



VIVA COLLEGE SCHOOL

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HOLIDAY WORK TERM THREE, 2019

Academics dept.

SENIOR THREE

04TH DEC, 2019

SUBJECT	CHALLENGE	MKS
INSTRUCTIONS <ol style="list-style-type: none"> For classes 1 to 2 all questions in all subjects are compulsory thus attempt all questions For senior 3 students, please attempt all questions for the compulsory subjects and only those for your options For senior 5 students, please attempt all questions in your subject combination For better marks, you must present and explain thoroughly well all the attempted challenges For each of your study subject done, it must be put in a separate 96 exercise book (its ok to use the previous books) Holiday work must be done before reporting back to school and the respective class tutor shall receive your work on reporting 		
ENGLISH	<p>Narrate an experience of any journey you have made of recent.</p> <p>Rewrite the following as instructed without changing meaning</p> <ol style="list-style-type: none"> The clock stopped because Bob didn't wind it (<i>Change to the passive voice</i>) He wants to leave home but he is afraid of his mother. (<i>Begin: If.....</i>) "My son, cried the old woman, "you have left me in great sorrow" (<i>Begin: The old woman</i>) The Crowd would have killed the thief if the police had not intervened in time (<i>Begin: But for.....</i>) He was warned to take notice of their complaint. (Use: <i>attention.....</i>) The journey to Namugog0 is no less and no more dangerous to make on foot today than it was long ago. (<i>Rewrite without using: less and more</i>) Peter left for Moroto. Peter put his clothes in a safe square box. He wanted to protect them from robber. (<i>Begin: To protect.</i>) It was hopeless talking to him. (<i>Begin: We need.....</i>) Jerry said he was sorry that he had broken the window. (<i>Replace "Sorry" with "apologize"</i>) Come early or you will not be able to get a ticket. (<i>Begin: Unless.....</i>) 	20mks 10 mks
LITERATURE	With Close reference to the novel "A Cowrie of Hope", Discuss the character traits of Sula, Nasula and Nalukwi.	40mks
MATHEMATICS	<ol style="list-style-type: none"> Find the equation of a line passing through the point $(2, -3)$ and is parallel to the line whose equation is $3x - 2y - 6 = 0$. (4 marks) Two similar jugs have capacities of 1.2 litres and 2.7 litres. The smaller jug has a height of 14 cm. Determine the height of the larger jug. (4 marks) Express $\frac{1}{\sqrt{5}-\sqrt{2}}$ with a rational denominator. (4 marks) Given that $F = \{ \text{all factors of } 24 \}$ $G = \{ \text{all factors of } 30 \}$ Find $n(F \cap G)$ (4 marks) (a) A safari rally driver is to follow a route ABCD. B is 250km from A on a bearing of 075° from A. C is on a bearing of 110° from A and 280km from B. The bearing of C from D is 040° and a distance of 300km. By scale drawing show the position of the points A, B, C, and D. (b) Determine; (i) the distance of A from C. (ii) the bearing of B from C. (iii) the distance and bearing of A from D. (14marks) 	30 mks
CHEMISTRY	<ol style="list-style-type: none"> <ol style="list-style-type: none"> Briefly describe how you would prepare a DRY sample of hydrogen chloride gas in the laboratory A solution of hydrogen chloride gas in methylbenzene does not turn litmus paper red but a solution of the same gas in water turns litmus red. Explain this observation. The reaction scheme shows a series of reactions. <div style="text-align: center;"> <pre> graph TD A[White solid A] -- "Heated with conc. H2SO4" --> B[Colourless gas B] E[Greenish yellow gas E] -- "Heated with D" --> C[Concentrated solution C] B -- "Dissolves in water" --> C C -- "With NH3(g)" --> G[Dense white fumes G] F[Metal F burnt in E] --> A </pre> </div> Identify A, B, C, D, E, F and G (e) An aqueous solution of chloride ions was separately treated with <i>lead(II) nitrate</i> solution and silver nitrate solution followed by <i>dilute nitric acid</i>. State what was observed in each case and write an ionic equation for the reaction which took place. (f) A red flower and a damp piece of blue litmus paper were put in a gas jar of chlorine gas. State what was observed and explain your observations. 2.(a) What is a hydrocarbon? (b) stating an example in each, explain the difference between <ol style="list-style-type: none"> A saturated hydrocarbon and an unsaturated hydrocarbon? An alkene and an alkyne (b) Name the following hydrocarbons: (i) CH_4, (ii) C_2H_6, (iii) C_2H_4, (iv) C_2H_2 (c) Briefly describe how vegetable oils can be converted to fats. (d) Name one reagent that can be used to distinguish C_2H_4 and C_2H_6. State the observations in each case. (e) The hydrocarbon C_2H_4 can be obtained in the lab by mixing ethanol and sulphuric acid. <ol style="list-style-type: none"> State the conditions for the reaction. (ii)Write the equation for the reaction (iii) Name the type of reaction. (f) A compound Y contains 15.8% aluminium, 56.2% oxygen and 28% Sulphur. <ol style="list-style-type: none"> Calculate the empirical formula of Y ($S=32, Al=27, O=16$) If the molecular formula of Y is 342g, determine the molecular formula of Y. 	30mks

