DOREGOS PRIVATE ACADEMY
PDA
Ad Gloriam Dei.
Est. 1990

College of Champions

HOLIDAY ASSIGNMENT
SENIOR CLASS

SS1

ECONMICS
HOLIDAY ASSIGNMENT
1.   Highlight the factors which encourage entrepreneurs to adopt division of labour in production. (5mks)
2.   What factors are capable of limiting the practice of division of labour? (5mks)

GEOGRAPHY
1)   Explain rocks
2)   Discuss the three types of rocks
3)   Mention five importance of rocks to Man

COMMERCE
1.   Explain five factors to be considered in setting up retail trade
2.   Diagrammatically classify retail trade into small scale and large scale
3.   Explain the following small scale retailing stating their meaning, characteristics, advantages and disadvantages: (i) hawking (ii) mobile shops (iii) street or roadside trading (iv) unit stores/tied shops

VISUAL ART
List and explain 10 arts   terminologies

CIVIC EDUCATION
1. Explain the structure of the executive arm of government.

YORUBA
1. a) Ki ni ipolowo oja?
   b. Salaye ona marun-un pelu apere ti a le gba polowo oja

GOVERNMENT
1. Define presidential system of government.
2. State six characteristics of presidential system of government.

FURTHER MATHEMATICS
Answer all the first term examination questions (theory).

Mathematics.
1. Ex. 1.8, pgs.19-20, questions 3, 6, 10, 14, 15 and 16.
2. Ex. 1.9, pgs. 21-22, questions 6, 11 and 13
3. Ex. 7.3, pgs. 97-98, question 8.
[Note: (a) It is expected that the questions are **copied** first before showing the solutions. This assignment should be **done in your school notes**.   (b).** All students are expected to come to school with **a complete mathematical set.** You are advised to **practice how to draw to a high degree of accuracy** all forms of solid shapes discussed in **the essential mathematics textbook for S.S.1].**

FOOD AND NUTRITION
1.   Write a comprehensive note on kitchen management.
2.   Define kitchen, types – traditional and modern kitchen.
3.   Factors that influence the size of the kitchen

TECHNICAL DRAWING
1.   State three properties of a polygon
2.   State three types of polygons. Show with sketches.
3.   State four examples of polygons. Describe with sketches
4.   With the aid of set-squares, construct; i) Hexagon ii) Octagon

DATA PROCESSING
1. Define the art of information processing

2. List and explain the four procedures for information processing
3. State the 8 ways of information interpretation.

PHYSICS
All Inclusive Calculation by Solomon Daud; Exercise 4, Page 146, No's : 21, 22, 24.

ENGLISH LANGUAGE
Write an essay titled: "Patriotism Enhances the Growth of a Nation" **OR** "Corruption is the Bane of the Nigerian Government". (Not less than 400 words)

STORE MANAGEMENT
Discuss five reasons why warehousing is important to an organization.

LITERATURE IN ENGLISH
Summarize the text 'Second class citizen" by Buchi Emecheta in two pages in your notebook.

BIOLOGY
1. Briefly explain the following terms:
   a) Parasitism
   b) Symbiosis
   c) Commensalism
   d) Saprophytism.
2. Distinguish between filter feeding and fluid feeding.

FINACIAL ACCOUNT
1) a. What is a cash book?
   b. State six reasons for dishonoring a cheque.
2) Attempt Question 3X (from the Textbook)
   Textbook: Simplified and Amplified Book Keeping and Accounting.
   Page: 72

SS2

TECHNICAL DRAWING
1. **Assemble and draw in isometric projection drawing numbers 23 and 24, on pages 166 and 167, J. N Green.**
2. **Draw in first angle projection drawing numbers 14 and 15 on page 163, J. N Green.**

FURTHER MATHEMATICS
1. **Answer in your note book, the first term Further Mathematics examination, 2018/2019. (theory and objectives)**

CIVIC EDUCATION
1 **Briefly explain the roles played by NDLEA (National Drug Law Enforcement agency), and NAFDAC (National Agency for Food and Drug Administration and Control)**

CRK
1. **Concern for one's nation. Round-up CRK for SSS. Page 34-38. Discuss the concern and response of Zerubbabel, Ezra, and Nehemiah to their nation.**

GOVERNMENT
1.Define the term "Indirect Rule System".
2.state six (6) reasons for its adoption.

