313/1 – **CHRISTIAN** – **Paper 1**
RELIGIOUS EDUCATION
Nov. 2018 – 2½ hours

Name .... Index Number ....

Candidate's Signature .... Date ....

Instructions to candidates

(a) Write your name and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
(c) This paper consists of **six** questions.
(d) Answer any **five** questions in the spaces provided at the end of question 6.
(e) Each question carries 20 marks.
(f) **This paper consists of 16 printed pages.**
(g) **Do not remove any pages from this booklet.**
(h) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
(i) **Candidates should answer the questions in English.**

For Examiner's Use Only

Question						Candidate's Total Score
Candidate's Score						

918309

Turn over

1. (a) Outline **seven** teachings about human beings from the Biblical creation accounts.
   (7 marks)

   (b) Give **seven** similarities between traditional African view of evil and the Biblical concept of sin.
   (7 marks)

   (c) State **six** ways in which Christians in Kenya help to restore a member who has fallen into sin.
   (6 marks)

2. (a) Give **five** reasons why the Israelites broke the covenant they had made with God while at Mount Sinai (Exodus 32:1-35).
   (5 marks)

   (b) Identify **eight** conditions that God gave to the Israelites during the renewal of the Sinai covenant (Exodus 34:1-35).
   (8 marks)

   (c) State the importance of the Ten Commandments to Christians.
   (7 marks)

3. (a) Identify **seven** characteristics of the Canaanite religion.
   (7 marks)

   (b) State the challenges faced by Elijah during his prophetic ministry in Israel.
   (6 marks)

   (c) Give **seven** ways in which Christians fight corruption in Kenya today.
   (7 marks)

4. (a) Explain the vision of the basket of summer fruits shown to Prophet Amos by God. (Amos 8:1-3).
   (6 marks)

   (b) Outline the teaching of Prophet Amos on the day of the Lord.
   (7 marks)

   (c) State **seven** ways in which Christians help the church leaders to perform their duties effectively.
   (7 marks)

5. (a) State the evils condemned by Prophet Jeremiah during the temple sermon.
   (6 marks)

   (b) Explain **four** symbolic acts related to hope and restoration as demonstrated by Prophet Jeremiah.
   (8 marks)

   (c) Give **six** lessons Christians learn from Prophet Jeremiah's temple sermon.
   (6 marks)

6. (a) Outline **six** roles of priests in traditional African communities.
   (6 marks)

   (b) Explain the importance of kinship ties in traditional African communities.
   (8 marks)

   (c) Identify **six** factors that have affected the kinship ties in the traditional African communities.
   (6 marks)

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Kenya Certificate of Secondary Education, 2018
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THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education

565/1 – **BUSINESS STUDIES** – **Paper 1**

Nov. 2018 – 2 hours

Name .... Index Number ....

Candidate's Signature .... Date ....

Instructions to candidates

(a) Write your name and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
(c) Answer **all** the questions.
(d) All answers should be written in the spaces provided in this booklet.
(e) **This paper consists of 12 printed pages.**
(f) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
(g) **Candidates should answer the questions in English.**

For Examiner's Use Only

Question	1	2	3	4	5	6	7	8	9	10	11	12	13
Score													

Question	14	15	16	17	18	19	20	21	22	23	24	25
Score												

TOTAL
SCORE

1. Outline **four** features of labour as a factor of production. (4 marks)

    (a) ....

    ....

    (b) ....

    ....

    (c) ....

    ....

    (d) ....

    ....

2. Outline **four** ways in which peace within a country may encourage entrepreneurial development. (4 marks)

    (a) ....

    ....

    (b) ....

    ....

    (c) ....

    ....

    (d) ....

    ....

3. State **four** duties of the office clerk. (4 marks)

    (a) ....

    (b) ....

    (c) ....

    (d) ....

4.   The document shown below is used in home trade.

BABU TRADERS LTD

To: Wakesho Ltd   No. 25
       P O Box 88   Date: 25/10/16
       KISUMU

We have credited your account as follows:

Being correction of arithmetic   **Amount**
error in invoice No. 015.

	Sh	Ct
	10,000	00
TOTAL	**10,000**	**00**

Error Total Sh 50,500
Correct Total Sh 40,500

Signature .LBO....

(a)   Identify the document.   (1 mark)

       ....

(b)   Outline **three** circumstances under which the above document may be used.   (3 marks)

       (i)   ....

              ....

       (ii)   ....

              ....

       (iii) ....

              ....

11. Outline **four** roles of transport in the facilitation of trade. (4 marks)

(a) ....

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(b) ....

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(c) ....

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(d) ....

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12. State **three** circumstances under which firms would form a cartel. (3 marks)

(a) ....

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(b) ....

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(c) ....

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13. Outline **four** conditions under which a manufacturer would distribute his products through the wholesaler. (4 marks)

(a) ....

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(b) ....

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(c) ....

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(d) ....

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14. State **four** reasons for maintaining a cash book in a business enterprise. (4 marks)

(a) ....

(b) ....

(c) ....

(d) ....

15. Apart from the forces of demand and supply, list **four** other ways in which the price of a product may be set. (4 marks)

(a) ....

(b) ....

(c) ....

(d) ....

16. Outline **four** factors that would make two people taking the same type of life assurance policy with the same insurer to pay different amounts of premium. (4 marks)

(a) ....

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(b) ....

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(c) ....

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(d) ....

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17. State the line of communication involved in each of the following: (4 marks)

   (a) The Manager of ABC Company Ltd talking to the Manager of XYZ Company Ltd.

   ....

   (b) A secretary asking for time off from her boss.

   ....

   (c) The Production Manager giving instructions to the Secretary of the Sales Manager.

   ....

   (d) The Store Keeper giving explanations to the Chief Accountant.

   ....

18. List **four** books of original entry that may be used to record transactions affecting stock.

   (4 marks)

   (a) ....

   (b) ....

   (c) ....

   (d) ....

