

## SS 2 HOLIDAY ASSIGNMENTS FOR SECOND TERM 2024

### MATHEMATICS

- 1a. If  $\frac{1}{2}, \frac{1}{x}, \frac{1}{3}$  are successive terms of an Arithmetic Progression,
- Show that  $\frac{2-x}{x-3} = \frac{2}{3}$
- b. The sum of the second and third terms of a Geometric Progression is six times the fourth term. Find the two possible values of the common ratio.
- 2a. A transport company has a total of 20 vehicles made up of a tricycles and taxicabs. Each tricycles carries 2 passengers while each taxicab carries 4 passengers. If the 20 vehicles carry a total of 66 passengers at a time, how many tricycles does the company have?
- b. Towns P and Q are  $x$  km apart. Two motorists set out at the same time from P to Q at a steady speed of 60km/h and 80km/h respectively. The faster motorist got to Q 30 minutes earlier than the other. Find the value of  $x$ .

### FURTHER MATHEMATICS

(1)

**You must not use a calculator in this question.**

- (i) Express  $\frac{8}{\sqrt{3} + 1}$  in the form  $a(\sqrt{3} - 1)$ , where  $a$  is an integer. [2]

An equilateral triangle has sides of length  $\frac{8}{\sqrt{3} + 1}$ .

- (ii) Show that the height of the triangle is  $6 - 2\sqrt{3}$ . [2]

- (iii) Hence, or otherwise, find the area of the triangle in the form  $p\sqrt{3} - q$ , where  $p$  and  $q$  are integers. [2]

(2)

A function  $f$  is such that  $f(x) = 4x^3 + 4x^2 + ax + b$ . It is given that  $2x - 1$  is a factor of both  $f(x)$  and  $f'(x)$ .

(i) Show that  $b = 2$  and find the value of  $a$ . [5]

Using the values of  $a$  and  $b$  from part (i),

(ii) find the remainder when  $f(x)$  is divided by  $x + 3$ , [2]

(iii) express  $f(x)$  in the form  $f(x) = (2x - 1)(px^2 + qx + r)$ , where  $p$ ,  $q$  and  $r$  are integers to be found, [2]

(iv) find the values of  $x$  for which  $f(x) = 0$ . [2]

## ENGLISH LANGUAGE

### GRAMMAR

1. New Concept English for SS 2. 5th Edition

**Page 196: Exercise 1 (Suffixes)**

**Questions: 1-5**

2. New Concept English for SS2. 5th Edition

Page 197

Exercise 1; Questions: 1-5

### SPEECH WORK

New Concept English for SS2. 5th Edition

Page 246: Test of Orals; Questions 1-10

### COMPREHENSION

New Concept English for SS. 2 Pages 242-243

Part B: Comprehension: a-h

## SUMMARY

In five sentences, state the effects of cybercrime on the society.

## COMPUTER STUDIES

- 1a. Provide definitions for the following terms:
  - i. Algorithm
  - ii. Flowchart
- b. List three key characteristics of an algorithm.
- 2a. Develop an algorithm to determine the average of three numbers represented by variables b and c.
- b. Create a flowchart illustrating the process of calculating the area of a triangle using the base (b) and height (h) as inputs.

## ECONOMICS

- 1a. With the aid of diagram, explain the concept of “*Financial Institution*”
- b. Distinguish between *Monetary policy* and *Fiscal policy*.
2. Explain any **five** instruments used by Central Bank to control the activities of other financial institutions.

## PHYSICS

- 1a. State and explain four properties common to all waves.
- b. Differentiate between constructive interference and destructive interference.
- c. Highlight three examples of a translucent body.
2. A wave is represented by the equation:  $y=1.5\sin (3t+6x)$ , where y and x are in centimeters and t is in seconds. Calculate the:

- a. frequency
- b. period
- c. wavelength

## **CHEMISTRY**

- 1a. Give three (3) physical properties of chlorine.
- b. Explain the bleaching action of chlorine.
- 2a. Explain the industrial preparation of hydrogen chloride.
- b. Explain the industrial preparation of ammonia using Haber process.

## **BIOLOGY**

- 1. Define the following:
  - i. Excretion;
  - ii. Egestion;
  - iii. Secretion.
- b. State two (2) waste products each excreted from the following organisms:
  - i. Flatworms;
  - ii. Insects;
  - iii. Flowering plants.
- 2. Briefly explain the following process involved in urine formation;
  - i. Ultra filtration;
  - ii. Selective re-absorption.

## **GEOGRAPHY**

- 1a. Define commercial activities.
- b. Highlight three (3) major commercial activities in Nigeria.
- c. State two (2) importance of commercial activities.
- 2a. What is settlement?
- b. Mention three (3) types of settlement.
- c. State three (3) factors of settlement location.

## **COMMERCE**

- 1a. What is meant by the term “Insurable risk”
- b. Explain **four** insurance policies a ship owner can take.
2. Distinguish between the following pairs of terms used in insurance.
  - i. Whole life and endowment policy;
  - ii. Insurance and assurance;
  - iii. Premium and compensation.

