

Name .....

Candidate's Signature .....

Date .....

101 / 1

**ENGLISH**

(Functional Skills, Cloze Test and Oral Skills)

Paper 1

**End of Term 1 2018**

Time: 2 Hours

## **FORM FOUR PRE-EXAMINATION 2018**

**Kenya Certificate of Secondary Education**

101/1

English paper 1

### **INSTRUCTIONS TO CANDIDATES**

- Write your name and index number in the spaces provided
- Sign and write the date of examination in the spaces provided above
- Answer ALL questions in this paper
- All your answers must be written in spaces provided in this question paper

### **FOR EXAMINER'S USE ONLY**

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1.	20	
2.	10	
3.	30	
<b>TOTAL</b>	<b>60</b>	

This paper consists of 6 printed pages

Candidates should check the question paper to ensure that all the printed pages are printed as indicated and no questions are missing

## **1. FUNCTIONAL WRITING**

Your school has gone to Nakuru to present the winning dance, you being the soloist. You will be out for three days as outlined: first day travelling and performance, second day, visit to Lake Nakuru National Park and the last day journey back to school.

- i) Write the diary you kept for the three days. .... (8mks)  
ii) Write a personal journal you kept for the three days. .... (12mks)



## 2. CLOZE TEST.

Fill in each blank space with the most appropriate word.

When studying, a typical pattern for many people is this: (1) \_\_\_\_\_ mind is sharpest in the morning, so the most (2) \_\_\_\_\_ tasks should be undertaken (3) \_\_\_\_\_. After forty five minutes or so, (4) \_\_\_\_\_ begins to decline; a few (5) \_\_\_\_\_ break is enough to (6) \_\_\_\_\_ it. To get the best out of break, close your eyes to rest (7) \_\_\_\_\_ and stretch your arms and shrug your shoulders to relieve muscular tension. (8) \_\_\_\_\_, you could have a brief change of task-glance at a newspaper or take a short stroll. But don't get (9) \_\_\_\_\_ after five minutes at most, (10) \_\_\_\_\_ to your studying.

## 3. ORAL SKILLS

a) Read the poem below and answer the questions that follow.

The chief defect of Henry king  
Was chewing little bits of string  
At last swallowed some which tied  
Itself in ugly notes inside  
Physicians of the utmost fame  
Were called at once; but when they came  
They answered as they took their fees  
“there is no cure for this disease  
Henry will soon be dead”  
His parent stood about his bed  
Lamenting his untimely death  
When Henry with his latest breath  
Cried, “Oh, my friends, be warned by me  
That breakfast, dinner, lunch and tea  
All the human frame requires”  
With that the wretched child expires.

- i) Describe the rhyme scheme of the poem above and state its effectiveness. (3mks)

.....  
.....  
.....  
.....

- ii) Identify and explain how you would use any two non-verbal cues when reciting the above poem. (4mks)

.....  
.....  
.....  
.....

- iii) Apart from rhyme, identify and illustrate two other devices used in this poem. (4mks)

.....  
.....  
.....  
.....

- iv) How would you say the last line and why? (2mks)

.....  
.....  
.....

- b) Indicate the type of intonation appropriate for the following. (3mks)

- i) Where is Jane?  
.....  
  
ii) Do you like swimming?  
.....  
  
iii) Oh my!  
.....

### ORAL SKILLS

4. a) As a newly elected President of Nguvu Tosha secondary school you are going to address students in your school.

- i) Give two things you will do to attract audience to listen to you. (2mks)

.....  
.....  
.....  
.....

- ii) Giving a reason for each, give four things you will talk about. (8mks)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

**b) Supply each of the following words with their synonyms. (4mks)**

i) Admit

.....

ii) Bizarre

.....

iii) Sure

.....

iv) Want

.....

NAME .....

INDEX NO .....

DATE .....

101 / 2

**ENGLISH**

(Comprehension, literacy appreciation and grammar)

Paper 2

**End of Term 1 2018**

Time: 2 ½ Hours

## **FORM FOUR PRE-EXAMINATION 2018**

Kenya Certificate of Secondary Education

101/2  
English paper 2

### **INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the spaces provided .
2. Sign and write the date of examination in the spaces provided .
3. Answer ALL the questions in this question paper.

### **FOR EXAMINER'S USE ONLY**

QUESTION	MAXIMUM	CANDIDATE'S SCORE
1	20	
2	25	
3	20	
4	15	
<b>TOTAL SCORE</b>	<b>80</b>	

This paper consists of 8 printed pages  
Candidates should check the question paper to ensure that all the  
printed pages are printed as indicated and no questions are missing.

**Read the following passage and answer the questions that follow.**

As we stand, HIV/AIDS is on the rampage; ravaging the old and young alike. It is time for the people to decide for themselves what is good and what is not and the early they do this the better.

The youth for instance can rise up with the message of hope and assure everybody that it is possible for a remnant to remain by just abstaining from premarital sex. And how will they abstain if everywhere they look, images of sex stare at them, beckoning alluringly?

The thing to remember is that it is their responsibility to censor the stuff that gets into their minds because this will definitely affect the kind of decisions and lifestyles they adopt. Before reading a pornographic book or magazine, they should pause and ask themselves, "Do I hope to become better after reading this?", the same consideration should be made before watching certain movies and listening to offensive music. Guarding one's mind against trash requires laying down very clear principles. Discipline is imperative.

For young people, it is important to choose friends wisely. They should determine what they should be doing when they come together. If a friend is not building them up, or is causing them undue pressure, they then should shun him or her. This pressure often takes the form of making those who choose to abstain from premarital or illicit sex feel inadequate.

Avoiding idleness is equally important. The wise say that an idle mind is the devil's workshop. The solution is to get busy with constructive activities be they academic, economic, physical or spiritual. Trying out new hobbies like gardening, playing football, swimming, basket weaving, baking and volunteer work is a step in the right direction.

Parents must also take the full responsibility of bringing up their children. They are the first counsellors of their children especially in the formative stages. Unless they do something in good time, they will cry alone when the disaster of teenage pregnancies, abortion and HIV/AIDS happen right under their own roofs. The onus is upon them to freely discuss issues of sexuality with their children.

Teachers too have a very crucial role to play in the lives of their students. The youth spend a bigger percentage of their waking moments with their teachers. The teachers not only equip them with academic knowledge but also the right attitudes and behaviour. And it is a good thing that sex education has been introduced in school curriculum. Studies by AMREF have shown that contrary to the popular believe, sex education does not promote promiscuity. Rather, it enlightens its recipients on productive health issues.

Moreover, places of worship must pitch in with their contributions. They are in excellent position of imparting the correct moral values to their adherents. Besides, they can provide social and religious activities that will build the youth up spiritually and mentally.

Finally, it is incumbent upon the government to put in place legislation governing what the citizens, especially the youth, are exposed to in terms of print or electronic media.

In conclusion, the future generation is keenly watching us to see if we will wreck or salvage the boat of their survival. Every member of our society has a part to play in enhancing morality. It is only by doing this that we can hope to check the onslaught of HIV/AIDS.

- a) Why is there need to make a decision soon? (2mks)

.....  
.....

- b) Write the following sentence in the past. The youth for instance can rise up with a message of hope. (1mk)

.....  
.....

- c) What is pornography and how do you think it influences one's behaviour? (3mks)

.....  
.....  
.....

- d) Rewrite the following sentence in indirect speech.

They should and ask themselves, "Do I hope to become a better after reading this?" (1mk)

.....  
.....  
.....

- e) Which words does the author use to show displeasure with some kinds of films and music? (2mks)

.....  
.....  
.....

- f) What sort of friends does the author seem to recommend? (2mks)

.....  
.....  
.....

- g) In point form, give evidence to show that every member of society has a role to play in enhancing morality? (5mks)

.....  
.....  
.....  
.....  
.....

- g) Explain the meaning of the following words and expressions as used in the passage. (4mks)

a) Beckoning alluringly .....

b) Adherents .....

c) Incumbent upon.....

d) Onslaught.....

**COMPREHENSION FROM THE SEEN TEXT**  
**THE RIVER AND THE SOURCE BY MARGARET OGOLA**

2. Read the passage below and answer questions that follow.

"And why, child have you not told us about this man before? Two weeks indeed!"

"Where does he come from and what are the names of his parents?" this from Maria.

"He comes from Scene, but I don't know the names of his parents."

"What do you mean you don't know? What is the world coming to!" She lamented.

Akoko drew on her fast dwindling powers to bring back reason and order.