19. Highlight **four** external economies of scale that a firm may get when operating on a large scale.

   (4 marks)

   (a) ....

   ....

   (b) ....

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   (c) ....

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   (d) ....

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20. The following information was extracted from the books of Leila Traders on 31st July 2016:

Details	Sh
Capital	90,000
Fixed Assets	80,000
Cash in hand	20,000
Current liabilities	20,000
Stock	20,000
Net profit	15,000
Drawings	5,000

Calculate:

(a) Capital owned (2 marks)

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(b) Acid test ratio (2 marks)

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21. Watamu Enterprises had the following assets and liabilities on 1st May 2014:

Particulars	Sh
Equipment	800,000
Capital	1,200,000
Creditors	100,000
Debtors	200,000
Stock	250,000
Cash at bank	50,000

The following transactions took place on 2nd May 2014:

(i)   Bought goods for re-sale Sh 150,000 on credit
(ii)   A debtor paid Sh 100,000 by cheque
(iii)   Sold the equipment for Sh 900,000 cash

Required: Prepare Watamu Enterprises balance sheet after the above transactions.   (5 marks)

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22. Outline **four** merits of indirect taxes. (4 marks)

(a) ....

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(b) ....

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(c) ....

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(d) ....

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23. Highlight **four** ways in which the technological environment may improve business
performance. (4 marks)

(a) ....

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(b) ....

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(c) ....

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(d) ....

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24. Identify the types of ledger in which each of the following accounts would be found: (4 marks)

	Account	Type of ledger
a	Otieno (buyer)	
b	Carriage outwards	
c	Mueni (supplier)	
d	Cash at bank	

25. Highlight **four** ways in which the introduction of money helped eliminate problems faced in barter trade.   (4 marks)

(a) ....

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(b) ....

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(c) ....

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(d) ....

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Kenya Certificate of Secondary Education

121/1 —   **MATHEMATICS**   — Paper 1
ALT A
Nov. 2018 – 2½ hours

Name ....   Index Number ....

Candidate's Signature ....   Date ....

Instructions to candidates

(a) Write your name and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
(c) This paper consists of **two** sections; **Section I** and **Section II**.
(d) Answer **all** the questions in **Section I** and only **five** questions from **Section II**.
(e) **Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question.**
(f) Marks may be given for correct working even if the answer is wrong.
(g) **Non-programmable** silent electronic calculators and KNEC Mathematical tables may be used, except where stated otherwise.
(h) **This paper consists of 18 printed pages.**
(i) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
(j) **Candidates should answer the questions in English.**

For Examiner's Use Only
Section I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total

Section II

17	18	19	20	21	22	23	24	Total

Grand Total

918228

Turn over
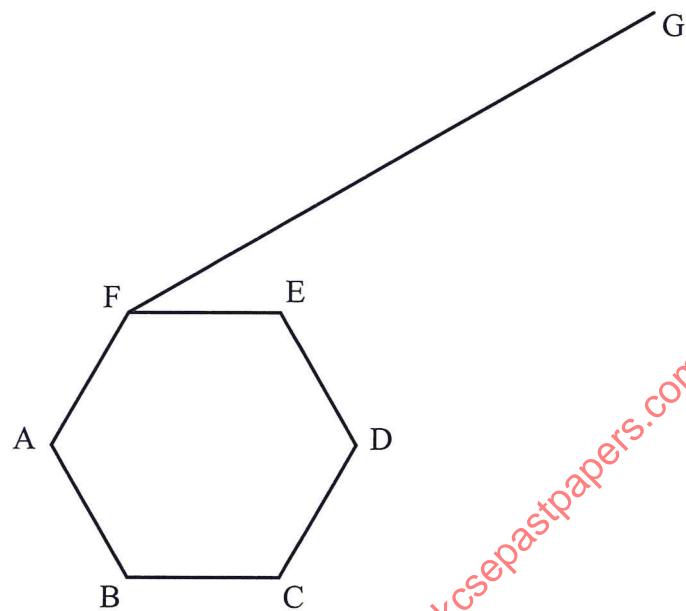
SECTION I (50 marks)

*Answer **all** the questions in this section in the spaces provided.*

1. Without using a calculator, evaluate: $\dfrac{2\frac{1}{3} - 1\frac{1}{5}\ of\ 2}{\frac{1}{4} - \left(-\frac{1}{2}\right)^3}$ (3 marks)

2. Given that $6^{2n-3} = 7776$, find the value of n. (3 marks)

3. The base of a right pyramid is a rectangle of length 80 cm and width 60 cm. Each slant edge of the pyramid is 130 cm. Calculate the volume of the pyramid. (3 marks)

4. In the figure below ABCDEF is a uniform cross section of a solid. Given that FG is one of the visible edges of the solid, complete the sketch showing the hidden edges with broken lines.

(3 marks)
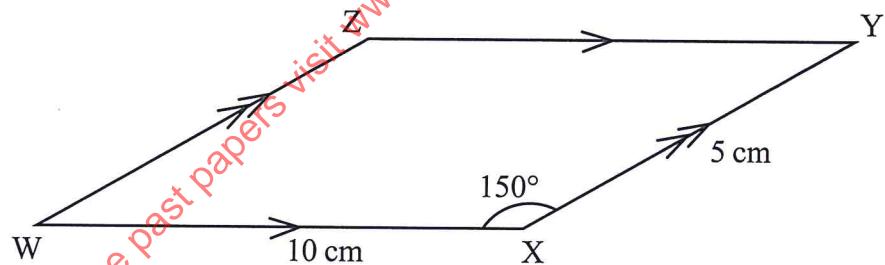
5. The lengths of three wires were 30 m, 36 m and 84 m. Pieces of wire of equal length were cut from the three wires. Calculate the least number of pieces obtained. (4 marks)

6. A two digit number is such that, the sum of its digits is 13. When the digits are interchanged, the original number is increased by 9. Find the original number. (4 marks)

7. (a) Using a ruler and a pair of compasses only, construct a quadrilateral PQRS in which PQ = 5 cm, PS = 3 cm, QR = 4 cm, ∠ PQR = 135° and ∠ SPQ is a right angle.

