# Second Term 2011/2012 Vacation Assignments

Class: S.S.2

### **Subject: Biology**

- 1 Distinguish between an antibody and as antigen
- 2 Explain the following terms:
  - (i) Conservation
  - (ii) Endangered species
- 3 Explain briefly how the level of sugar in the mammalian blood can be regulated
- 4 Draw and label fully the mammalian kidney

## **Subject: Economics**

- 1. Distinguish between public finance and fiscal policy
- 2. What are the main sources of government revenue
- 3. Explain the following:
  - a. Tax evasion
  - b. Tax avoidance
  - c. Advalorem tax
- 4. What is a budge? Give reasons for the rapid increase in government expenditure in West Africa in the last two decades
- 5. How can budget be used to influence economic activities in the country
- 6. Write notes on:
  - i. Budget surplus
  - ii. Budget deficit
  - iii. Recurrent and capital expenditure
  - iv. Recurrent and capital revenue
  - v. Balanced budget
- 7. (a) What is tax?
  - (b) What are progressive, regressive and proportional taxes? Explain your answers with the aid of examples.
- 8. (a) What is meant by 'Economic Development'? How can the government help to speed up Economic Development of your country?
  - (b) What is Economic planning? Why is Economic planning necessary?
- 9. What are the characteristics that cause West African countries to be described as underdeveloped?
- 10. Carefully distinguish between Economic growth and Economic development. Show the relationship between them if any.

### **Subject: English Language**

### Summary

Read the following passage carefully and answer the questions on it.

"The more I consider the behavior of man, the more I respect my dog" so say a sage. The sage admired the faithfulness of the dog which stands in sharp contrast to man's unfaithfulness. Once a friend, the dog never betrays that bond of loyalty. Through thick and thin, he remains ever trusting, consistently loving. When you put this against man's readiness to call it quits when it suits him, you cannot but share the sentiments held by the sage.

A dog's friendless with man manifests even more when we consider the ferocity with which he attacks the quadrupeds. Like most carnivores, he hunts other animals but unlike others he hunts not for himself but for man. To please his friends, he sets himself against his brothers. In this respect, his services to man excel those of other domestic animals. The cow donates milk, the pig its meat, the sheep its fleece, the horse its strength in bearing burdens. The cat hunts but solely for itself. Only the dog pleases man by displeasing his brothers.

He even wages man's war against man's enemies, the criminals. Skilled as a hunter, with a sharp sense of smell, he develops as a natural detective, able to sniff out who and where members of the underworld are. In the hand of the police, he undergoes a rigorous training that makes him an asset in fighting crime. Again, during wars, highly trained dogs are used to go ahead of an advancing battalion, spying to find out whether or not the enemy soldiers are near. Somehow, they report back to the commanding officer.

At home, his hunting instincts are exploited to advantage. Kept outside at night, he guards the doors, warding off thieves and other suspicious elements. In the process, he might end up paying with his life, though more often he brings down the culprit with his fangs. While not primarily a beast of burden, he could be used for transportation. In the very cold regions of the world where there is perpetually a carpet of snow, the dog proves a successful means of transport where other beasts fail. Polar explorers have used dog trains to pull sledges which glide smoothly on ice. One explorer, Captain Scott, who tried to use horses rather than dogs failed disastrously. Most of his animals died; so, his men rendered immobile followed suit. He thus failed to be the first man to reach the South Pole.

### **QUESTIONS**

In six sentences, one for each, summarise the uses of the dog to man.

### **Vocabulary Development**

- 1. Explain the duties of the following in a hospital setting:
  - (b) A technologist (a) A nurse
  - (c) A radiologist (d) A physiotherapist (f) A dermatologist (e) A pharmacist
  - (g) An ophthalmologist (h) A gynaecologist (i) A dentist
- 2. Who is a registrar; a houseman; a general practitioner; a para-medical staff; a herbalist?
- 3. What are the difference in the following (a) immunization (b) vaccination (c) inoculation

### **FINANCIAL ACCOUNTING**

[1] Segun is a manufacturer of expanded materials. The following balances have been extracted from the books of the business for the year ended 31<sup>st</sup> December 1991.

		#		#
Capital				18,400
Drawings	720			
Stocks at January 1991:				
	Raw materials	8,00	00	
	Work in progress	3,2	50	
	Finished goods	6,00	00	
Manufacturing wages – Direct		6,	,450	
	- Indirect	2,80	0	
Miscellaneous expenses		26	50	
Travelling expenses		2,4	100	
Rent and Rate-factory		60	00	
Freehold premises		10	),000	
Plant and machiner	y-factory	10	6,000	
Sales				98,260
Debtors and Creditors		4,	050	3,190
Salaries and wages		3,	500	
Bank		6,0	00	
Cash		2,00	00	
Selling and administration expenses		:	2,850	
Discounts received				150

Discounts allowed	120	
Purchases of raw materials	45,000	
	120,000	120,000

### Additional Information:-

1. Stocks at 31<sup>st</sup> December 1991

Raw materials # 9,500

Work in progress # 3,750

Finished goods #5,840

- 2. Rates paid in advance #250
- 3. Provisions for bad debts of #300 is to be provided on plants and machinery at 20%

You are required to prepare manufacturing trading profit and loss account for the year ended 31<sup>st</sup> 1991

- 2i. Mention six items which must be contained in a partnership agreement.
- ii. Briefly explain the provisions of section 24 of the partnership Act of 1890.
- 2. Mapherson Limited is a company with an authorized capital of 200,000, 12% preference shares of #1 each.100,000 preference shares have been issued at a premium of 10%. All shares are fully paid. The following balances appeared in the books of the company at 30<sup>th</sup> June 1993 after the profit and loss account had been prepared.