"Accept it Maria, the world is changing. All is not lost, however. We must listen to the suit according to the (chick) for we are still the children of Ramogi. You shall therefore leave for Sakwa at cockcrow tomorrow and fetch your brother-in-law - this girl's uncle. I shall also send word to Yimbo to my nephews, the twins Opiyo and Odongo. Those two rascals must be old men now."

Finally, I shall get Father Thomas to send for Owuor at the Seminary. He is the closest thing to a brother the girl has and he must be there. These Seme people must not think that because we are widows and Christians and sojourners in this place, we do not know how things are done." She patted her granddaughter's hand with calm affection. "It is going to be all right. You will see. So long as there is no consanguinity and he is no thief or witch there is nothing to worry about. In any case what is a witch except one who is driven by his shortcomings to harm others? Besides I believe in God. Do not worry, all will be well." And Elizabeth thought to herself. "What will I do without her when she is gone? She is the steady rock of our lives." She looked at her simple hut in which she had grown up. It was round and grass thatched. There was a kind of enclosed veranda at the entrance, and then there was the main room which was semicircular. Outside were four granaries and a small cooking hut. Three granaries were empty, a testimony to the declining strength of her grandmother. Beside the granaries was a cattle pen which was generally full at night when the herds came in from grazing. It was still quite a respectable herd of cattle usually attended by hired men. Most other women would not have bothered, seeing that the only son was headed for priesthood; but Akoko had to instill in her daughter and granddaughter that work was a discipline and poverty was an enemy to be fought. "God has no time for the lazy, but the devil has," was a favourite saying of hers.

It was a simple house in which she had a simple life. But she had been surrounded by love and caring. She had lived among strangers but had never lacked the sense of continuity. It had been a good life.

(*The River and the Source*, Focus Publishers Ltd, 1994)

- a) Place this excerpt in its context.

(3mks)

.....  
.....  
.....  
.....  
.....

- b) Compare and contrast Akoko and Nyabera as brought out in this excerpt.

(3mks)

.....  
.....  
.....  
.....  
.....

- c) What aspects of tradition and culture are highlighted in this excerpt? (3mks)

.....  
.....  
.....  
.....

- d) Identify and illustrate two aspects of style used in the excerpt. (4mks)

.....  
.....  
.....  
.....

- e) What did Akoko mean when she said the world is changing? (2mks)

.....  
.....  
.....

- f) What evidence is there in the excerpt to show that Akoko is (6mks)

- i) Optimistic.....  
.....  
ii) Encouraging.....  
.....  
iii) Industrious.....  
.....

- g) Explain the meaning of the following words as used in the excerpt. (4mks)

- i) Respectable.....  
.....  
ii) Sojourners.....  
.....  
iii) Consanguining .....  
.....  
iv) Driven.....  
.....

**ORAL LITERATURE (20 MARKS)**  
**THE HARE AND THE MONKEY**

The following morning, the hare woke up at dawn and ran fast to the well. The cold dew numbed his tiny feet. When he got there, he put on his mask and got into the well to drink. When he had drunk enough and was just about to get out, he noticed two huge animals advancing towards the well. The earth vibrated more and more as they came closer and closer to the well. He remained motionless in the water and waited. When the animals reached the well and were just about to start drinking, the hare made such a loud noise in the water that the animals drew back in fear. The hare then quickly jumped out of the water and when the animals saw the wet, muddy, strange-looking creature, they ran away at lightning speed. The hare was pleased to see them run and he smiled broadly exposing brown teeth.

He then looked around and saw that all was clear. He picked a lot of fruit from the bushes nearby, some ripe, some sour, and took them all to the monkey who ate them greedily. So, day after day, the hare went to the well at dawn and repeated his usual trick. The animal soon became afraid of going to the well to drink. They could not understand what the strange looking creature in the water was. In due course, their necks became as thin as those of giraffes.

**Questions**

1. What evidence is there in the story to show this is an extract from a longer story? (2mks)

.....  
.....  
.....

2. Find two phrases in the passage suggesting that what is described went on for a period of time. 2mks

.....  
.....  
.....

3. Give two reasons why the animals at the well are frightened. (2mks)

.....  
.....  
.....

4. What tells you that the hare is in a hurry when picking the fruit? (1mk)

.....  
.....  
.....

5. With illustrations, identify two character aspects of Hare. (4mks)

.....  
.....  
.....

6. How can you classify this narrative? Give reasons for your answer. (2mks)

.....  
.....  
.....  
.....

7. Mood can be described as happy, sad, angry ..... (3mks)  
What is the mood of this story.

.....  
.....  
.....  
.....

8. Identify a simile used in the story. (1mk)

.....  
.....  
.....  
.....

9. Write down any descriptive words what add to the vividness of the story. (3mks)

.....  
.....  
.....  
.....

4. Rewrite the following sentences according to instructions given under each.

- a) i) Is it absolutely necessary to register students online?

(Begin; Do students.....  
.....  
.....

ii) Jane had just rushed out of the hall when the students started murmuring.

(Begin; No sooner .....  
.....  
.....

iii) The committee consists of the chairman, secretary and the treasurer.

(Rewrite using “comprise”).....  
.....  
.....

**b) Fill each of the blank spaces with the correct word.**

- i) Jane has a special liking ..... mathematics.  
ii) The host has a pet that answers ..... the name Totie.

**c) i) It is bad manners to spit on the ground. (Rewrite using gerund)**

- .....  
ii) James likes tea more than coffee (Begin; James prefers....)  
.....

**d) Fill in the blanks with the correct form of the word in brackets.**

- i) It is not possible to spell a word from her ..... (**pronounce**)  
ii) Do not wait for the bus, it comes to this town very ..... (**regular**)  
iii) The hunt for the murderers has been ..... (**intense**)

**e) Rewrite the following sentences in the passive.**

- i) People say this new material is very good.

.....  
ii) A guide took me to Fort Jesus  
.....

**f) Punctuate the following sentence (1mk)**

Certainly said Mayo I will see the manuscript next week.

- .....

**g) Replace the underlined word with the correct phrasal verb formed from the word in brackets.**

- i) The class teacher entered the classroom and caught us making noise. (**burst**)

- .....  
ii) After the attack, she discovered that the thugs had escaped with her expensive watch (**make**)

NAME .....

INDEX NO .....

DATE .....

101/3

**ENGLISH**

(Creative composition and Essays based on set texts)

Paper 3

**End of Term 1 2018**

Time: 2hours 30 minutes

## **FORM FOUR PRE-EXAMINATION 2018**

**Kenya Certificate of Secondary Education**

101/3

English paper 3

### **INSTRUCTIONS TO CANDIDATES**

1. Answer two questions from the paper; one from number one and question two

This paper consists of 2 printed pages

Candidate should check the question paper to ensure that all the printed pages are printed as indicated and no questions are missing.

**1. Imaginative composition (COMPULSOTY)**

**EITHER**

- a) Write a composition to illustrate the saying that "A bird in hand is worth two in the bush."

**OR**

- b) Write a composition beginning with the words

"You will serve as an example to the rest of the student in this school" the principal said.....

**2. Bertolt Brecht, The Caucasian chalk circle.**

Sometimes life can be full of contradictions with illustrations from Bertolt Brecht's *The Caucasian chalk circle*, show the truth of this statements.

**3. Optional set texts**

- a) Memories we lost

In a political crisis it is the innocent who are faced with hyried of plights. Justify this statement.  
Using the short story "The president". (20 mks)

**OR**

- b) Betrayal in the city (20mks)

Using Francis Imbuga's Betrayal in the City for your illustrations, show how the author has effectively employed the use of allusion in the delivery of the play

**OR**

- c) The Pearl

Bring your argument on "The Pearl" a certain the statement when the fortune knocks on a poor man's door. The affluent tend to be opportunistic (20 mks)

Jina ..... Nambari .....

Nambari .....

Tarehe .....

102/1

### KISWAHILI

Karatasi ya 1

(Insha)

Mwisho wa Muhula wa kwanza 2018

Muda: Saa 1  $\frac{3}{4}$

## MTIHANI WA KIDATO CHA NNE KABLA YA MWIGO 2018 CHETI CHA KUHITIMU ELIMU YA SEKONDARI

102/1  
Kiswahili 1

### MAAGIZO

- Andika insha mbili.
- Insha ya kwanza ni ya lazima
- Kila insha isipungue maneno 400.
- Kila insha ina alama 20
- Karatasi hii ina kurasa mbili.
- Watahiniwa wahakikishe kama kurasa zote zimepigwa chapa.