(2 marks)

(b) The quadrilateral PQRS represents a plot of land drawn to a scale of 1:4000. Determine the actual length of RS in metres. (2 marks)

8. Given that $\mathbf{OA} = \begin{pmatrix} 2 \\ 3 \end{pmatrix}$ and $\mathbf{OB} = \begin{pmatrix} -4 \\ 5 \end{pmatrix}$. Find the mid point M of $\mathbf{AB}$. (2 marks)

9. Two towns R and S are 245 km apart. A bus travelling at an average speed of 60 km/h left town R for town S at 8.00 a.m. A truck left town S for town R at 9.00 a.m and met with the bus at 11.00 a.m. Determine the average speed of the truck. (4 marks)

10. In the parallelogram WXYZ below, WX = 10 cm, XY = 5 cm and ∠ WXY = 150°.

Calculate the area of the parallelogram. (3 marks)

11. Without using mathematical tables or a calculator, evaluate $\dfrac{\sin 30° - \sin 60°}{\tan 60°}$. (3 marks)

12. Use matrix method to solve:

$5x + 3y = 35$
$3x - 4y = -8$. (3 marks)

13. Expand and simplify.
$(2x + 1)^2 + (x - 1)(x - 3)$. (2 marks)

14. Use mathematical tables to find the reciprocal of 0.0247, hence evaluate

$\dfrac{\sqrt[3]{3.025}}{0.0247}$, correct to 2 decimal places. (3 marks)

15. A Kenyan businessman intended to buy goods worth US dollar 20 000 from South Africa. Calculate the value of the goods to the nearest South Africa (S.A) Rand given that, 1 US dollar = Ksh 101.9378 and 1 S.A Rand = Ksh 7.6326. (3 marks)

16. A photograph print measuring 24 cm by 15 cm is enclosed in a frame. A uniform space of width x cm is left in between the edges of the photograph and the frame. If the area of the space is 270 cm², find the value of x. (3 marks)

SECTION II (50 marks)

*Answer any **five** questions from this section in the spaces provided.*

17.   A school water tank is in the shape of a frustum of a cone. The height of the tank is 7.2 m and the top and bottom radii are 6 m and 12 m respectively.

(a)   Calculate the area of the curved surface of the tank, correct to 2 decimal places.

(4 marks)

(b)   Find the capacity of the tank, in litres, correct to the nearest litre.   (3 marks)

(c)   On a certain day, the tank was filled with water. If the school has 500 students and each student uses an average of 40 litres of water per day, determine the number of days that the students would use the water.   (3 marks)

18. Two vertices of a triangle ABC are A (3,6) and B (7,12).

    (a)   Find the equation of line AB.   (3 marks)

    (b)   Find the equation of the perpendicular bisector of line AB.   (4 marks)

    (c)   Given that AC is perpendicular to AB and the equation of line BC is $y = -5x + 47$, find the co-ordinates of C.   (3 marks)

19. The distance covered by a moving particle through point O is given by the equation, $s = t^3 - 15t^2 + 63t - 10$.

Find:
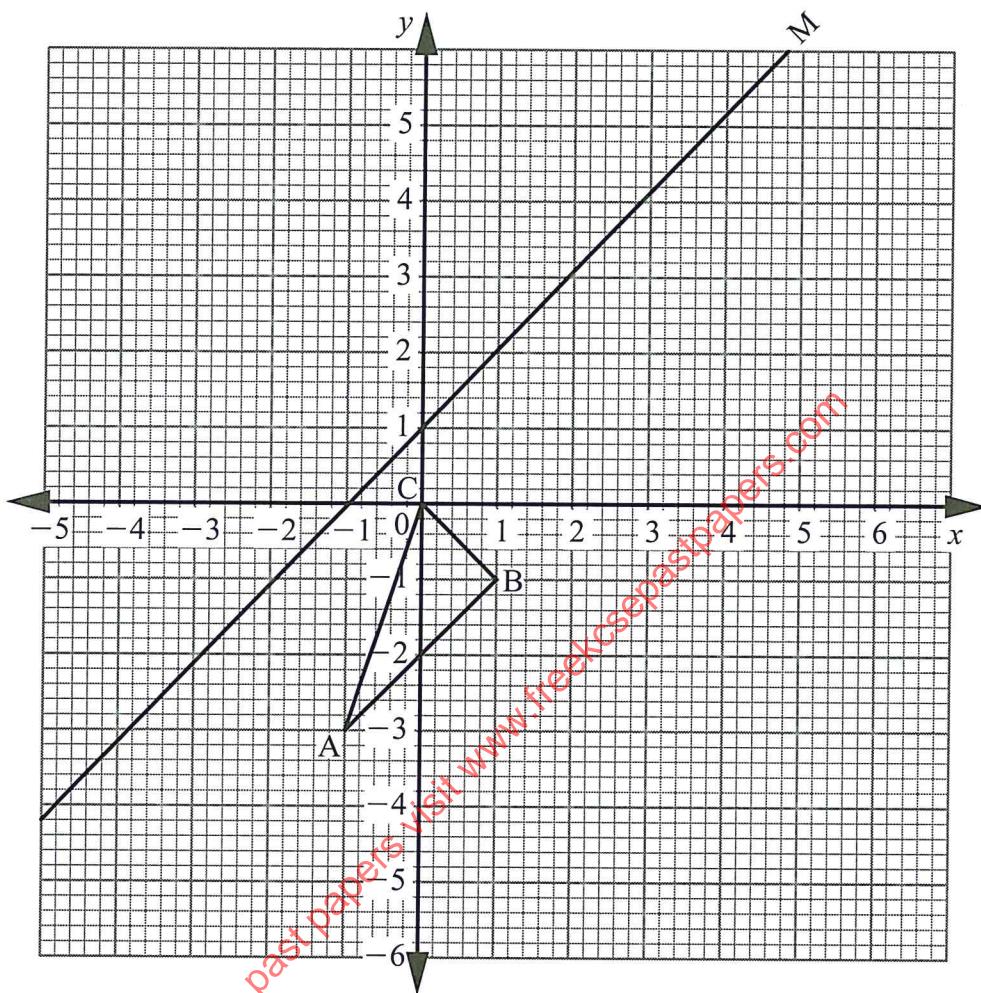
(a) distance covered when $t = 2$;   (2 marks)

