.

4. Design a poster for an "Art Exhibition" in a space measruing 28 cm x 33 cm. the exhinbition is organised by Picaso School of Arts; majoring in Sculpture, Ceramics and Painting. It will take place on 5th March 2030 at the Nommo Gallery between 10.00 am to 5.00 pm.

Use not more than **three** colours.

END

1. (a) Distinguish between **complementary** and **neutral** colours. *(02 marks)*

   (b) List **two** neutral and **two** complementary colours. *(02 marks)*

   (c) Give **three** uses of colour in Art and Design. *(03 marks)*

2. Briefly explain the following principles of Art and Design

   (a) Rhythm *(02 marks)*
   (b) Balance *(02 marks)*
   (c) Perspective *(02 marks)*

3. (a) Define the term **studio technology.** *(01 mark)*

   (b) State **four** uses of a studio to a visual artist. *(04 marks)*

4. (a) Define the following terms in relation to clay work.

   (i) Scoring *(01 mark)*
   (ii) Wedging *(01 mark)*
   (iii) Leather-hard *(01 mark)*
   (iv) Vitrification *(01 mark)*

   (b) List down **four** possible areas of clay deposits. *(02 marks)*

5. (a) Distinguish between the following;

   (i) Tesserae and interstices. *(02 marks)*
   (ii) Photomontage and montage. *(02 marks)*

   (b) Explain the process of making a floor stone mosaic. *(07 marks)*

6. (a) Define the following terms as used in Art and Design.
   (i) Exhibition *(01 mark)*
   (ii) Craftsmanship *(01 mark)*
   (iii) Foreshortening *(01 mark)*

   (b) Explain any **four** factors hindering the staging of exhibitions in Uganda. *(04 marks)*

7. Explain the wet method of preparing clay. *(08 marks)*

8. (a) Distinguish between **planes** and **voids** in sculpture. *(02 marks)*

   (b) Explain the following techniques in relation to sculpture.
   (i) Carving *(02 marks)*
   (ii) Casting *(02 marks)*

9. (a) Define the term **glaze**. *(01 mark)*
   (b) Explain **three** basic techniques of glazing pottery. *(03 marks)*
   (c) Give **four** reasons why ceramic ware is glazed. *(04 marks)*

10. Basketry is a craft that economically benefits the community. Explain **six** benefits your community has gained from this craft. *(06 marks*

END

EITHER

A male adolescent model dressed in sportswear and wearing sports boots and stockings pulled upwards to the knee level, sits on a football in a relaxed mood *(as if listening to instructions from his coach)* The model sits with his legs slightly apart. The right and left arms are folded at the elbows and rest on the right and left thighs respectively, allowing the fingers to point outwards.

Candidates draw or paint the whole figure.

OR

A female adolescent model with a veiled head, wearing a school uniform, sits on an office chair behind a table facing the candidates directly. The right arm of the model clasps at the front part of the table. Her left arm is raised up as if giving an answer to the teacher.

Candidates draw the head and torso including the upper part of the table.

END

EITHER: STILL LIFE

ALTERNATIVE A

On a low table covered with a light cloth, place a big tray. In the middle of the tray, place a flask with its lid on. On the right side of the flask, place a medium – sized loaf of bread with a few slices falling off and lying atop each other. To the left of the flask, still on the tray but slightly in front, place a plastic NICE cup with its handle facing your right. Between the cup and the slices of bread, place a big tin of Blue Band Margarine (with its cover intact). To the right of the tray but not on the tray, a medium-sized kettle is placed with its spout facing left.

Candidates draw or paint the entire setting including the table.

ALTERNATIVE B

On the floor near the corner of the room, place a mortar in its upright position. A pestle is placed in a mortar with its remaining half facing the right of the setter. On the left side of the mortar but slightly in front, place a 20-litre jerry can in a ¾ view facing towards the right. To the right of the setter slightly in front of the mortar, place a coiled-basket approx. 30 cm in diameter half-filled with shelled ground nuts. In front of the setting but between part of the jerry can and basket, place a medium-sized wooden sieve leaning to the right of the basket.

OR: NATURE

ALTERNATIVE C

Candidates make a study or studies of a fresh tilapia fish with scales attached thereto.

ALTERNATIVE D

Candidates make a study or studies of a grasshopper.

ALTERNATIVE E

Candidates draw or paint a landscape within the school showing a toilet facility with some trees in the back and foreground.