1. Hivi karibuni Waziri wa Elimu alipiga marufuku mtindo wa kutangaza matokeo ya mitihani ya kitaifa (KCPE na KCSE) kwa kupanga shule kulingana na jinsi zilivyofanya. Ulikuwa katibu wa tume iliyoteuliwa kuchunguza mtindo wa hapo awali. Andika ripoti yenu.
2. Ugatuzi umeleta hasara nyingi kuliko faida hapa nchini. Jadili.
3. Lila na fila havitangamani
4. Andika insha inayoishia kwa “.....nilibaini ilikuwa ruya tu na kushukuru kwa kutokuwa mhusika”.

Jina .....  
Nambari .....  
Tarehe .....

102/2

**KISWAHILI**

Karatasi ya 2

LUGHA

Mwisho wa Muhula wa Kwanza 2018

Muda: Saa 1 ½

**MTIHANI WA KIDATO CHA NNE**  
**KABLA YA MWIGO 2018**

*CHETI CHA KUHITIMU ELIMU YA SEKONDARI*

102/2  
Kiswahili 2

**MAAGIZO**

- Andika jina lako na namba yako katika nafasi ulizoachiwa hapo juu
- Weka sahihi yako na tarehe ya mtihani katika nafasi iliyoachwa.
- Jibu maswali **yote**
- Andika majibu yako yote katika nafasi zilizoachwa katika kijitabu hiki cha maswali.
- Karatasi hii ina 8 zilizopigwa chapa.
- Watahiniwa ni lazima wahakikishe kuwa kurasa zote za karatasi hii zimepigwa chapa sawasawa na kuwa maswali yote yapo.

**KWA MATUMIZI YA MTAHINI PEKEE**

SWALI	UPEO	ALAMA
1	15	
2	15	
3	40	
4	10	
<b>Jumla</b>	<b>80</b>	

## 1. UFAHAMU

### Kisome kifungu kufuatacho kisha ujibu maswali.

Kwa kipindi cha mizezi kadhaa iliyopita tumeshuhudia vyombo vya dola vikitia **makali yake kwenye upekuzi na hata kupiga doria usiku na mchana katika jitihada za kulinda nchi.** Mpango huu ni **kweli umeonekana kufanya kazi hivi kwamba hata magaidi wenyewe wameshindwa kupenya katika miji na sasa kuhiari kijinga kushambulia magari ya abiria, kitendo ambacho ni cha kuonyesha uwoga.** Kwa **hatua hiyo navipa vyombo vya dola kongole.** Jambo ambalo lafaa kujulikana ni kwamba mikakati ya kulinda nchi haifai kuwa ni ya wakati mmoja tu, mbali inafaa kuwa ni zoezi la kia siku.

Magaidi nao huwa macho huku yakijua hayana wakati wa kulala kwa ulinzi unapokuwepo, basi wanapata nafasi ya kutupia 'viazi' ukipenda grunedi.

Kama ilivyo kawaida katika mataifa mengi barani Afrika, ni bayana kwamba bado kungali na mianya mingi ambayo magaidi wa kimataifa huendelea kutumia. Dosari bado zipo. Kwa mfano, mipaka mingi ya nchi hizi huwa kama lango kuu la ugaidi wa kimataifa, kwani kuenea kwa saratani ya usisadi halimio tu maofisi ni bali pia kwenye mipaka yetu. Kama kupata kitambulisho; pasipoti na stakabadihi zagine za kusafirinchini Kenya ashakum si matusi ziligeuzwa 'maandalizi' ya kariakoo basi niambie ni nani hawezি kuingia naktoka nchini bila usumbufu wowote ule bora tu anayehitaji ana hela mkononi? kwa kuikubali hongo kuwa usfunguo wa kila kitu, wakenya wenzangu hapo naona ni kama tumejweka kwenye kikaango kilicho juu ya moto mkali. Hapo hakuna aliye na bahati, tajiri kwa maskini wamo kwenye mtego huu hatari.

Kwa mtindo ambao tunafuata wa kutoa ajira katika idara mbalimbali za ulinzi, inabidi serikali iwe na uangalifu saha hasa kwenye suala nzima la kuhakikisha stakabadihi wanazohitaji si ghushi. Pasina kufanya hivyo hapo tena tunaweza kuwapata maadui wanaopenya na kujifanya walini wetu kumbe ni majasusi wa magaidi. Kila mkenya ni mlipa ushuru na hatufai kuona labda ta baka la juu likipendeleva huku mitaa ya mabanda ikiachiwa mbwa koko kama walini wao.

Suala lingine muhimu ni kuangaziwa upya usalama kwenye magari ya usafiri. Juzi tulishuhudia mabasi mawili yakilipuliwa kwenye barabara ya Thika huku tukijua sika kwamba, mpango walinda nchi ungalipo. La kusikitisha ni kuona kwamba, madereva na utingo wao walikamiatwa na kufunguliwa mashtaka kwa kutozia shambulizi hilo. Je, hii ni sheria gani? Dereva ataendesha gari au atachukua jukumu la walinda usalama?

Waswahili walineni kwamba mkubwa ni jaa na kwa hivyo Rais wa taifa mzima ndiye anayefaa kuubeba mzigo wa usalama wetu bila kubanaga wasaa wengine ambao wanafaa kuwajibika ni wakuu wote wa idara mbalimbali za usalama. Usalama wako na wangu ni muhimu, elewa bayana kwamba bila usalama watalii hawawezi kuja kututembelea. Bila ya usalama maendeleo ya taifa kame hayawesi kupatikana, ndiposa kila jitihada sharti zifanywe ili wote waweze kuendelea kuyafurahia matunda ya uhuru wetu.

Ada ya mja kunena muungwana ni vitendo, hatufai tu kuimba wimbo wa Linda nchi ilhali mabasi barabara ni hayana usalama. Hebu na tuone ulinzi uendelevu na hapo tutawakomoa magaidi kwa yokini.

**Maswali**

- a) Ipe taarifa ulioisoma anwani mwafaka. (alama 1)
- b) Kwa nini magaidi wanashambulia magari ya abiria (alama 2)
- c) Eleza njia tatu ambazo zinatumwiwa na magaidi kutekeleze unyama wao. (alama 3)
- d) Ni njia gani ambazo magaidi hutumia kuingia nchi wanazoazimia kutekeleza uhalifu? (alama 2)
- e) Kwa mimi suala la usalama kwenye magari ya usafiri ni muhimu? (alama 1)
- f) Ni njia zipi zinazowza kutumiwa kupunguza mashambulizi ya kigaidi kulingana na mwandishi? (alama 2)
- g) Eleza athari za utovu wa usalama. (alama 2)
- h) Eleza neno au mafungu ya maneno kama yalivytumiwa katika kifungu. (alama 2)
- i) Vyombo vyadola
- ii) Jaa

## 2. UFUPISHO

**Soma taarifa kisha ujibu maswali yanavofuata**

Dunia sasa imegeuka ikilinganishwa na vile ilivyokuwa zamani. Siku hizi, jambo linapotokea popote duniani, Inajulikana kwingineko kwa haraka. Hali **hii** imethiri jinsi mabadiliko yanavyotokea na kuifumania jamii. Sasa, mwanafunzi anaweza kufanya maamuzi kwa haraka na kubadilisha mawazo na hivyo kufikia maamuzi hata kupitia kwa baruaapepe. Hata hivyo, wakereketwa wengine wadai kuwa hali **hii** imechangia pakubwa "kudhoofika" kwa tabia ya usomaji.

Katika burudani, mambo sasa ni tofauti. Zamani watu wakiwa na njia finyu za kujiburudisha lakini siku hizi zimejaa tele. Mja anaweza kuchagua kujiburudisha akiwa nyumbani kwake katika chumba cha kulala kupitia kwa mtandao. Wengi wanasema kuwa hali hii imesaidia kuwepo burudani aipendayo mtu kwa sababu ya kuwepo uteuzi lakini pia kuna shutumu- Hali hii inasemekana kurahisisha kasumba ya kikoloni kupitia kwa uigizwaji wa tamaduni za kigeni ikiwemo kuhariri.

Jamii nyingi siku hizi zimebadilisha mawazo yao na utendaji katika jamii kwa sababu ya utandarithi.

Watu wamebadilisha fikra kuhusu masuala na dhana potovu, hali ambayo imebadilisha hali ya maisha katika jamii. Dhana kama usawa wa kijinsia na mawazo ya kisasa limekuwa jambo la kawaida. Watetezi wa masuala ya kiasili wanasema kuwa hali iliyozuka imedhoofisha utamaduni wa kiafrika, kustaarabisha watu na kuchangia kusambaratika kwa familia kutokana na kuongezeka kwa visa vya kuvunjika kwa ndoa.