(b) the distance covered during the 3rd second;   (3 marks)

(c) the time when the particle is momentarily at rest;   (3 marks)

(d) the acceleration when $t = 5$.   (2 marks)

20. The diagram below shows triangle ABC with vertices $A(-1, -3)$, $B(1, -1)$ and $C(0,0)$, and line M.

(a) Draw triangle A′B′C′ the image of triangle ABC under a reflection in the line M.

(2 marks)

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Turn over
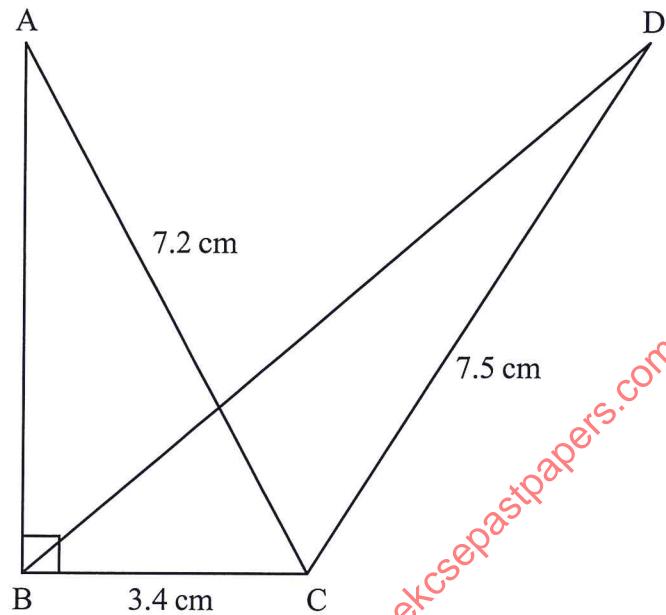
(b)   Triangle A″B″C″ is the image of triangle A′B′C′ under a transformation represented by the

matrix $\mathbf{T} = \begin{pmatrix} 1 & 2 \\ 0 & 1 \end{pmatrix}$

(i)   Draw triangle A″B″C″   (3 marks)

(ii)   Describe fully the transformation represented by matrix **T**.   (3 marks)

(iii)   Find the area of triangle A′B′C′ hence find area of triangle A″B″C″.   (2 marks)

21. The figure below shows two triangles, ABC and BCD with a common base BC = 3.4 cm. AC = 7.2 cm, CD = 7.5 cm and ∠ ABC = 90°.
The area of triangle ABC = Area of triangle BCD.

Calculate, correct to one decimal place:
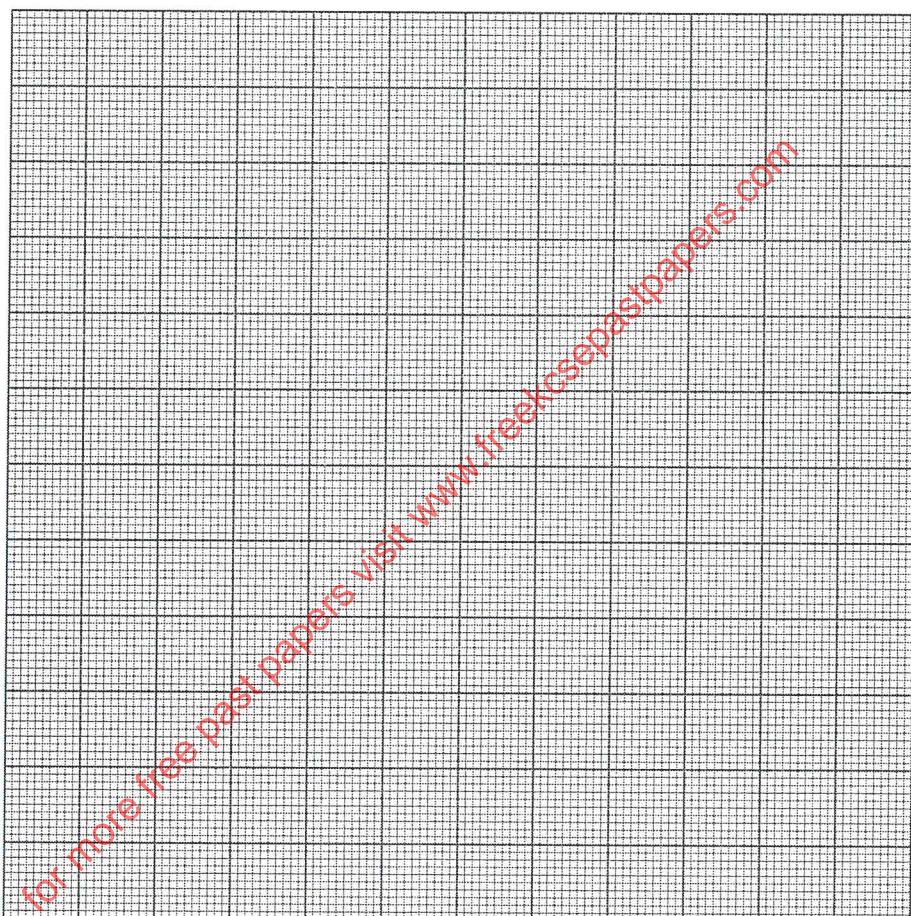
(a)   the area of triangle ABC;   (3 marks)

(b)   the size of ∠ BCD;   (3 marks)