	#
Premises at cost	180,000
Machinery at cost	85,000
Creditors	63,000
Debtors	92,000
Stock	45,000
Furniture	22,000

Investments	10,000
Bank overdraft	17,000
Profit and Loss account	62,000
Provision for depreciation of machinery	12,000
Provision for depreciation of furniture	2,000
15% Debentures issued	60,000
Motor Vehicle at cost	30,000
Provision for depreciation of Motor Van	12,000
Provision for bad debts	8,000
Bills receivable	22,000
Bills payable	38,000
Payments in advance	11,000
Cash in hand	2,000
General reserve	15,000

### Additional Information:-

- [a] The debenture interest and the preference share dividend for the year ended  $30^{th}$  June 1993 have not been provided for.
- [b] The directors have recommended a dividend of 8% on ordinary share capital.

### Required:-

Prepare a balance sheet as at 30<sup>th</sup> June 1993.

### COMMERCE

- [1a] Define Transportation.
- [1b] List the importance of transportation by water.
- [2a] What is Communication?
- [2b] List and explain different means of Communication.

### **YORUBA**

parallax?

Tumo ogbufo yii si ede geesi (A) **ORO IMURAN** Omo atata kaka ki n bi egbaa obun Maa kuku bi okan soso oga Maa fiyan araye loju Maa rohun gberaga Se okan soso araba, kii se egbe egbaa osunsun Omo ti o ja fafa kan soso, kii se egbe egbaa Irunbi omo Akukuubi san ju radarada Kaka lomode ki o yeni Osanju ka dagba, ka toroje lo. (B) Se ilana adako awon gbolohun wonyi si fonetiiki Ι. Patapata Sugbon II. Gbangbarigida III. Obo lagido IV. ٧. Sanponna **PHYSICS** 1a Explain the types of reflection B State the laws of reflection

2a What do you understand by the principal reversibility of light, virtual and real images and

- 3 Explain with the aid of diagram how a concave mirror could be used to:
  - I. Ignite a piece of carbon paper
  - II. Produce an exact copy of an object on a screen.
- 4 A ray of light experiences a minimum deviation when passing symmetrically through an equilateral triangular prism.
- Calculate I. The angle of minimum deviation
  - II. The angle of incidence.

(Refractive index of glass =1.5).

#### **GEOGRAPHY**

- 1 Explain in detains the EARTHQUAKE (with its measurement and integrity)
- 2 Draw a diagram showing the earthquake waves.
- 3 Mention and explain examples of volcano.

### **CHEMISTRY**

- 1 Write TWO IUPAC nomenclature naming and their respective structure formulae for the following homologous series.
- a Alkanes b. Alkenes. c Alkynes d. Alkanols e. Alkanoic / Carboxylic f. Alkanoates g. Alkanals

h Alkanones i. Amines j. Amides/ Alkanamide.

### **MATHEMATICS**

1 The table below shows the frequency distribution of money income of 40 employees of First Bank PLC.

Salary (in thousand)	57 - 61	62 – 66	67 -71	72 - 76	77 - 81	82 - 86	87 - 91
frequency	5	5	7	8	9	3	3

Find the (i) Mea n (ii) Median (iii) Mode

2 The volume of different types of accounts held by Ogun Community Bank LTD. For the period 1996 to 2000 are follows (in #m)

YEAR	Savings	Current	Fixed deposit
1997	25	60	15
1998	30	65	20
1999	40	75	20
2000	60	100	25

Presents the above data in the form of

- (i) Bar chart
- (ii) Component bar chart
- (iii) Multiple bar chart

3(a) Copy and complete the table for the relation

$$Y = 2\cos 2x - 1$$

X	$0_0$	$30^{0}$	$60^{0}$	$120^{0}$	$150^{0}$	$180^{0}$
Y	10	0				1.0

b Using a scale of  $2cm = 30^{\circ}$  on the x-axis and 2cm = 1unit on the y-axis, draw the graph of

$$y = 2\cos 2x - 1$$
 for  $0^0 \le x \le 180^0$ 

c (i) On the same axis draw the graph of  $y = \frac{1}{180^{\circ}}(x - 360^{\circ})$ 

(ii) roots of the equation 
$$2\cos 2x - \frac{x}{180} + x = 0$$

### **AGRICULTURAL SCIENCE**

- 1. Define the term 'animal nutrition'.
- 2. Outline the classes of livestock feeds.
- 3. Mention five types of roughages.
- 4. Write six factors affecting water intake of animals.
- 5. List six sources of vitamins.
- 6. State three types of ration.

- 7. What is a diet?
- 8. Define the 'term ration formulation'.
- 9. Highlight six effects of malnutrition in farm animals.
- 10. What is supplementary feeding?