Kuwepo kwa mtandao kumefanya mambo kuwa rahisi kwa njia nyingi. Lakini hali hiyo pia imechangia kuwepo kwa hali ya kuchanganyikiwa hasa mionganoni mwa vijana wasioweza kujiamulia kuhusu wanayoyaona na kuyasikia. Baadhi ya watafiti pia wanasema kuwa hali hii imechangia kuwepo kwa uvivu kwa sababu ya runinga.

Kwa sababu hii pia, mabadiliko makubwa yanaendelea kutokea katika masomo huku ujanja mwingi na kutozingatiwa kwa maadili ukishuhudiwa.

- a) Eleza faida zinazotokana na mabadiliko yaliyoko katika jamii. (Maneno 30-40) alama 6). (Utiririko 1)

Nakala Chafu

Nakala safi

- b) Ni matatizo gani yanayoambitanishwa na mjo wa hali ya sasa? (maneno 40-50) (alamo 6, Utiririko 2)  
-Nakala Chafu

## Nakala safi

- 3). Matumizi ya lugha

a) Taja sauti zenyе sifa zifuatazo.

i) Mbele, juu, tandazwa (alama 2)

.....  
.....  
.....

ii) Kikwamizo, sighuna cha ufizi

.....  
.....  
.....

b) Ainisha vizhazi katika sentensi (alama 2)  
Nguo iliyoshonwa juzi imependeza mama

.....  
.....  
.....

c) Bainisha chagizo katika sentensi ifuatayo, (alama 1)  
Wageni wataondoka haraka sana.

- d) Zingatia maagizo uliyopewa kuandika upya sentensi zifuatazo:  
i) Meneja mpya ameiletea kampuni hii sifa tele. (Anzia kwa shamirisho tendewa) (alama 2)  
.....  
.....  
.....
- ii) Watoto wake walipata gubu wakati baba yao aligusu kwenda kazini. (Andika upya kwa kutumia kisawe cha maneno yaliypigiwa mstari chini yake). (alama 2)  
.....  
.....  
.....
- e) Ainisha vihusishi katika sentensi: (alama 2)  
Ateka ndiye mtoto wa nne wa Oloo lakini amesoma kuliko wengine.  
.....  
.....  
.....
- f) Akifisha sentensi ifuatayo. (alama 2)  
Akinyi baba utanipeleka kwa mbuga za wanyama Odhiambo bila shaka mwanangu.  
.....  
.....  
.....
- g) Changanua sentensi ifuatayo kwa kielelezo cha Matawi. (alama 4)  
Wazee walikuwa wakila mle chumbani.  
.....  
.....  
.....
- h) Tambua na ueleze aina za shamirisho katika sentensi ifuatayo (alama 3)  
Amu alimtumia mtoto wake kharafa kupitia rununu.  
.....  
.....  
.....
- i) Tambua matumizi ya 'NI' katika sentensi hii. (alama 2)  
Ondokeni mwende kanisani!  
.....  
.....  
.....
- j) Andika katika msémo wa taarifa: (alama 2)  
"Mwanafunzi ameodnoka hapa kwa vishindo sijui anapoelekea. " Akasema mwalimu wake.  
.....  
.....  
.....

- k) Kanusha (alama 2)  
Juma amecheza na kukinai.
- .....
- l) Neno 'tikiti' hupatikana katika ngeli mbili tofauti. Taja ngeli hizo kisha utungie maneno hayo ya ngeli tofauti sentensi mbili. (alama 2)
- .....
- m) Uunganisha sentensi zifuatazo kwa kutumia kiunganishi 'maadamu. (alama 2)  
i) Nitapita mtihani ujao kwa alama nzuri.  
ii) Nimesoma kwa bidii muhula huu
- .....
- n) Andika sentensi hii katika udogo wingi; mbwa wake ana manyoya mengi na harufu kali. (alama 2)
- .....
- o) Andika sentensi ifuatayo upya kwa kurejea wakati uliopita hali ya masharti. (alama 2)  
Ukisoma kwa bidii utpita mtihani.
- .....
- p) Tofautisha kati ya shadda na kiimbo (alama 2)
- .....
- q) Bainisha aina za vitenzi katika sentensi ifuatayo. (alama 3)  
Ndugu yake alikuwa akirauka kumwita alfajiri.
- .....
- r) Ainisha nomino zilizopigiwa mstari. (alama 1)  
Kucheza kwa kiti kuliniwangamiza.
- .....

#### 4. ISIMU JAMII

- a) Eleza maana ya lugha. (alama 2)
- b) Taja mambo yoyote matatu yanayosababisha kufa kwa lugha. (alama 3)
- c) Eleza sababu tano zinazochangia makosa ya lugha ya kiswahili. (alama 5)

Jina .....

Nambari .....

Tarehe .....

102/3

**KISWAHILI**

Karatasi ya 3

**FASIHI**

Mwisho wa Muhula wa Kwanza 2018

Muda: Saa 2 ½

**MTIHANI WA KIDATO CHA NNE**  
**KABLA YA MWIGO 2018**

*CHETI CHA KUHITIMU ELIMU YA SEKONDARI*

102/3

Kiswahili 3

**MAAGIZO**

- a. Jibu maswali manne pekee
- b. Swali la kwanza ni la lazima
- c. Usijibu maswali mawili kutoka sehemu moja.
- d. Maswali hayo mengine yachaguliwe kutoka sehemu nne zilizobaki yaani:  
RIWAYA TAMTHILIA, HADITHI FUPI NA USHAIRI

## **SEHEMU YA A: FASIHI SIMULIZI**

1. Swali la lazima
  - a) Eleza maana ya misimu (alama 2)
  - b) Eleza mambo yoyote manne yanayosababisha kuzuka kwa misimu (alama 8)
  - c) Fafanua umuhimu wa misimu katika jamii (alama 10)

## **SEHEMU YA B: RIWAYA**

**Jibu swali la 2 au 3**

**Ken Walibora: Kidagaa Kimemwozea**

2. "Wajua bara la Afrika lataka watu waliosoma sana kulikomboa toka kwenye utumwa wa ujinga, njaa na umasikini"
  - a) Eleza muktadha huu (alama 4)
  - b) Eleza mbinu iliyotumika katika dondoo (alama 2)
  - c) Thibitisha ukweli kuwa jamii ya msemaji inakabiliwa na uhaba wa elimu kwa kutoa mifano riwayani. (alama 14)
3. Eleza namna mwandishi wa kidagaa kimemwozea anavyodhihirisha maudhui ya nafasi ya mwanamke katika jamii (alama 20)

## **SEHEMU YA C. TAMTHILIA**

**Kigogo: (Pauline Kea)**

**Jibu swali la 4 au 5**

4. "..... na uchunge sana ulimi wako usikutome kwenye bahari mchafukoge usi ....."
  - a) Eleza muktadha wa dondoo hili (alama 4)
  - b) Taja na ueleze sifa tatu za msemaji (alama 6)
  - c) Jadili maudhui manne yanayoendelezwa na msemaji (alama 10)
5. Eleza mbinu ambazo majoka anatumia kuendeleza shughuli zake za uongozi katika jimbo la sagamoyo (alama 20)

## **SEHEMU YA D. HADITHI FUPI**

**Tumbo lisiloshiba (Dumu Kayanda na Alifa chokocho)**

### **Jibu swalii 6 au 7**

6. "Yalahi, dunia gain umetuumbia? Madhulumu tuzidi kudhulumka na dhalimu aachwe kuendelea kunafusika. Ati mimi niliyedhalilishwa na kuvunjiwa heshima yangu ndiye pia nitakayefukuzwa ....."
- a) Eleza muktadha wa dondo hili (alama 4)
  - b) Fafanua sifa tatu za mhusika katika dondo hili (alama 6)
  - c) Eleza jinsi mwanamke amesawiviwa katika hadithi hii (alama 10)
7. Fafanua jinsi maudhui yafuatayo yanavyojitokeza katika hadithi ya mwalimu mustaafy (alama 20)
- i) Elimi
  - ii) Umaskini
  - iii) Ulevi
  - iv) Utu

## **SEHEMU YA E: USHAIRI**

8. Soma shairi hili kasha ujibu maswali yanayofuata  
Waume msiudhike, swalii nawaulizia  
Wala msibabaike, hadhi yetu twatetea,  
Kuwatweza wanawake, hamoni mwakosea?  
Wanawake wawer sawa, na waume duniani.