## **FINANCIAL ACCOUNTING**

- 1a. Explain financial institution.
- b. Identify the components of financial system.
2. Distinguish between the **two** financial systems mentioned above.
- b. State and explain **five** instruments traded in each of the components of financial system.

## **GOVERNMENT**

1. Do a concrete exposition on public opinion and explain any **FOUR (4)** related ways through which it can be measured.
- 2a. What is public administration?
- b. Highlight any **FOUR (4)** characteristics of the Nigerian civil service.

## **CIVIC EDUCATION**

- 1a. Who is a parent?
- b. Discuss any **FOUR (4)** general roles expected of parents as identified by Chris Theisen.
- 2a. Define the term inter-communal conflict.
- b. Distinguish between regular marshals and special marshals.

## **CHRISTIAN RELIGIOUS STUDIES**

- 1a. Define the term provision.
- b. Provide a detailed account of the first creation story.
- 2a. Discuss vividly the call of Samuel.
- b. Enumerate any **FIVE (5)** consequences of Saul's disobedience.

## **ISLAMIC RELIGIOUS STUDIES**

- 1a. Write Suratul Alaq and its meaning
- b. Give five (5) lessons derived from it.
2. Write Hadith 2 of an-Nawawi's collections and its meaning.

## LITERATURE-IN-ENGLISH

### WILLIAM SHAKESPEARE: A Midsummer Night's Dream

Read the extract and answer the following question.

As wagish boys in a game themselves forswear;

So the boy Love is perjured everywhere;

For ere Demetrius looked on Hermia's eyne,

He hailed down oaths that he was only mine;

And when this hail some heat from Hermia felt,

So he dissolved and showers of oaths did melt

1. The speaker is

A. Egeus

B. Hermia

C. Demetrius

D. Helena

2. The speech shows that the speaker is

A. high spirits

B. disappointed

C. excited

D. in a bad mood

3. The speaker's mood stems from

A. being rejected by the lover

B. having to go into the forest

C. wanting to punish Hermia

D. meeting with Hermia

4. The speaker has just said farewell to

A. Helena

B. Demetrius

C. Hermia

D. Lysander

5. The speaker resolves to tell

A. Lysander of Hermia's infidelity

B. Demetrius of Hermia's flight

C. Egeus of Hermia's flight

D. Theseus of Hermia's infidelity

WILLIAM SHAKESPEARE: A Midsummer Night's Dream

Read the extract below and answer the following question:

That fallen am I in dark uneven way,

Come, thou gentle day;

For if but once thou show me thy grey light,

I'll find, and revenge this spite.

6. The speaker is in

A. the woods

B. his apartment



C. a street

D. the palace

7. Come, thou gentle day illustrates

A. apostrophe

B. irony

C. paradox

D. euphemism

8. After the speech, the speaker

A. begins to dance

B. laughs uncontrollably

C. falls asleep

D. starts crying

Read the following extract and answer the questions 9 - 10.

The boat nodded in timing with the gentle

Bobbing of the float on the unhurrying

Tide as the angler awaited the bite and

Pull of a salmon

9. The extract presents the image of a

A. enough time

B. bright day

C. dark night

D. calm weather

10. The dominant literary device used in the extract is

- A. parallelism
- B. apostrophe
- C. personification
- D. antithesis

## EDE YORUBA

### ISÉ ÀŞETILÉWÁ INÚ ÌSINMI OLÓJÓGBỌORO

1. Sàlàyé àpẹẹrẹ àròkọ márùn-ún
2. Tọka sí márùn-ún nínú àwọn ohun tó yẹ kí a yẹwò nínú ewì

## FRENCH LANGUAGE

### COMPÉHENSION ÉCRITE:

#### LE SIDA

**Le médecin:** Le sida! Écoutez ce que j'ai à vous dire à propos de cette maladie: En 1981, lorsque le Syndrome d'Immuno Déficience Acquis (le SIDA) a été identifié, les autorités médicales estimaient qu'environ 5 à 10 pour cent des personnes contaminées allaient développer la maladie et mourir. Mais contrairement à ce que l'on s'attendait, il s'est trouvé que le virus a une longue période d'incubation. Il peut ainsi attendre cinq ans ou plus avant que les symptômes n'apparaissent.

Supposons que seulement la moitié des 50 à 100 millions de porteurs du virus finissent par mourir, c'est quand même une grande proportion de population active qui disparaît. Certains estiment que, pour l'Afrique uniquement, on pourrait même compter des dizaines de millions des gens atteints par cette maladie, ce qui serait regrettable.