END

208/1
LITERATURE
IN ENGLISH
Paper 1
29 July 2022
2 ½ hours

ENTEBBE JOINT EXAMINATIONBUREAU

Uganda Certificate of Education

LITERATURE IN ENGLISH

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Attempt **five** *questions in all on* **five** *books, choosing* **two** *questions on two books from* Section **A** *and* **three** *books from* Section **B.**

In Section **A**, *you must answer one question from Sub – Section I (passages) and one question from Sub – Section II (essays).*

You **must** *cover one play and one novel.*

In Section **B**, *you must answer* **three** *questions, one of which must be from the poetry questions* ***23*** *to* ***26.***

SECTION A

Sub – Section I (Passages 1 — 4)

Choose one of the passages 1 – 4; read it carefully and answer the questions that follow.

Either

1: FRANCIS IMBUGA: *The Return of Mgofu*

MTANGE &: MNAVI — [*Together*] Yes, Mgofu, we slept well.

NGODA: — That's good. Nora, my daughter, returned from her studies last night, just after you retired to bed. She has been away for three years.

NORA: — I greet you, people of our motherland.

MTANGE &: MNAVI — We greet you too, our daughter,

NGODA: — Nora, . . . we named her after the woman who gave birth to me right here at this shrine. *[visibly amused]* That was soon after my father's death. He was buried under that fig tree over there, where the sick sit. My mother is buried there too. And when my time comes, which is not too far away, I to shall be laid to rest there. Nora, here is my witness. Not so, Ulivaho?

NORA: — It's so, father.

NGODA: — I thank you.

MTANGE: — *[cutting in]* Allow me to stand by your father's graveside for a few moments.

NGODA: — That's granted. My late father was a man of Mndika. Where is the wisdom of denying your request? *[*MTANGE *and* MNAVI *observe silence at the graveside]*

MNAVI: — We thank you for that.

NGODA: — Quite often we make a mistake. A mistake of thinking that we learn from the wisdom of hindsight. No! No, we don't.

MNAVI: And do we not?

NGODA: No, we don't. My people, what we actually learn from is the ignorance of our understanding. Probably the appreciation of the future too. We think wrongly about the future. The turning point can only be reached by our children and their children.

MTANGE: A profound thought, indeed.

NGODA: *[contemplating]* I've been thinking deeply about what we discussed last night. If your leader is thinking of bringing women closer to the seat of rule, you should support him. That is surely the future. Nderema took that path several years ago. Now see where they are.

MTANGE: Mwami Mhando already has a list of deserving women whom he wishes to join the Inner Circle of Elders known as Sujas, for servants.

MNAVI: I think he intends to revral their names on Remembrance Day.

NGODA: *[looking excited]* That's music to my ears. I shall pray for it. You see, tradition is only good when it helps a nation to improve the human condition of its people. Many will resists change out of ignorance and selfishness.

Questions:

(a) What happens shortly before this scene? *(04 marks)*

(b) Describe the character of Mtange and Ngoda in the passage. *(08 marks)*

(c) Identify and illustrate the themes in the conversation above. *(04 marks)*

(d) Describe what follows this passage. *(04 marks)*

Or

2. WILLIAM SHAKESPEARE: ***The Merchant of Venice:***

Portia: A pound of that same merchant's flesh is thine,
The court awards it, and the law doth give it.

Shylock: Most rightful judge!

Portia: And you must cut this flesh off from his breast;
The law allows it, and the court awards it.

Shylock: Most learned judge! A sentence: come, prepare.

Portia: Tarry a little, there's something else.
Thisbond doth give thee here no jot of blood
The words expressly are 'a pound of flesh,'
Take then thy bond, take thou thy pound of flesh,
But in the cutting it, if thou dost shed
One drop of Christian blood, thy lands and goods
Are by the laws of Venice confiscate
Unto the state of Venice.

Gratiano: Oh, upright judge!
Mark, Jew — Oh learned judge!

Shylock: Is that the law?

Portia: Thyself shall see the act.
For as thou urges justice, be assured
Thou shalt have justice more than thou desir'st.

Shylock: I take this offer then. Pay the bond thrice
And let the Christian go.

Questions:

(a) What conflict does the passage show the readers? *(05 marks)*

(b) Describe the character of Portia as shown in the passage. *(04 marks)*

(c) Identify and briefly explain any three themes in the passage. *(06 marks)*

(d) What happens immediately after this passage? *(05 marks)*

Or.

3. JOHN STEINBECK: *The Pearl*

'Yes?' the doctor asked.
'It is a little Indian with a baby. He says a scorpion stung it.'
The doctor put his cup down gently before he let his anger rise.
'Have I nothing better to do than cure insect bites for 'little Indians'? I am a doctor, not a veterinary.'