GEOGRAPHY
Give five (5) differences between Greek and Koppen's system of Climatic Classification.

DATA PROCESSING
1. Define file organization
2. Explain the various types of file organization

AGRICULTURAL SCIENCE

1. Study and form notes on these methods of replacing lost nutrients. a) Cover cropping b) Liming c) Inorganic manuring or Fertilizers.

2. State two effects of these farming practices on the soil. a) Bush burning b) Mixed farming.

1. ESSENTIAL MATHEMATICS FOR SS2 by AJS Oluwasanmi Exercise, 5.4 page 62, No's: 14, 15, 16, 17.
2. MATHEMATICS

PHYSICS
1. Write out the correct answers to all the THEORY questions of the first term examination paper.

ENGLISH LANGUAGE
Read the comprehension passage on page 206-207, (Lesson Ten) of the Goodbye to Failure in English, SS2 and answer questions a-g.

LITERATURE-IN-ENGLISH
DRAMA:
Read and summarise the major events in Act 1 Scene 1 and 2 of A Raising in the Sun by Lorainne Hansberry.
Read Othello by William Shakespeare.
POETRY:
1. Write the poem, 'Shall I Compare Thee to a Summer's Day?'' by William Shakespeare in your notebook.
2. Form notes on the author's background and the background and the background of the text.

YORUBA
Ko leta si ore re ki o salaye awon ona ti o fe gba se ayipada rere ninu eko re ninu odun tuntun.

FOOD AND NUTRITION
1. Differentiate between kitchen equipment and kitchen utensils.
2. List five types and three examples each.

FRENCH
1. Exprimez dans une histoire une situation de l'hesitation.
2. Exprimez aussi une situation de confiance.
3. Conjuguez ces verbes au conditionnel present: manger, finir, vouloir et se promener.

ECONOMICS
1. Explain Law of variable proportion.
2. Explain with an appropriate diagram, the relationship between total product, average product and marginal product.
3. Explain the following (a) increasing returns (b) constant returns (c) diminishing returns.

COMMERCE
1) a. Define credit sales.
   b. List and explain five different types of credit sales you know.
2) a. What do you understand by hire purchase?
   b. Describe four advantages of hire purchase to the sellers.

BIOLOGY

1. What is meant by the term excretion?
   a. Name the excretory organs/systems of these organisms.
      I. Amoeba
      II. Tapeworm
      III. Earthworm
      IV. Cockroach
      V. Crustaceans
      VI. Lizard
      VII. Man
      VIII. Flowering plants.
   b. List four excretory products of mammals.
2. State the substances contained in urine.

CREATIVE ART

In a tabular format, highlight five (5) different Nigerian local craft, the materials used and functions.

Ss3

PHYSICS

1. Write out the correct answers to all the THEORY questions of the first term examination.
2. Read up "Atomic Structure and Models of the atom".

SS3 FURTHER MATHEMATICS

Solve all the THEORY questions of the first term examination paper.

CHEMISTRY

Instruction: Answer the following questions in a new 40 leaves note. Please note that each question is to be answered on a new page and the graph is to be drawn on a graph sheet.

QUESTION 1

(a) (i) Define *heat of formation.*

(ii) Calculate the standard free energy of a reaction at $25°C$, when the enthalpy and entropy of reaction are -190J/mole and 20 $Jmol^{-1}K^{-1}$ respectively.

(iii) State whether the reaction in (aii) is feasible or not. Give reason for your answer.

(b) (i) Distinguish between *a conductor* and *an electrolyte.*

(ii) Name **two** substances that cause hardness of water.

(iii) Mention **two** disadvantages of hard water.

(c) (i) Define *solubility.*

(ii) The following results were obtained from the solubility of potassium bromide at various temperatures in 1000g of water.