(c)   the length of BD;   (2 marks)

(d)   the size of ∠ BDC.   (2 marks)

22. (a) On the grid provided, draw the graph of $y = 4 - \dfrac{1}{4}x^2$ for $-4 \leqslant x \leqslant 4$. (2 marks)

(b) Using trapezium rule, with 8 strips, estimate the area bounded by the curve and the x-axis. (3 marks)

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Turn over

(c)   Find the area estimated in part (b) above by integration.   (3 marks)

(d)   Calculate the percentage error in estimating the area using trapezium rule.   (2 marks)

23. Three business partners Abila, Bwire and Chirchir contributed Ksh 120 000, Ksh 180 000 and Ksh 240 000 respectively, to boost their business. They agreed to put 20% of the profit accrued back into the business and to use 35% of the profits for running the business (official operations). The remainder was to be shared among the business partners in the ratio of their contribution. At the end of the year, a gross profit of Ksh 225 000 was realised.

(a) Calculate the amount:

    (i) put back into the business;   (2 marks)

    (ii) used for official operations.   (1 mark)

(b) Calculate the amount of profit each partner got.   (4 marks)

(c) If the amount put back into the business was added to individuals's shares proportionately to their initial contribution, find the amount of Chirchir's new shares.   (3 marks)

24. The equation of a curve is given as $y = \frac{1}{3}x^3 - 4x + 5$. Determine:

(a) the value of y when $x = 3$; (2 marks)

(b) the gradient of the curve at $x = 3$; (3 marks)

(c) the turning points of the curve and their nature. (5 marks)

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311/2 – **HISTORY AND GOVERNMENT** – **Paper 2**

Nov. 2018 – 2½ hours

Name .... Index Number ....

Candidate's Signature .... Date ....

Instructions to candidates

(a) Write your name and index number in the spaces provided above.

(b) Sign and write the date of examination in the spaces provided above.

(c) This paper consists of **three** sections: **A**, **B** and **C**.

(d) Answer **all** the questions in section **A**, **three** questions from section **B** and **two** questions from section **C**.

(e) Answers to **all** the questions **must** be written in the space provided at the end of question 24.

(f) **This paper consists of 20 printed pages.**

(g) Do not remove any pages from this booklet.

(h) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

(i) **Candidates should answer the questions in English.**

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1 – 17	25	
B		15	
		15	
		15	
C		15	
		15	
		Total Score	

918372

Turn over

SECTION A (25 marks)

*Answer **all** the questions in this section in the space provided at the end of question 24.*

1. Identify **one** type of early manuscript which is likely to contain information on History and Government. (1 mark)

2. Give **two** developments which were made by Homo erectus that improved his way of life. (2 marks)

3. State **one** similar factor which contributed to the development of early agriculture in Mesopotamia and Egypt. (1 mark)

4. State **two** advantages of using animal transport. (2 marks)

5. Outline **two** factors which facilitated the spread of iron working technology in Africa during the ancient times. (2 marks)

6. Identify **two** features of the direct rule as applied by the British in Zimbabwe. (2 marks)

7. Give the **main** reason why the European countries formed alliances before the outbreak of the First World War. (1 mark)

8. State the **main** reason why countries establish diplomatic relations. (1 mark)

9. Identify **one** economic factor which contributed to the collapse of the East African Community in 1977. (1 mark)

10. Name the **two** financial institutions which were established by the United Nations after the Second World War. (2 marks)

11. State **two** ways in which poverty has undermined economic development in Tanzania since independence. (2 marks)

12. Give **one** function of the Odwira festival among the Asante during the 19th Century. (1 mark)

13.   State **two** social factors which caused the Majimaji rebellion.   (2 marks)

14.   State **two** ways in which the Royal Fire was important in the Mwene Mutapa Kingdom.
                                                                                          (2 marks)

15.   Give **one** function of the Court of Justice of the Common Market for Eastern and Southern
       Africa.   (1 mark)

16.   State **one** way in which Angola was affected by the Cold War.   (1 mark)

17.   Name the country in Africa which was created to settle freed slaves.   (1 mark)

SECTION B (45 marks)

*Answer any **three** questions from this section in the space provided at the end of question 24.*

18.   (a)   Highlight **five** changes which marked the Agrarian Revolution in Britain.   (5 marks)

       (b)   Discuss **five** effects of the Agrarian Revolution in the United States of America.
                                                                                          (10 marks)

19.   (a)   Identify **five** effects of scientific inventions on medicine.   (5 marks)

       (b)   Describe **five** factors which have influenced industrialisation in India. (10 marks)

20.   (a)   State **five** functions of the ancient city of Athens.   (5 marks)

       (b)   Describe **five** challenges experienced in the city of Johannesburg.   (10 marks)

21.   (a)   State **five** factors which influenced the British to use indirect rule in Northern Nigeria.
                                                                                          (5 marks)

       (b)   Explain **five** challenges which were experienced in the implementation of assimilation
              policy in Senegal.   (10 marks)

SECTION C (30 marks)

*Answer any **two** questions from this section in the space provided at the end of question 24.*

22. (a) State **three** external factors which speeded up the growth of African nationalism during the struggle for independence. (3 marks)

(b) Explain **six** challenges which were faced by the nationalists in South Africa during the apartheid rule. (12 marks)

23. (a) State **three** ways in which terrorism is a threat to international peace. (3 marks)

(b) Describe **six** achievements of the Non-Aligned Movement since its formation.
(12 marks)

24. (a) Identify **three** types of Federal Courts in the United States of America. (3 marks)

(b) Explain **six** responsibilities of the Federal Government of the United States of America.
(12 marks)

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451/1 – COMPUTER STUDIES – Paper 1
(THEORY)
Nov. 2018 – 2½ hours

Name .... Index Number ....

Candidate's Signature .... Date ....