En Afrique, peu de guerres ont eu d'aussi graves conséquences que le SIDA aujourd'hui. Selon une revue européenne, "le SIDA se répand en Afrique comme un nuage de poudre". Une autre revue sur le SIDA déclare: "à moins d'un changement,

un adulte sur deux sera séropositif dans les dix ans à venir". On note avec regret environ la moitié des cas de SIDA en Afrique concernent des femmes en âge d'avoir des enfants. Au Rwanda, un malade du SIDA sur cinq est un enfant. En Zambie, 6000 bébés naîtront cette année avec le SIDA. À Nairobi, sur 800 prostituées à qui l'on a fait subir des tests de dépistage, 90 pour cent étaient porteuses du virus. Et ces femmes reçoivent en moyenne 1000 clients par an. Si seulement ces femmes savaient! Sous certains aspects, le SIDA est même pire que la guerre. Pourquoi? Parce que qu'en dépit de tout, aucune solution n'est en vue, parce que la liste des victimes continue à s'allonger et que les blessés ne se rétablissent pas.

**Madame Labila:** Zut alors! S'est-elle écriée.

**Répondez aux questions suivantes:**

1. En 1981, on a identifié .....

  - A. le SIDA
  - B. les autorités médicales
  - C. l'âge de mourir
  - D. 5 à 10 pour cent des porteurs du SIDA

2. La période d'incubation du virus est en moyenne .....

  - A. 15 ans ou plus
  - B. 5 ans ou plus
  - C. 1981 ans
  - D. 50 ans à 100 ans

3. En moyenne, "la moitié des 50 à 100 millions de porteurs de virus finissent par mourir". Cette phrase veut dire qu'il y a à peu près ..... de personnes qui meurent du virus.

  - A. 150 millions
  - B. Entre 25 et 50 millions
  - C. 100 millions

D. 6000

4. Selon une revue sur le SIDA, quelle est la proportion d'adultes qui seraient séropositifs dans les dix années à venir?

A. 50 pour cent

B. 33 pour cent

C. 60 pour cent

D. 80 pour cent

5. En Afrique, à peu près 50 pour cent des cas de SIDA concernent .....

A. des prostituées

B. des bébés

C. des femmes en âge d'avoir des enfants

D. des personnes âgées de 50 ans et plus

6. Au Rwanda, 20 pour cent de la population atteinte du SIDA concernent .....

A. des enfants

B. des femmes enceintes

C. des prostituées

D. des guerriers

7. Recherchez dans le texte pourquoi l'on considère le SIDA comme étant pire que la guerre.

## 2. EXECICE DE GRAMMAIRE

**Mettez les verbes entre parenthèses au présent de l'indicatif**

a. Joseph (passer) devant le mendiant.

b. Nous ne (comprendre) rien de sa présentation.

- c. Je (vouloir) apprendre à nager.
- d. Le professeur ne (savoir) quelle réponse donner à l'élève.
- e. La jeune élève (avoir) fait beaucoup de fautes grammaticales.

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## **AGRICULTURAL SCIENCE**

- 1a. Define Pest
- b. Mention and explain two classifications of pest
- c. State four ways of controlling pest.
- 2a. Define the term parasite
- b. State four economic importance of insect pests in crop production.
- c. State the insect pest of the following crops
  - I. Maize
  - Ii. Mango
  - iii.. Yam

## **ANIMAL HUSBANDRY**

- 1a. Define Agricultural marketing.
- b. State 2 agents of agricultural marketing and two (2) functions of any of the agents.
- 2a. Briefly explain channels of agricultural marketing
- b. State three channels of agricultural marketing
- c. State one importance of agricultural marketing

## **DATA PROCESSING**

- 1a. What is a graphics package?
- b. Highlight **four (4)** uses of graphics packages.
- c. Highlight **four (4)** examples of graphics packages.
- 2a. What is a web package?
- b. Highlight examples of web packages.
- c. What is the full meaning of the following;
  - i. HTML
  - II. CSS

## **FURNITURE MAKING**

1. Define the following;
  - i. Design
  - ii. Pictorial drawing
  - iii. Scale drawing
  - iv. Cutting list
  - v. Upholstery
2. Itemize ten (10) business opportunities in wood work industry

## **DYEING AND BLEACHING**

- 1a. Explain the difference between dyeing and bleaching processes in textile manufacturing, and provide examples of each process.
- b. State 4 importance of batik in Nigeria textile industry

- 2a. Highlight 4 accidents that can occur when dye spill during dye and bleaching
- b. Identify 4 printing techniques and explain any 1

## **VISUAL ART**

- 1a. Explain the brief history of Leonardo da Vinci
  - b. State 5 relationship between Nigerian traditional art and Ghana Nigerian traditional art
- 2a. State 5 popular art works created by Pablo Picasso
  - b. Explain the following art movement
    - I. Cubism
    - II. Futurism
    - III. Expressionism

## **TECHNICAL DRAWING**

1. Use diagrams to represent the following types of screw threads;
  - a. ACME Thread
  - b. Buttress thread
  - c. Square thread
  - d. Metric thread
2. Represent the isometric casting shown below in third angle orthographic projection using the direction of arrow X.