Si vizuri kuwatesa, wanawake kuonea  
Kuwapiga pasi kosa, kwa hakika ni hatia  
Nyote mna sawa hisa, katika hii dunia,  
Wanawake wawer sawa, na waume duniani.

Mngakaa mfikiri, lau kwa miaka mia,  
Na muache ujabari, wanawake si ngamia,  
Sidanganywe na mahari, msambe ni kununua,  
Wanawake wawer sawa, na waume duniani.

Madharau huwa mengi, kwa waume narudia  
Huwawekea vikingim, wanawake kila njia  
Kwa waume hawasongi, fikiria zao kutoa  
Wanawake wawe sawa, na waume duniani.

Usawa tunautaka, si hivi kubagua,  
Tufanye mambo shirika, hakuna wa kubakia,  
Kubaki nyuma twachoka, wanaume kutangulia,  
Wanawake wawe sawa, na wanaume duniani.

#### **MASWALI:**

- a) Lipe shairi hili kichwa mwafaka. (alaa 2)
- b) Yatambue maudhui mawili yanayoangaziwa kwenye shairi hili. (alama 20)
- c) Ukiota ithibati zifaazo, liweke shairi hili katika bahari tatu. (alama 6)
- d) Eleza muundo wa ubeti wa tatu (alama 4)
- e) Andika ubeti wa mwisho kwa lugha nathari. (alama 4)
- f) Eleza maana ya maneno haya kama yaliviyotumika katika shairi. (alama 4)
  - i) Kuwatweza
  - ii) Vikingi.

Name .....

Candidate's Signature .....

Date .....

121 / 1

**MATHEMATICS**

Paper 1

**End of Term 1 2018**

Time: 2 ½ Hours

## **FORM FOUR PRE-EXAMINATION 2018**

**Kenya Certificate of Secondary Education**

121/1

Mathematics paper 1

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the spaces above.
2. Sign and write the date of examination in the spaces provided above.
3. This paper consists of two sections: section I and II.
4. Answer all the questions in section I and ONLY five in section II
5. Show all the steps in your calculations giving your answers at each stage in the spaces provided below each question.
6. Marks may be given for correct working even if the answer is wrong.
7. Non-programmable silent calculators may be used and KNEC Mathematical tables may be used, except where stated otherwise.
8. This paper consists of 16 printed pages
9. Candidates should check the question paper to ascertain that all the pages are printed as indicates and that no questions are missing.
10. Answer ALL questions in English.

**FOR EXAMINERS USE ONLY**

**SECTION I**

QUESTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
MARKS																	

**SECTION II**

Question	17	18	19	20	21	22	23	24	TOTAL	Grand Total
Marks										

**SECTION A : (50 MARKS)**

**Answer all the questions in this section in the spaces provided.**

1. Evaluate :

$$\frac{28 - (-18) - (-15) - (-2)(-6)}{-2 \quad \quad \quad 3} \quad (3 \text{ marks})$$

2. A square room is covered by a number of whole rectangular slabs of sides 60cm by 42cm. Calculate the least possible area of the room in square metres. (3 marks)

3. If the ratio  $x : y = 4 : 3$ , determine the ratio  $(3x - y) : (3x + y)$  (3 marks)

4. In January, Mutua donated  $\frac{1}{6}$ th of his salary to a children's home while Tom donated  $\frac{1}{5}$ th of his salary to the same children's home. Their total donation for January was Ksh.14820. In February, Mutua donated  $\frac{1}{8}$ th of his salary to the children's home while Tom donated  $\frac{1}{12}$ th of his salary to the children's home. Their total donation for February was Ksh.8675. Calculate Mutua's monthly salary. (4 marks)

5. Two similar containers have base areas  $25\text{cm}^2$  and  $324\text{cm}^2$  respectively. Calculate the capacity of the largest container correct to 1 decimal place if the capacity of the smaller one is  $8\text{cm}^3$ . (3 marks)

6. Use reciprocal tables to find the value of  $y$  in the expression below.

$$\frac{1}{2y} = \frac{1}{11} + \frac{1}{15}$$

(3 marks)

7. Solve the inequalities  $4 - 3x < 25 \leq -6x - 5$  giving the answer as a combined inequality. (3 marks)
8. Given that  $OA = 2\mathbf{i} + 3\mathbf{j}$  and  $OB = 3\mathbf{i} - 2\mathbf{j}$ . Find the magnitudes of  $AB$  to one decimal place. (3 marks)
9. Using a ruler and a pair of compasses only construct a triangle ABC given that angle ABC =  $120^\circ$ , AB = 6cm and BC = 6cm. Drop a perpendicular from A to meet CB produced at D. Measure AD. (3 marks)

10. A Kenyan bank buys and sells foreign currencies at the exchange rates shown below.

	<u>Buying (Ksh)</u>	<u>Selling (Ksh)</u>
1 Euro	147.56	148.00
1 US dollar	74.22	74.50

An American arrived in Kenya with 20,000 Euros. He converted all the Euros to Kenya shillings at the bank. He spent Ksh.2510200 while in Kenya and converted the remaining Kenya shillings into US dollars at the bank. Find the amount in dollars that he received. (4 marks)

11. Point A(-2, 2) and B(-3, 7) are mapped onto A'(4, -10) and B'(0, 10) by an enlargement. Find the scale factor of the enlargement. (3 marks)

12. Evaluate :

$$2 \log_{10} 5 - 3 \log_{10} 2 + \log_{10} 32 \quad (3 \text{ marks})$$

13. Simplify the expression :

$$\frac{x^2 + x - 4xy - 4y}{(x + 1)(4y^2 - xy)}$$

(4 marks)

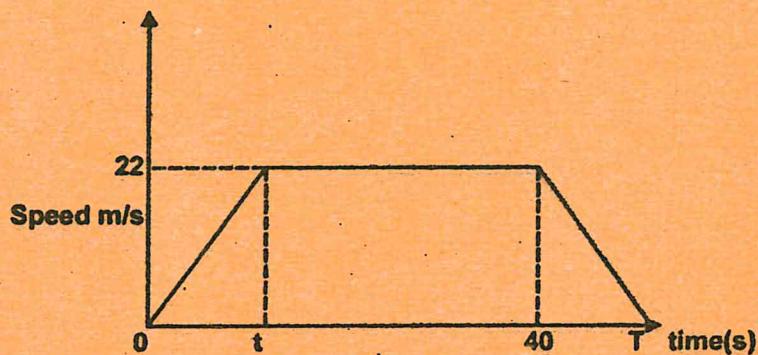
14. Fifteen tractors each working eight hours a day take eight days to plough a piece of land. How long would it take 24 tractors, each working 10 hours a day to plough the same piece of land ? (2 marks)

15. A path down the side of a cliff is inclined at  $38^\circ$  to the horizontal. If the length of the path was found to be 70 steps, determine the height of the cliff in metres. (on average, a step = 0.62m) (3 marks)
16. The second term of a four consecutive odd number is  $2n + 1$ . If the sum of the numbers is 10104. Find the value of  $n$ . (3 marks)

**SECTION B :**

Answer only five question in this section in the spaces provided.

17. The figure below shows a speed-time graph of a journey of a car. The car starts from rest and accelerates at  $2.75 \text{ m/s}^2$  for  $t$  seconds until its speed is  $22 \text{ m/s}$ .



Brakes are applied bringing it uniformly to rest. The total journey is  $847 \text{ m}$  long and takes  $T$  seconds.

Calculate :

- a) the value of  $t$

(3 marks)

- b) the distance travelled during the first  $t$  seconds.

(2 marks)

- c) the value of  $T$

(3 marks)

- d) the final deceleration

• 18. A carpenter constructed a closed wooden box with internal measurements 1.5m long, 0.8m wide and 0.4m high. The wood used in constructing the box was 1.0cm thick and had a density of  $0.6\text{g/cm}^3$ .

a) Determine :

i) volume in  $\text{cm}^3$  of the wood used in constructing the box.