BIOLOGY	1. (a) Distinguish between gaseous exchange and respiration . (04 marks) (b) What is the importance of gaseous exchange in living things. (04 marks) (c) What is the importance of respiration in living things? (07 marks)	15 mks																																							
	2. (a) Get specimen K (freshly killed cockroach). Giving three reasons in each case, identify the (i) kingdom , (ii) phylum and the (iii) class of specimen K (b)(i) Draw and label the one hind limb of specimen K(ii) Explain how features of the hind limb adapts to its function	25 mks																																							
HISTORY	1 (a) What were the causes of the 1895-1906 Nandi resistance against the British? (b) What were the effects of this resistance? 12 mark	25 mks																																							
	2. (a) Explain the factors for the rise of Zulu state (12marks) (b) Describe the organization of the Zulu state politically, socially and economically (13marks)	25 mks																																							
COMMERCE	Given the details below for the year ended 31/12/2018 from KIMS traders; <table style="width:100%; border:none;"> <tr> <td style="width:30%;"><i>Particulars</i></td> <td style="width:30%; text-align:right;"><i>Ushs</i></td> <td style="width:40%;"></td> </tr> <tr> <td><i>Sales</i></td> <td style="text-align:right;"><i>400,500,000</i></td> <td>i. <i>Net purchases</i></td> </tr> <tr> <td><i>Stock (1/1/2018)</i></td> <td style="text-align:right;"><i>20,800,000</i></td> <td>ii. <i>Net sales</i></td> </tr> <tr> <td><i>Returns outwards</i></td> <td style="text-align:right;"><i>2,400,000</i></td> <td>iii. <i>Cost of goods available for sa</i></td> </tr> <tr> <td><i>Expenses</i></td> <td style="text-align:right;"><i>1,000,000</i></td> <td>iv. <i>Cost of goods sold</i></td> </tr> <tr> <td><i>Purchases</i></td> <td style="text-align:right;"><i>300,000,000</i></td> <td>v. <i>Gross profit</i></td> </tr> <tr> <td><i>Returns inwards</i></td> <td style="text-align:right;"><i>280,000</i></td> <td>vi. <i>Net profit</i></td> </tr> <tr> <td><i>Carriage in wards</i></td> <td style="text-align:right;"><i>80,000</i></td> <td>vii. <i>Mark up</i></td> </tr> <tr> <td><i>Stock (31/12/2018)</i></td> <td style="text-align:right;"><i>500,000</i></td> <td>viii. <i>Margin</i></td> </tr> <tr> <td><i>Capital</i></td> <td style="text-align:right;"><i>162,640,000</i></td> <td>ix. <i>Average stock</i></td> </tr> <tr> <td></td> <td></td> <td>x. <i>Rate of stock turn</i></td> </tr> <tr> <td></td> <td></td> <td>xi. <i>Net profit ratio</i></td> </tr> <tr> <td></td> <td></td> <td>xii. <i>Rate of return on capital</i></td> </tr> </table>	<i>Particulars</i>	<i>Ushs</i>		<i>Sales</i>	<i>400,500,000</i>	i. <i>Net purchases</i>	<i>Stock (1/1/2018)</i>	<i>20,800,000</i>	ii. <i>Net sales</i>	<i>Returns outwards</i>	<i>2,400,000</i>	iii. <i>Cost of goods available for sa</i>	<i>Expenses</i>	<i>1,000,000</i>	iv. <i>Cost of goods sold</i>	<i>Purchases</i>	<i>300,000,000</i>	v. <i>Gross profit</i>	<i>Returns inwards</i>	<i>280,000</i>	vi. <i>Net profit</i>	<i>Carriage in wards</i>	<i>80,000</i>	vii. <i>Mark up</i>	<i>Stock (31/12/2018)</i>	<i>500,000</i>	viii. <i>Margin</i>	<i>Capital</i>	<i>162,640,000</i>	ix. <i>Average stock</i>			x. <i>Rate of stock turn</i>			xi. <i>Net profit ratio</i>			xii. <i>Rate of return on capital</i>	30 mks