Instructions to candidates

(a) Write your name and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
(c) This paper consists of **two** sections; **A** and **B**.
(d) Answer **all** the questions in **Section A**.
(e) Answer question **16** and any other **three** questions from section **B**.
(f) **All** answers should be written in the spaces provided on the question paper.
(g) **This paper consists of 16 printed pages.**
(h) Do **not** remove any pages from this booklet.
(i) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
(j) **Candidates should answer the questions in English.**

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1–15	40	
B	16	15	
		15	
		15	
		15	
	Total Score		

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Turn over

SECTION A (40 marks)

*Answer **all** questions in this section.*

1. State **two** reasons for the increased use of laptop computers in government offices. (2 marks)

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2. Computer network technicians prefer to use command-line based operating system when configuring networks. State **three** reasons for the preference. (3 marks)

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3. State **three** measures that should be put in place in a computer laboratory to safeguard users' health. (3 marks)

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4. State **three** ways in which barcode readers may be used in schools. (3 marks)

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5. State **three** advantage of flat panel monitors over cathode ray tube monitors as used in computers. (3 marks)

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6. State **three** possible reasons for the extinction of daisy wheel printers in the market. (3 marks)

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7. State **three** ways in which an operating system secures a computer system. (3 mark)

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8. A law firm prefers to use hard copy output over soft copy output when handling documents for legal matters. State **two** reasons for this preference. (2 marks)

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9. State the function of each of the following features in a word processor application:

(a)   Thesaurus; (1 mark)

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(b)   Comments. (1 mark)

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10. With the aid of an example, explain the term *multi-level list* as used in word processing.

(3 marks)

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11. Distinguish between real-time operating system and distributed operating system.   (3 marks)

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12. Explain the function of *protect sheet* feature in a spreadsheet program.   (2 marks)

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13. State **four** computer-based careers introduced as a result of computerised data processing method at the airport. (2 marks)

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14. In a spreadsheet, the formula **=If(A1>10, A1*77, A1*50)** is entered in a cell. Interpret the results. (3 marks)

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15. State a stage in systems development life cycle where each of the following activities are carried out:

    (a)   identifying the technologies that may be used in a proposed system;

    .... (1 mark)

    (b)   identifying shortcomings of a system;

    .... (1 mark)

    (c)   preparing the system migration plan.

    .... (1 mark)

SECTION B (60 marks)

*Answer question **16** and any other **three** questions from this section in the spaces provided.*

16. (a) With the aid of a flow chart, describe *a loop control structure* as used in programming.

(4 marks)

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(b) Study the following pseudocode and answer the questions that follow.

1. Start
2. Get value1 and value2
3. If value1 > value2 Then
4. Maximum = value1
5. Else If value1 < value2 Then
6. Maximum = value2
8. Else Go to 9
9. Display Maximum
10. Stop

(i) State the purpose of the pseudocode. (1 mark)

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(ii)   Draw a flowchart equivalent to the pseudocode.   (6 marks)

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(c)   Distinguish between a *source program* and a *compiler* as used in computer programming. (4 marks)

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17.   (a)   (i)   Explain the term *search engine* as used in the Internet. (2 marks)

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(ii)   Peter intends to download a movie from the Internet. State the **three** factors that may determine the total time taken to complete the download. (3 marks)

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(b) Wakulima online is an organisation that runs a web based system for assisting farmers to obtain market for their farm produce. State **four** technological reasons that may cause a farmer not to access the organisation's system. (4 marks)

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(c) Explain a situation when each of the following Desktop Publishing program features may be used when creating a publication:

    (i)   cropping; (2 marks)

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    (ii)   transparency. (2 marks)

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(d) List **two** areas where infrared waves are used in data communication. (2 marks)

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18. (a) State **four** activities of the planning stage of systems development. (4 marks)

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(b) Explain a circumstance when each of the following feasibility studies are carried out during systems development:

(i) Technical; (2 marks)

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(ii) Economic; (2 marks)

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(iii) Schedule. (2 marks)

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(c)   **Table 1** and **Table 2** are related tables in a database. Use them to answer the questions that follow.

Table 1

Dept Code	Dept Name
001	Computer
002	Aviation
003	Engineering

Table 2

DeptID	Student Registration No.	Student's Name
002	St01	Alex Toro
003	St02	Naomi Komi
002	St03	Peter Kengo

(i)   Identify the appropriate primary key for each table.   (1 mark)

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(iii)   Explain **two** benefits of enforcing referential integrity in the database.   (4 marks)

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19.   (a)   Describe each of the following validation checks as used in data processing:

(i)   Preserve check;   (2 marks)

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(ii) Data type check; (2 marks)

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(iii) Check digit. (2 marks)

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(b) Write each of the following abbreviations in full:

(i) BCD; (1 mark)

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(ii) EBCD; (1 mark)

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(iii) ASCII. (1 mark)

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(c) Using 10 – bits binary number system, perform the following decimal operation using two's complement (6 marks)

$$129_{10} - 128_{10}$$

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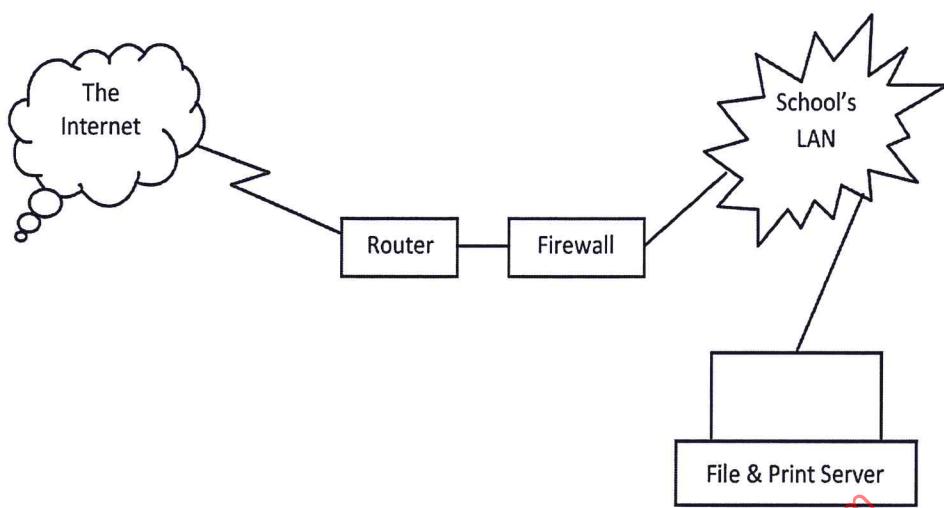
A007

20. (a) The figure shows a network design. Use it to answer the questions that follow.