(4 marks)

ii) the mass of the box, in kilograms correct to 1d.p

(2 marks)

b) Identical cylindrical tins of diameter 10cm, height 20cm with a mass of 120g each were packed into the box. Calculate the :

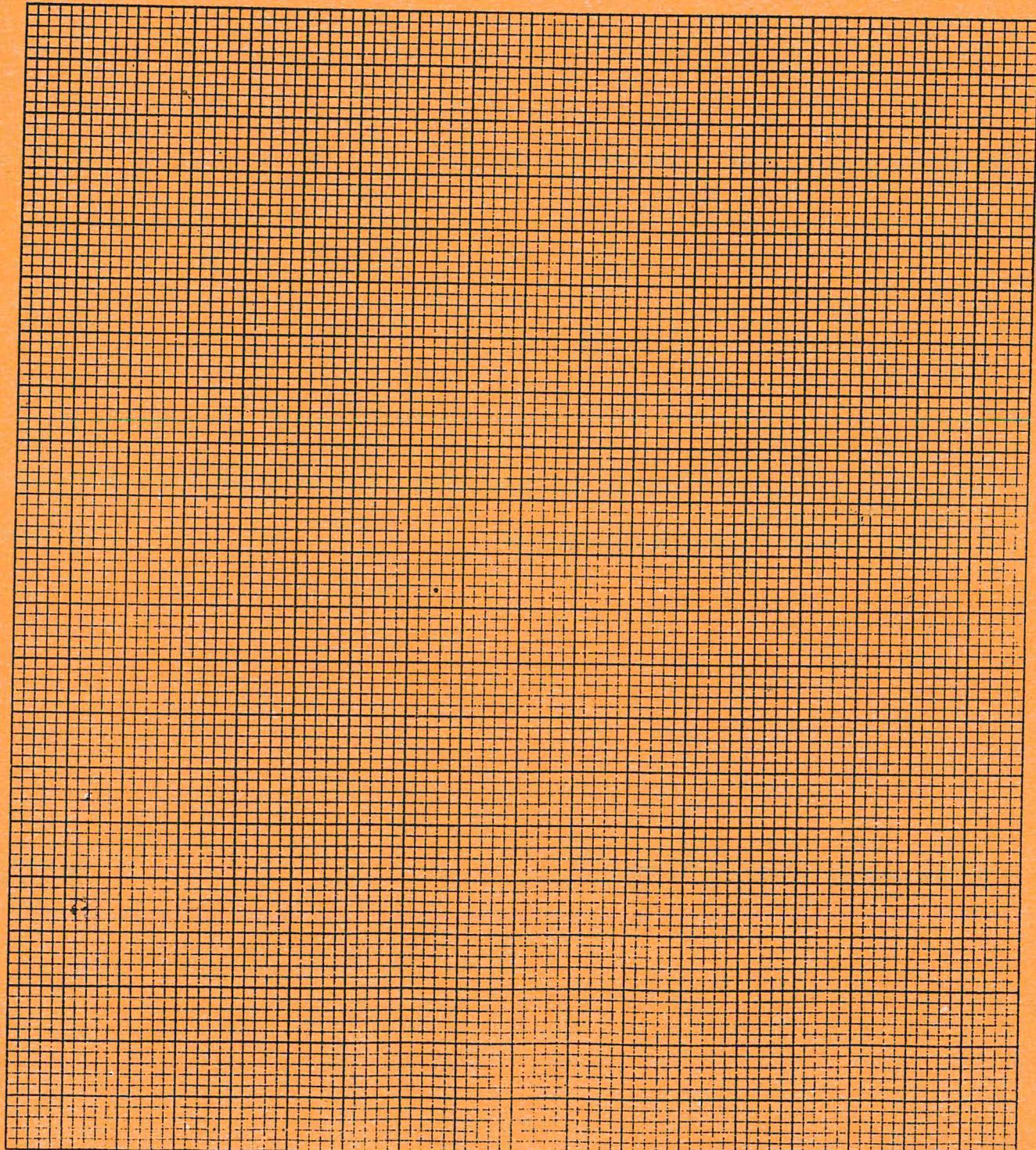
i) maximum number of packets that were packed.

(2 marks)

ii) total mass of the box with the tins.

(2 marks)

19. The vertices of a quadrilateral OPQR are O(0, 0), P(2, 0), Q(4, 2) and R(0, 3). The vertices of its image under a rotation are  $O'(1, -1)$ ,  $P'(1, -3)$ ,  $Q'(3, -5)$  and  $R'(4, -1)$
- a) i) On the grid provided, draw OPQR and its image  $O'P'Q'R'$  (2 marks)  
ii) By construction, determine the centre and angle of rotation. (3 marks)
- b) On the same grid as a(i) above, draw  $O''P''Q''R''$ , the image of  $O'P'Q'R'$  under a reflection in the line  $y = x$  (2 marks)
- c) From the quadrilaterals drawn, state the pairs that are oppositely congruent. (3 marks)



**20.** A spire stands directly across the street from a building. The angle of depression of the top of the building from the top of the spire is  $25.8^\circ$  and the angle of elevation of the top of the spire from the foot of the building is  $43.5^\circ$ . Given that the distance between the spire and the building is 40 metres, calculate to two decimal places.

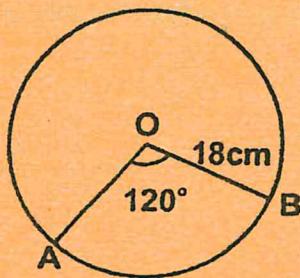
a) the height of the spire (2 marks)

b) the difference in height between the spire and the building. (3 marks)

c) the height of the building. (2 marks)

d) the angle of elevation of the top of the building from the foot of the spire. (3 marks)

21. The figure below shows a circle centre O and radius 18cm. The minor sector AOB subtends an angle of  $120^\circ$  at the centre of the circle. The sector is cut off and folded into a cone. (Take  $\pi = \frac{22}{7}$ )



Calculate :

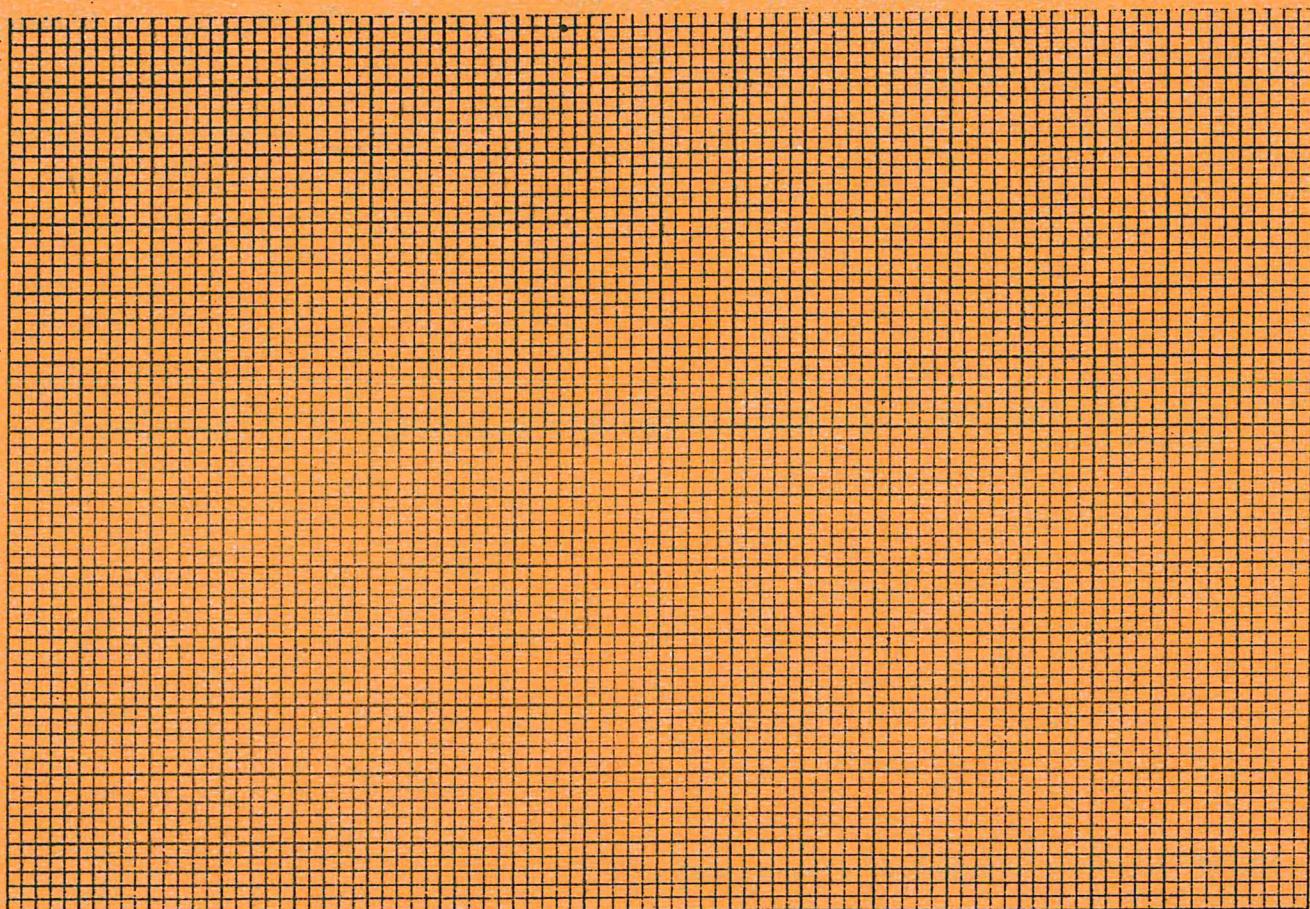
- a) the area of the minor sector AOB (2 marks)
- b) the radius of the cone formed (3 marks)
- c) the height of the cone (3 marks)
- d) the volume of the cone in  $\text{cm}^3$  (2 marks)