'Yes, Patron,' said the servant.

'Has he any money?' the doctor demanded. 'No, they never have any money. I, I alone in the world am supposed to work for nothing - and I am tired of it. See if he has any money!'

At the gate the servant opened the door a trifle and looked out at the waiting people. And this time he spoke in the old language.

'Have you money to pay for the treatment?'

Now Kino reached into a secret place somewhere under his blanket. He brought out a paper folded many times. Crease by crease he unfolded it, until at last there came to view eight small misshapen seed pearls, as ugly and gray as little ulcers, flattened and almost valueless. The servant took the paper and closed the gate again, but this time he was not gone long. He opened the gate just wide enough to pass the paper back.

'The doctor has gone out,' he said. 'He was called to a serious case.' And he shut the gate quickly out of shame.

And now a wave of shame went over the whole procession. They melted away. The beggars went back to the church steps, the stragglers moved off, and the neighbors departed so that the public shaming of Kino would not be in their eyes.

For a long time Kino stood in front of the gate with Juana beside him. Slowly he put his suppliant hat on his head. Then, without warning, he struck the gate a crushing blow with his fist. He looked down in wonder at his split knuckles and at the blood that flowed down between his fingers.

Questions:

(a) What leads to this scene in the novel? *(05 marks)*

(b) Describe the character of Kino in the passage. *(04 marks)*

(c) What are your feelings in this passage? *(06 marks)*

(d) What happens shortly afterwards? *(05 marks)*

Or

4. LAWRENCE DARMANI: *Grief Child*

No one in Susa, not even the oldest man in the village, could remember a time like this. Here was a family, almost wiped out. People refused to believe that this could happen in their village. To some it was like a dream, they would wake to find it gone. But the reality hung over the village like dark clouds. It was a tragedy, a sorrow, a menacing omen. It could not be true. Such things don't happen in real life. May be they happened in distant lands; but not so close to

them. Yet an almost empty house reminded them that Nimo and all but one of his family members were no more. So ominous was the situation that people thought of Adu as the last victim to be waiting to be slaughtered by whatever malevolent hand that had caused all this. Then Adu would follow his father, mother and sister into the world of the dead.

To Adu it felt like a dream, a nightmare that scares you until day breaks and vanishes to the back of your mind. He waited for the day to break soon.

Mahama was a walking shadow. He was afraid now for his own survival. Mahama and Adu were living with Appiah and his family. In no time, Mahama decided that he would leave Susa before his turn came.

When he told Appiah, the older man said, 'Mahama, those who run away from trouble often meet it. You are planning to leave this village because of what happened to all of us. You should consider that trouble is everywhere. Don't let this trouble drive you away from this place. Stay with me: you will be able to make some money here.'

Mahama listened to him but he had already made up his mind to go away. He was not alone. The events had made it too scaring for some to remain in Susa. Only a month later, two families left the village with flimsy reasons which did nothing to satisfy the inquirers.

Yaro did not know what to say to his friend Adu. Only a few months ago when the first tragedy occurred, he had told Adu that God was able in the worst of situations to bring out something better. But surely the death of Adu's father could not be the better thing! Was his statement still true? He had no answer. He could only let the boy come to his house and unburden his soul for as long as he wanted, and cry with him and hold the boy in his arms. It was a tragedy to which he had no ready answers. In the silence of his room he prayed that God would himself talk to the boy.

Questions:

(a) What events come before this incident? *(06 marks)*

(b) Describe the feelings that this passage arouses in you. *(05 marks)*

(c) Explain any **two** themes shown in the extract. *(04 marks)*

(d) What happens shortly after the passage? *(05 marks)*

Sub Section II

*Attempt only **one** question from this* Sub Section. *If your answer in sub section (i) was on a play, now select a novel; but if your answer in sub section (i) was a novel, now you must select a play.*

FRANCIS IMBUGA: *The Return of Mgofu*

Either

5. How is the theme of leadership and power brought out in the play *The Return of Mgofu?* *(20 marks)*

Or

6. Explain the ways in which the play *The Return of Mgofu* is relevant in your community today. *(20 marks)*

WILLIAM SHAKESPEARE: *The Merchant of Venice*

Either

7. Explain any **three** themes in The *Merchant of Venice.* *(20 marks)*

Or

8. Of Shylock and Antonio, who do you sympathise with and why? *(20 marks)*

LAWRENCE DARMANI: *Grief Child*

Either

9. What challenges does Adu face while growing up? How does he finally overcome them? *(20 marks)*

Or

10. Describe the character of Goma in the novel, *Grief Child.* *(20 marks)*

JOHN STEINBECK: ***The Pearl***

Either

11. In what ways does the discovery of the pearl make Kino and his family insecure in the novel *The Pearl ?* *(20 marks)*