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PHYSICS	1(a) What do you understand by; (i) Ray (ii) Beam (iii) Rectilinear propagation of light . (b). Describe an experiment to demonstrate rectilinear propagation of light (c)(i) State the laws of refraction (ii)What do you understand by the principle of reversibility of light (iii) State the causes of refraction (d) Explain why a pond appears shallower when viewed from above (i) State Snell's law (ii)A ray of light is incident at an angle of 30° on a water-air interface. Find the angle of refraction in the air	25 mks																																							
	In this experiment to determine the constant f of a convex lens a student obtained the following results <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td>$u(cm)$</td> <td>20</td> <td>25</td> <td>30</td> <td>35</td> <td>40</td> <td>45</td> </tr> <tr> <td>$v(cm)$</td> <td>22.0</td> <td>16.4</td> <td>15.3</td> <td>14.0</td> <td>12.8</td> <td>12.5</td> </tr> </table> (a) Enter your results in a suitable table including values of $\frac{u}{v}$ (b) Plot a graph of $\frac{u}{v}$ against u (c) Calculate the slope, k of the graph (d) Find the constant, f from the expression $k = \frac{1}{f}$	$u(cm)$	20	25	30	35	40	45	$v(cm)$	22.0	16.4	15.3	14.0	12.8	12.5	40 mks																									
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AGRICULTURE	1. (a) Mention the qualities of a good egg . (06 marks) (b) Draw a well labeled diagram of internal features of an egg and give functions for each part. (14 marks) (c) Using an illustration, describe the process of egg formation in a hen. (30 marks)	50 mks																																							
GEOGRAPHY	1. (a)Draw a sketch map of the Netherlands and on it mark name, (i) River Rhine (ii) Towns Haarlem, The Hague and Amsterdam (ii) Any two areas under horticulture . (10 MARKS) (b) Describe the factors which have led to the development of horticulture in the Netherland (8 marks) C) Explain the problems affecting the horticulture in the Netherlands. (7 marks)	25 mks																																							
IRE	1. (a) Give an account of Abubaker's life up to the time he became a caliph. (b)Describe his election to the caliphate seat. (25 marks) 2. (a) Define the term Aqilah. (b)How is Aqilah ceremony celebrated?	50 mks																																							
FINE ART	1. Create an imaginative composition in colour on <u>each</u> of the topics below; (a) Vendors in a local market (b) Good news	40 mks																																							
SWAHILI	1.Andika insha isiyopungua wala kuzidi maneno 200 kuhusu ugonjwa wa “MALARIA.”	30 mks																																							
COMPUTER	1. The following devices; an Uninterruptible power supply, PC blower, a CCTV camera and a modem have been purchased by the ICT department. As a computer student you have been asked to; (a) Give reasons for the purchase of each devices (10 marks) (b) Suggest any five physical measures that may safeguard the purchased devices (10 marks)	20 mks																																							
CRE	1(a). Give reasons why young people find it hard to get good marriage partners today(10 marks). (b). What does the Old Testament teach about marriage?10 marks	20 mks																																							

Assessment Percentage rank for term one, 2020

Report	Holiday work	Mid-term exam	End of term exam	TOTAL MARK
Mid-term report	20%	80%	100%
End of term report	10%	30%	60%	100%