22. The table below gives the age distribution of the people who live in a certain village in years.

Age group	No. of people
0 - 2	3
2 - 5	6
5 - 12	12
12 - 20	24
20 - 35	30
35 - 60	20
60 - 90	5

a) Represent this information on a histogram.

(5 marks)



b) Calculate the mean age of the population in this village.

(5 marks)

23. A line L passes through points (-2, 3) and (-1, 6) and is perpendicular to a line P at (-1, 6).

a) Find the equation of L

(2 marks)

b) Find the equation of P in the form  $ax + by = c$  where a, b and c are constants.

(2 marks)

c) Given that another line Q is parallel to L and passes through points (1, 2). Find the x and y intercepts of Q.

(3 marks)

d) Find the point of intersection of line P and Q

(3 marks)

24. The length of a room is 3 metres longer than its width. A carpet whose area is  $18\text{m}^2$  is laid in the middle of the room leaving a margin 50cm wide between the wall and the carpet all around the room.

a) Taking  $w$  to represent the width of the room, express the dimensions of the carpet in terms of  $w$ .  
(4 marks)

b) Write down the area of the carpet in terms of  $w$ .  
(2 marks)

c) Determine the dimensions of the room.  
(4 marks)



Name .....

Candidate's Signature .....

Date .....

121 / 2

**MATHEMATICS**

Paper 2

End of Term 1 2018

Time: 2 ½ Hours

# **FORM FOUR PRE-EXAMINATION 2018**

**Kenya Certificate of Secondary Education**

121/2  
Mathematics paper 2

### **INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the space provided above.
2. Sign and write the date of the examination in the spaces provided above.
3. This paper contains TWO Sections I and Section II
4. Answer ALL the questions in Section I and ONLY five in Section II
5. Show all the steps in your calculation, giving your answers at each stage in the spaces below each question.
6. Marks may be awarded for correct working even if the answer is wrong.
7. Non-programmable silent electronic calculators and KNEC Mathematical tables may be used, except where stated otherwise.
8. This paper consists of 16 printed pages.
9. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

#### **For examiners use only**

**Section I**

QUESTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
MARKS																	

**Section II**

QUESTION	17	18	19	20	21	22	23	24	TOTAL	Grand Total
MARKS										

**SECTION A : (50 MARKS)**

**Answer all the questions in this section in spaces provided.**

1. Use logarithms in all steps to evaluate :

$$\frac{2.53^2 \times 83.45}{\sqrt{0.4562}}$$

(4 marks)

2. From an experiment, the values of a, b and c are 3cm, 4cm and 6cm respectively to the nearest centimetre. Find the percentage error in

$$\frac{a}{bc}$$

(3 marks)

3. If  $(x + 3)(x + 4)$  is equivalent to  $(x + a)^2 + b$ . Find the value of a and b.

(3 marks)

4. Find the value of  $x$  in the equation  $(\log_3 x)^2 + 3 \log_3 x = 4$

(4 marks)

5. Solve the equation  $2 \cos 4x = -1$  for  $0^\circ \leq x \leq 180^\circ$

(3 marks)

6. If  $\frac{1}{\sqrt{14}-2\sqrt{3}} - \frac{1}{\sqrt{14}+2\sqrt{3}} = a\sqrt{7} + b\sqrt{3}$  find the value of  $a$  and  $b$  where  $a$  and  $b$  are rational numbers.

(3 marks)

7. a) Expand and simplify the binomial expression  $(2 + 2y)^5$  in ascending powers of y. (1 mark)

b) Use the expansion up to the fourth term to evaluate  $(2.02)^5$  correct to 4d.p. (2 marks)

8. Find the distance between the centre A of a circle whose equation is  $2x^2 + 2y^2 + 6x + 10y + 7 = 0$  and the point B(-4, 1) (4 marks)

9. Given the simultaneous equations.

$$5x + y = 19$$

$$3y - x = 9$$

Write the equation in matrix form. Hence solve the simultaneous equation.

(3 marks)

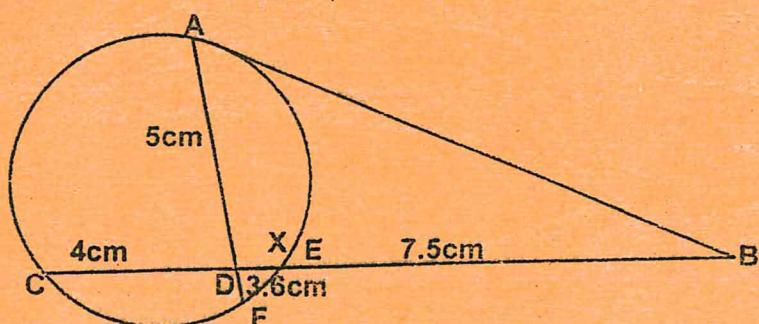
10. Make x the subject of the formulae

(3 marks)

$$m = \sqrt{\frac{x-p}{p(l+px)}}$$

11. Tap A and B can fill a tank in 4 and 9 hours respectively. Both taps are turned on for 2 hours after which tap A is closed. Find how long tap B takes to fill the remaining part of the tank. (3 marks)

12. In the figure below, AB is a tangent meeting chord CDE at B. AD = 5cm, DF = 3.6cm, CD = 4cm, DE = xcm, EB = 7.5cm



Determine :

- a) the value of x
- b) the length of AB

(1 mark)  
(2 marks)

13. A man accumulated sh.71,105 after investing sh.50,000 at a rate of 18%p.a compounded quarterly.  
Find the time taken in years to accumulate this amount. (3 marks)

14. A trader buys millet flour at sh.50 per kilogram and sorghum flour at sh.40 per kilogram. She mixed the millet and sorghum in the ratio 2 : 3 respectively and sells a kilogram of the mixture at sh.52.80. What percentage profit does she make ? (3 marks)

15. The sum of the digit in a 3 digits number is 9. The tens digit is half the sum of the other two and the hundreds digit is half the units digit. Find the number. (3 marks)

16. The expression  $nx^2 + 12nx + 25$  is a perfect square. Find the value of n. (2 marks)

**SECTION II : (50 MARKS)**

**Answer only FIVE questions in this section in the spaces provided.**

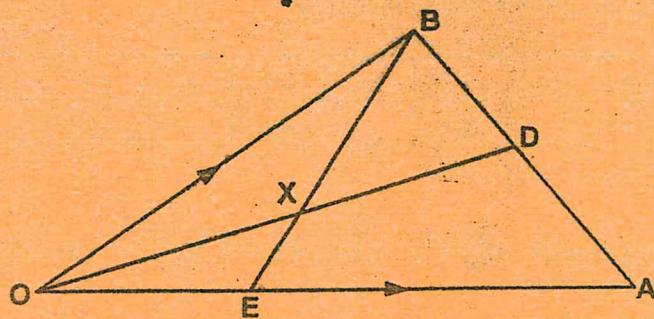
17. The taxation rate for 2007 were as in the table below.

Income (Ksh.per month)	Tax rate (%)
1 - 2000	5
2001 - 4000	10
4001 - 6500	15
Above 6500	20

In a certain month in 2007, Mutai paid a tax of Ksh.3000 after having been given a personal relief of Ksh.1056 per month.