Or

12. How is the theme of poverty shown in the novel *The Pearl?* *(20 marks)*

SECTION B

In this Section, *you must answer* ***three*** *questions covering* ***three*** *books.* ***One*** *of the questions* ***must*** *be chosen from a* ***Poetry*** *book.*

SILVESTER ONZIVUA: *The Heart Soothers*

Either

13. What challenges does Mini face in her relationship with Jimmy? Show how she overcomes these challenges. *(20 marks)*

Or

14. Describe the major lessons in *The Heart Soothers.* *(20 marks)*

OKIA OMTATAH OKOITI: *Voice of the People*

Either

15. Do you find the play *Voice of the People* relevant to Uganda today? Give reasons. *(20 marks)*

Or

16. What is the importance of Nasirumbi in the play *Voice of the People*? *(20 marks)*

VICTOR BYABAMAZIMA: *Shadows of Time*

Either

17. Explain the ways in which *Shadows of Time* is a story of suffering. *(20 marks)*

Or

18. Describe the character of Flora in the novel *Shadows of Time.* *(20 marks)*

CHINUA ACHEBE: *Things Fall Apart*

Either

19. What makes Obierika a likeable character in *Things Fall Apart*? *(20 marks)*

Or

20. Describe the different traditional beliefs of the people of Umuofia in the novel *Things Fall Apart.* *(20 marks)*

DANIEL MENGARA: *Mema*

Either

21. In what ways is the novel *Mema* relevant to your community today? *(20 marks)*

Or

22. What makes Akoure Ekang an interesting character in the novel *Mema?* *(20 marks)*

DAVID RUBADIRI: *Growing up with Poetry*

Either **23.** *Read the poem below and answer the questions after it*

I, too, sing America

I, too, sing America

I am the darker brother.
They send me to eat in the kitchen
When company comes,
But I laugh,
And eat well,
And grow strong.

Tomorrow,
I'll sit at the table
When company comes,
Nobody'll dare
Say to me
'Eat in the kitchen',
Then.

Besides, they'll see how beautiful I am
And be ashamed –

I, too, sing America.

Questions:

(a) State the subject matter of this poem. *(06 marks)*

(b) Mention any five character qualities of the speaker in the poem. *(05 marks)*

(c) What do you find appealing in this poem? *(06 marks)*

(d) How do you feel about the person in the poem and why? *(03 marks)*

Or **24.** Select any poem you have read from ***Growing up with Poetry*** by David Rubadiri on the theme of *Identity* other than the one in **question 23** above and use it to answer the following questions:

(a) State the name of the poet and the title of the poem. *(02 marks)*

(b) What does the poem say about *Identity*? *(06 marks)*

(c) What is interesting in the poem? *(07 marks)*

(d) Which lessons do you learn from the poem? *(05 marks)*

A.D. AMATESHE: *An Anthology of East African Poetry*

Either **25.** *Read the poem below and answer the questions after it*

Song of the Worker

We squat
We move
Left centre right
Breaking stones
KwaKwaKwa!
Our hands sore
Our heads ache
Our knees numb
Our backs break
Breaking stones
KwaKwaKwa!

We squat
We move
Back centre forward
Tilling the land
Kwa! Kwa! Kwa!

Our song is sorrow
Our tears we eat
In rags we move
Tramping the land
Kwa! Kwa! Kwa!
To them:
It's dance

They roar in laughter
While we sweat and bleed

To them:
It's pleasure
They weep with laughter
While we stumble and tumble
Burdened and hungry
Kwa! Kwa! Kwa! Kwa! Kwa!

(E. Songoyi)

Questions:

(a) What is this poem about? *(06 marks)*

(b) Who is the speaker in the poem? *(02 marks)*

(c) Explain what makes this poem attractive to you. *(07 marks)*

(d) How does the situation of the speaker make you feel and why? *(05 marks)*

Or **26.** Select any poem you have read from ***An Anthology of East African Poetry*** by A.D Amateshe on the theme of *Work* other than the one in question 25 above and use it to answer the following questions:

(a) State the name of the poet and the title of the poem. *(04 marks)*

(b) What does the poem say about *Work*? *(06 marks)*

(c) What makes the poem interesting to you? *(06 marks)*

(d) Write some piece of advice to a person who dislikes work. *(04 marks)*

END