Temperature (°C)	0	10	20	30	40	50	60	70	80	90	100
Solubility	53.50	59.50	65.20	70.40	75.50	80.50	85.50	90.20	95.00	99.50	104.00

Plot a solubility curve of potassium bromide from the result above.
From the solubility curve, calculate solubility of potassium bromide at 35°C.
What is the least amount of water that will dissolve 30g of potassium bromide at 70°C?

QUESTION 2
What is the shape of:
(i) *p-orbital;*
(ii) a molecule of methane;
(iii) a molecule of carbon (IV) oxide?
(iv) *d-orbital*
Consider the following elements: Ne, S, Cl, O, Fe, and Mg. State which of them:
exhibit(s) allotropy
form(s) coloured ions
is/are malleable
consist(s) of molecules that are far apart at room temperature
forms hydrides by sharing electrons with hydrogen
has/have complete outermost shell.
State **three** characteristics properties of:
electrovalent compounds
alpha particles
catalysts

QUESTION 3
i. Define the term *Mixture*.
ii Calculate the percentage by mass of nitrogen in magnesium trioxonitrate (V)
        [Mg = 24, N =14, O =16]
iii. Mention two compounds that are used as drying agents.
i. State two types of heat change that accompany chemical process.
ii. Mention three indicators used in quantitative analysis.
iii. Calculate the relative molecular mass of a gas with a relative vapour density of 1.58 gdm^{-3} at s.t.p.
(c) i. State the differences between ionization energy and electron affinity.
ii. Give two differences in the physical properties of rhombic Sulphur and monoclinic Sulphur.

iii. Determine the empirical formula of an oxide of sodium containing 60% of oxygen.

QUESTION 4
When a quantity of powdered Sulphur was burnt in excess oxygen, 100 cm^3 of Sulphur (IV) Oxide were produced at s.t.p.
Write an equation for the reaction.
Calculate the volume of oxygen utilized during the reaction.
        [Molar volume of a gas s.t.p. = 22400 cm3]
The structures represented below are two atoms:
        $^a_c X$ $^b_c X$
Name the phenomenon exhibited by the two atoms.
What is the difference between the two atoms?
What is the similarity between two atoms?
Give three examples of elements that exhibit the phenomenon.
(c) i. List two oxides of nitrogen.

ii.   State Charles' law.

iii.   A given mass of gas occupies 300 cm3 at 900 mmHg. Calculate the volume occupied by the gas at 750 mmHg if temperature remains constant. 3 marks

QUESTION 5.

a. State *Faraday's* first law of electrolysis.

b. A current of 2.5A is passed through acidified water for 1.5 minutes, calculate the volume of oxygen evolved at 285K and 0.91×10^5 Nm^{-2} [G.M.V. = 22.4dm^3 , standard pressure= 1.01×10^5Nm^{-2}. 1Farad= 96500C]   6mks

c. State two applications of electrolysis.

QUESTION 6.

The analysis of a compound gave the following: 1.25g of the compound contained 0.62g of potassium, 2.51g of the compound contained 0.51g of Sulphur, 1.87g of the compound contained 0.57g of oxygen. Determine: a. the empirical formula of the compound,   b. the molecular formula of the compound given that its relative molecular mass is 158.

c. Mention an industrial application for each of the following.   i. Magnetization   ii. Fractional crystallization.

iii. Distillation   iv. Evaporation

QUESTION 7.

An aluminum rod dipped into a solution of aluminum salt was connected through a voltmeter to a copper rod dipped into a solution of copper salt and connected by a salt bridge. The standard electrode potentials, E^0, of copper and aluminum are +0.34V and – 1.66V respectively.

ai. Draw the electrochemical cell and show the direction of flow of electrons.

ii. Write down the cell notation of the setup above.

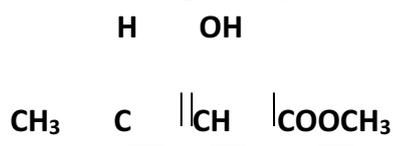 bi. Calculate the e.m.f. of the cell.   ii.