- a) How much tax per month could he have paid if he did not get tax relief. (2 marks)
- b) Calculate his total taxable income in Ksh per month. (6 marks)
- c) Given that his total taxable allowance amounts to Ksh.4520 p.m, calculate his monthly salary in Kenya shillings. (2 marks)

18. The figure below shows triangle OAB in which  $OA = a$ ,  $OB = b$ . Points D and E are such that  $AD = \frac{1}{3}AB$  and  $OE = \frac{1}{3}OA$



a) Express in terms of  $a$  and  $b$

i)  $OD$  (1 mark)

ii)  $BE$  (1 mark)

b) If  $OX = kOD$  and  $BX = hBE$  where  $k$  and  $h$  are constants, express  $OX$  in terms of

i)  $k$ ,  $a$  and  $b$  (2 marks)

ii)  $h$ ,  $a$  and  $b$  (2 marks)

c) Find the value of  $h$  and  $k$  (4 marks)

19. The table below shows values of  $x$  and some values of  $y$  for the curve  $y = x^3 + 3x^2 - 4x - 12$  in the range  $-4 \leq x \leq 2$

a) Complete the table by filling in the missing values of  $y$ .

$x$	-4	-3.5	-3	-2.5	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2.0
$y$		-4.1		-1.1		-2.6		-9.4		-13.1		-7.9	

(2 marks)

b) On the grid provided, draw the graph of  $y = x^3 + 3x^2 - 4x - 12$  for  $-4 < x < 2$ . Use the scale :

Horizontal axis, 2cm represent 1 unit

Vertical axis, 2cm represent 5 units

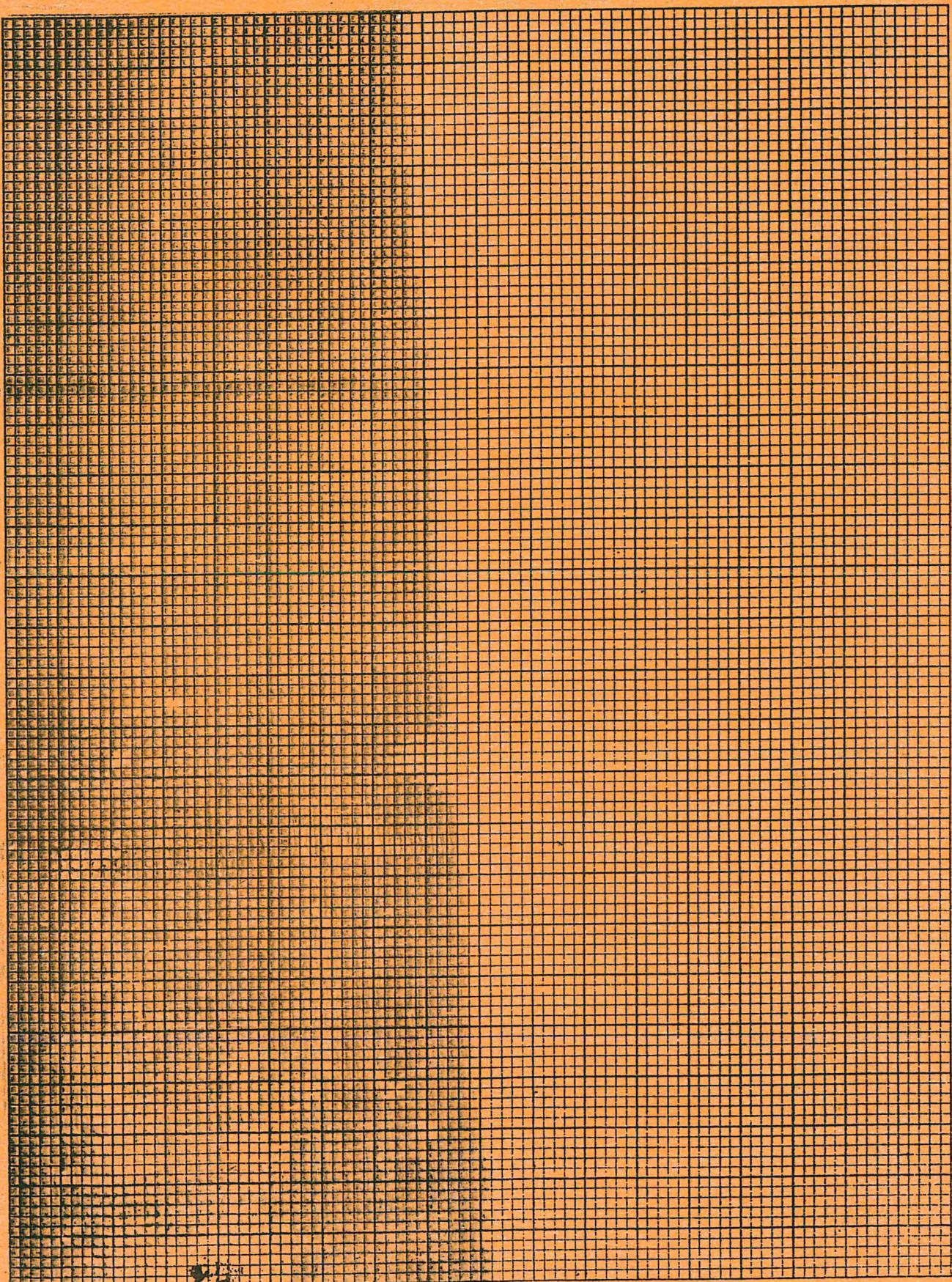
(5 marks)

*(Graph paper provided on page 11)*

c) By drawing a suitable straight line, on the same grid as (b) above, solve the equation

$$x^3 + 3x^2 - 5x - 6 = 0$$

(3 marks)



**20.** A supermarket is stocked with plates which come from two supplies A and B. They are bought in the ratio of 3 : 5 respectively, 10% of plates from A are defective and 6% of plates from B are defective.

a) A plate is chosen by a buyer at random. Find the probability that :

i) It is from A

(2 marks)

ii) It is from B and it is defective.

(2 marks)

iii) It is defective.

(2 marks)

b) Two plates are chosen at random. Find the probability that :

i) both are defective

(2 marks)

ii) At least one is not defective

(2 marks)

21. a) The first term of a GP is 4. If the common ratio is 2, find the greatest number of terms that will give a sum less than 40. (4 marks)

b) The 2nd, 4th and 7th terms of an A.P are the first 3 consecutive terms of a G.P. If the common difference of the A.P is 2. Find :

i) the common ratio (3 marks)

ii) the sum of the first 8 terms of the G.P (3 marks)

22. The cost  $C$  of producing  $n$  items varies partly as  $n$  and partly as the inverse of  $n$ . To produce two items it costs Ksh.135 and to produce 31 items it costs Ksh.140.

Find :

a) The constants of proportionality and hence write the equation connecting  $c$  and  $n$ . (5 marks)

b) The cost of producing 10 items (2 marks)

c) The number of items produced at a cost of Ksh.756 (3 marks)

23. In a triangle ABC, BC = 8cm, AC = 12cm and angle ABC =  $120^{\circ}$ .

a) Calculate the length of AB, correct to one decimal place.

(4 marks)

b) If BC is the base of the triangle, calculate correct to one decimal place

i) the perpendicular height of the triangle.

(2 marks)

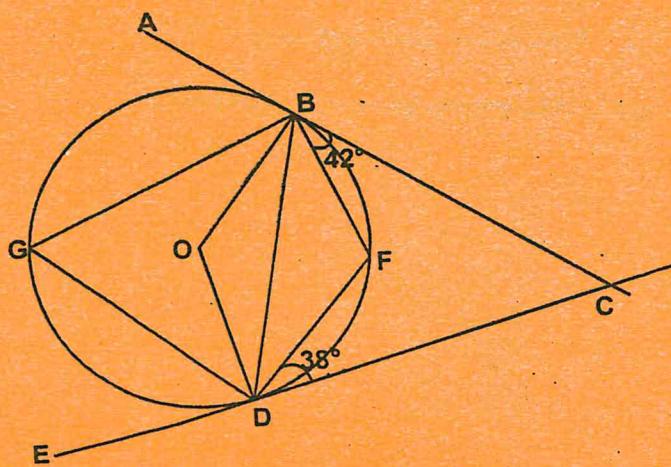
ii) the area of the triangle

(2 marks)

iii) the size of angle ACB

(2 marks)

24.



In the figure above, ABC and EDC are tangents to the circle and O is the centre. Angle CBF =  $42^\circ$  and angle FDC =  $38^\circ$  calculate the following angles stating the reasons in each case.

i)  $\angle BFD$

(3 marks)

ii)  $\angle BGD$

(2 marks)

iii)  $\angle OBD$

(2 marks)

iv)  $\angle BCD$

(3 marks)