(i) Explain the function of each of the following in the network.

I   Router;   (2 marks)

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II   Firewall;   (2 marks)

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III File server.   (2 marks)

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(ii) State **two** categories of software that must be installed in a computer so that users can use it to access the internet.   (2 marks)

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(b) State **four** ways in which computers may be used to manage data in a research environment. (4 marks)

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(c) Some computer companies have opted to use the Internet to provide shared processing resources and online application services to users. State **three** advantages that this approach will have on their customers. (3 marks)

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918282 **451/1**
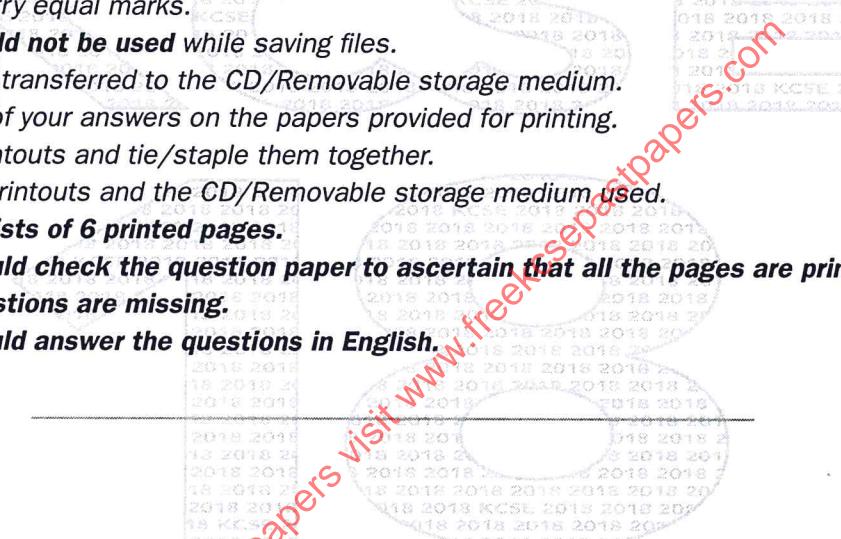
Instructions to candidates

(a)   Write your name and index number at the top right hand corner of each of the papers provided for printing.

(b)   Write your name and index number on the CD/Removable storage medium provided.

(c)   Write the name and version of the software used for each question attempted in the printouts used.

(d)   Answer **all** the questions.

(e)   All questions carry equal marks.

(f)   Passwords **should not be used** while saving files.

(g)   All files must be transferred to the CD/Removable storage medium.

(h)   Make printouts of your answers on the papers provided for printing.

(i)   Arrange your printouts and tie/staple them together.

(j)   Hand in all the printouts and the CD/Removable storage medium used.

(k)   **This paper consists of 6 printed pages.**

(l)   **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

(m)   **Candidates should answer the questions in English.**

1. (a) In a school, students reside in three dormitories Red, Blue and Orange. Each dormitory is managed by a patron and each student is required to register for a game.

    (i) Open a database program and create a database named **schoolgames** that would be used to manage the games. (1 mark)

    (ii) Create the tables named; *Student, Patron, Dormitory* and *Game* in the database created in (i) using the following specifications. (7 marks)

    Student table

Field name	Description
StudNo	Contains unique registration code
Studname	Contains the name of a student
Gamecode	Contains codes of each game
Dormcode	Contains codes of each dormitory

    Patron table

Fieldname	Description
Patroncode	Contains the patron code
Patronname	Contains the patron name

    Dormitory table

Field name	Description
Dormcode	Contains the dormitory code
Dormname	Contains the dormitory name
Patroncode	Contains the dormitory patron code

    Game table

Field name	Description
Gamecode	Contains the game code
Gamename	Contains the name of the game

    (iii) Create the relationships between the tables. (3 marks)

(b) (i) Create a form for each table that would be used for data entry. (2 marks)

(ii) Enter the following data into their respective tables: (9 marks)

Student table

StudNo	Studname	Gamecode	Dormcode
K001	Anne	Gm004	D003
K002	Chris	Gm003	D001
K003	Jared	Gm001	D002
K004	Julian	Gm004	D003
K005	Marion	Gm001	D003
K006	Janet	Gm002	D003
K007	Tom	Gm002	D002
K008	Jerry	Gm003	D002

Patron table

Patroncode	Patronname
P001	Maurice
P002	Edward
P003	Jane

Dormitory table

Dormcode	Dormname	Patroncode
D001	Red	P001
D002	Blue	P002
D003	Orange	P003

Games table

Gamecode	Gamename
Gm001	Basketball
Gm002	Volleyball
Gm003	Table tennis
Gm004	Netball

(c) Create a query to extract each of the following details:

  (i) StudNo, Studentname and Gamename for all students who reside in the Orange dormitory or play Basketball. Save the query as **orangeq**. (5 marks)

  (ii) StudNo, studentname, gamename for the students whose studentname start with letter "J". Save the query as **Jquery**. (3 marks)

(d) (i) Create a tabular report showing the StudNo, Studentname, Dormname, Patronname, Gamename and grouped by Gamename. Save the report as **reportgame**.