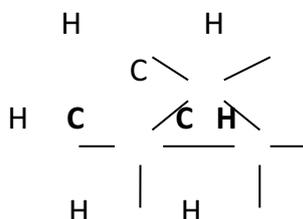State three differences between an electrolytic cell and an electrochemical cell.

QUESTION 8

(i) Define the term ***functional group.***   (ii)

Name the functional groups present in the following compound:

          H   OH

   CH$_3$ C   ‖CH   ‖COOCH$_3$
          ──   ──   ──

Consider the following structure of an organic compound, **Q**.

         H   H
          C   /
   H   C   /C H
          ──   /──   ──
          │   │
          H   H

Name the compound Q.

Write the balance equation for the complete combustion of compound Q

What type of reaction will compound Q undergo with chlorine?

(i) Give the **two** reasons why soda lime is used instead of caustic soda in the preparation of methane.
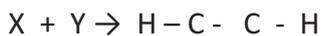
(ii) List **two** physical properties of methane.

Consider the following reaction scheme:

Petroleum → Petroleum Fractions

Higher Petroleum Fractions → Petrol + X

                H H

$$X + Y \rightarrow H - C - \ C - H$$

$$ Cl \quad Cl$$

$nX \rightarrow (CH_2 - CH_2 - CH_2 - CH_2)_3$

State the type of process/ reaction involved in each of the stages numbered i-iv above.

Identify X and Y in (iii) above.

Give the IUPAC name of the product formed in (iii)

What are the reaction conditions for stage (iv)?

Explains why palm wine:

froths or foams

tastes sour after some days.

Draw the structure of the alkene that is an isomer of compound Q.

MATHEMATICS
Essential Mathematics for S.S. 3 by A.J.S. Oluwasanmi
Ex. 6.2, No. 11, Page 7
Ex. 7.4, No. 4,7 and 8, Page 91

FRENCH
Ecrivez sur ce titre 'Mon Proviseur'

CRK
Round Up CRK page 108
Acts. 9:1-30
Give an account of the conversion of Paul and the reaction of the people to his conversion.

VISUAL ART
With the use of calligraphy pen, design a package advertising CLOSE UP toothpaste.

TECHNICAL DRAWING
Make a neat free hand sketch of the following tools and symbols: Spirit level, anvil, thin snip, trowel, hack saw, twist drill, rammer,and ten electrical/ electronic symbols.

ENGLISH LANGUAGE
Your school has a poor image in the community it finds herself because of the behaviour of the students of your school. Write a letter to the Principal of the school of three areas the school has attained notoriety and what he can do to change the situation.

LITERATURE
Account for the plot of Horace Walpole's The Castle of Otranto. (2)Write short notes on the major and minor characters in the novel above.

BIOLOGY
1. (a) What are hormones?
(b) In a tabular form, state four differences between nervous coordination and hormonal coordination in humans
(c) Make a labelled diagram 10-12cm long of the reflex arc.
2. (a) What do you understand by guttation and transpiration?
(b) Illustrate an experiment to demonstrate transpiration in plants.

Economics
Summarize chapter 11 to chapter 19 using Essential Economics for Senior Secondary Schools in your **SUMMARY NOTE** (60 Leaves exercise book)

YORUBA LANGUAGE
Ko leta si ore re ni ilu odikeji lori bi o se se àyeye odun Keresi ti o waye ni odun 2018.

CIVIC EDUCATION
Distinguish between majority and minority rule in an ideal democracy.

GOVERNMENT
Discuss vision 2020

GEOGRAPHY
Write an explanatory note on the following geographical regions in Nigeria   (i) North-Central (ii) Western Highland (iii) Eastern Scarpland

DATA PROCESSING
1. Define parallel and distributed databases
2. State the features /characteristics of parallel and distributed databases
3. State the advantages and disadvantages of both parallel and distributed databases

FOOD AND NUTRITION
Plan a traditional meal for any of the ethnic group.
List out the ingredients and how to prepare the meal.