The Ambassadors College, Ota

S.S.S 1

FIRST TERM

HOLIDAY ASSIGNMENT

2024/2025 Academic Session

Name: _____

ENGLISH LANGUAGE

Read structure of the verb on pg. 104 and answer question A and B on page 105 of NOSEC Book 1.

CIVIC EDUCATION

1a. What is representative Democracy?

b. Discuss FIVE reasons Nigeria adopts Representative Democracy.

c. Explain with clear examples, FIVE problems of Nigeria democracy.

BIOLOGY

State the functions of the following nutrients;

i. Nitrogen ii. Phosphorus

iii. Potassium iv. Sulphur

PHYSICS

1. Differentiate between classical and modern Physics, hence give five examples of each.
2. Given displacement, $s = 10t^2 + 4t$, in metre. Deduce the velocity, v equation, and determine the magnitude of v at time $t = 4s$.

BIOLOGY

1. Read the topic Nutrient cycles from page 40 – 43 of your e-note with reference to your Modern Biology.
2. Answer question 1 – 7 on page 43 of your E-note and question 2 of assignment six on page 43 of your e-note.

CHRISTIAN RELIGIOUS KNOWLEDGE

1. Explain the term old life.
2. Mention ten characteristics of old life.
3. What is New Life in Christ?
4. Mention any FIVE characteristics of the New Life.

VISUAL ART

Arrange and Draw THREE man-made objects.

Medium - Pencil/Painting

Size - Sketchpad

DYEING & BLEACHING

Design a fabric for Nigerian Football Federation (NFF)

Medium - Coloured pencil

Size - Sketchpad

Colour - Minimum of 3

GOVERNMENT

1a. Define Government as an academic field of study.

b. Describe any three branches of government.

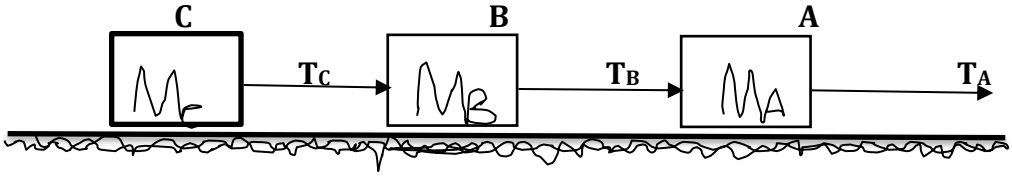
c. How id the Executive controlled in the exercise of its powers and functions.

PHYSICS

1. Show that the linear velocity, **V ,** of a particle executing circular motion in a circular track of diameter , ***d,*** at an angular speed , **ω** is given as ;

$$V = \frac{\omega d}{2}$$

(a) The diagram below illustrate ***three*** similar blocks. Labelled, **A, B,** and **C**, each of mass 3 *kg* and are joined by strings.



They are pulled along a horizontal floor by means of the string at A with acceleration of 2 ms^{-2}. The string are under tension T_C, T_B, and T_A. If the coefficient of friction between the surface and the bodies is 0.3, calculate ;

(i). T_C, (ii). T_B,

(iii). T_z (Take g = $10ms^{-2}$)

2. (a) (i). Show that the coefficient of friction in an inclined plane of inclination, θ,

is. $\mu = \tan\theta$

(ii). Mention the aspect or topic in study of Physics that is applicable in each of the following:

(β) : Threading of the automobile tyres

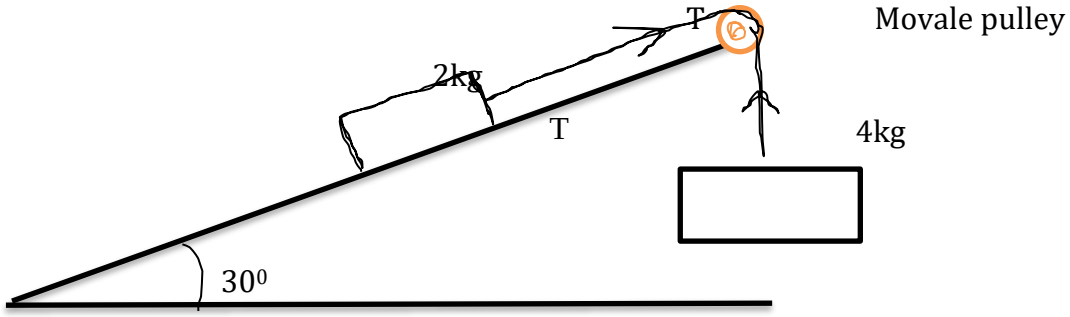
(λ) : Production of lubricating oil

3. (a) Three vectors; $\mathbf{V_1} = 3\ ms^{-1}$, *North* 45^0 *West*, $\mathbf{V_2} = 12\ ms^{-1}$, *West* and $\mathbf{V_3} = 5\ ms^{-1}$, *South* act at a point.

(i). Sketch a **vector diagram** to illustrate the given information, in the space provided below.

(ii). Calculate the *magnitude* and *direction* of the resultant of the vectors.

(b). Study the diagram below carefully, where a string was connected to two masses 2kg and 4kg via a movable pulley.



Show that the tension, T in the string connecting both masses, is :

$$T = 20.0N$$