  (8 marks)

  (ii) Format the report created in (i) as follows:

    I Replace the report title with the text "*players for each game*" (1 mark)

    II Enter your name and index as a report footer. (2 marks)

    III Bold the dormitory names in the report. (2 marks)

(e) Print out each of the following:

  (i) Student, Patron, Game and Dormitory tables

  (ii) Jquery and orangeq

  (iii) reportgame (7 marks)

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2 (a) (i) Open a word processing program and key in the following text as it appears. Save the documents as **socialnetwork**. (11 marks)

SOCIAL NETWORKING

Social networking platforms are used by organisation to improve communication and productivity by disseminating information among different groups of employees in a more efficient manner. The advantages and disadvantages of social media are as follows.

Advantages
- Facilities open communication.
- Allows employees to discuss ideas.
- Provides an opportunity to widen business contracts.
- Targets a wide audience.
- Improves business reputation and client base.
- Expands market research.

Disadvantages
☐ Susceptible to fraud
☐ Potentially results to hate speech
☐ Destructs normal business operations

Employers do have the right to ban computer activity that is not work related, this approach may not yield optimal results. If employees are to be allowed access to social networking platforms then a comprehensive and well defined policy should be established to prevent abuses.

(ii) Format the document as follows:

I Title: Font size 18pts, font colour red, font type Tahoma. (3 marks)

II Apply double line spacing for the text under the sub title "Advantages". (2 marks)

III Apply a 4 lined drop cap on the first letter of first paragraph. (3 marks)

IV Apply a two-columns format with a line between for the text with the two subtitles such that "Advantages" are to the left column and "Disadvantages" are in the right column. (4 marks)

V Apply bold, italic and underline to subtitles "Advantages" and "Disadvantages". (3 marks)

(iii) Apply the following format to the document:

I Insert a water mark with the text "social media" on the document of a font size of 20 and running diagonally from left to right. (4 marks)

II Insert page numbers at the bottom centre of every page. (2 marks)

III Insert the text "social networks" as a header aligned to the right. Apply italics to the header. (3 marks)

(b)   The following is a letter from a Principal of Malimali school to other Principals inviting them for a seminar at the country education offices.

   (i)   Open a new document and create the following as it appears. Save the document as **Malimali**   (2½ marks)

The Principal
<<School>>

Dear Sir

RE: SEMINAR MEETING
You are invited to attend the Principal's seminar which is scheduled to be at the county education office on the 2nd of June 2015. You are booked to be in <<Room>>

We are looking forward to a successful event.

Yours Faithfully

Lilango Jotema
Malimali School Principal

   (ii)   Use a mail merge feature to generate customised mails for the addresses shown in the following table. Save the mail merged document as **Aletters**.   (9½ marks)

School	Room
Ginga school	Room 6
Lubi school	Room 8
Trans school	Room 10

(c)   Print out each of the following:

   (i)   socialnetwork

   (ii)   Malimali

   (iii)   Aletters   (3 marks)

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THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education

312/1 – **GEOGRAPHY** – **Paper 1**

Nov. 2018 – 2¾ hours

Name .... Index Number ....

Candidate's Signature .... Date ....

Instructions to candidates

430

(a) Write your name and index number in the spaces provided above.
(b) Sign and write the date of examination in the spaces provided above.
(c) This paper consists of **two** sections: **A** and **B**.
(d) Answer **all** the questions in section **A** in the space provided at the end of question 10.
(e) Answer **question 6** and any other **two** questions from section **B** in the space provided at the end of question 10.
(f) **This paper consists of 20 printed pages.**
(g) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
(h) **Candidates should answer the questions in English.**

A123

For Examiner's Use Only

Section	Questions	Maximum Score	Candidate's Score
A	1–5	25	
B	6	25	
		25	
		25	
	Total Score		

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312/1

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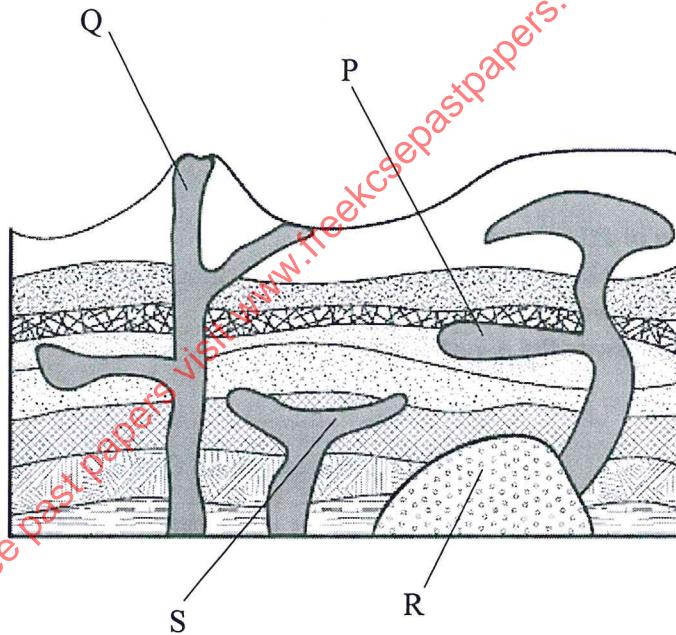
SECTION A

*Answer **all** the questions in this section.*

1. (a) Define the term atmosphere. (2 marks)

    (b) State the composition of the inner core. (3 marks)

2. (a) Name **three** types of folds. (3 marks)

    (b) State **three** factors that determine the folding of crustal rocks. (3 marks)

3. The diagram below represents some volcanic features. Use it to answer the questions below.

Name the features marked P, Q, R and S. (4 marks)

4. (a) Identify the main characteristics of the ocean water. (2 marks)

    (b) Give **three** factors that influence wave deposition. (3 marks)

5. (a) List the **three** types of dunes. (3 marks)

    (b) Identify **two** processes through which wind transports materials in arid areas. (2 marks)

SECTION B

*Answer **question 6** and any other **two** questions from this section.*

6.   Study the map of Taita Hills 1:50,000 (sheet 189/4) provided and answer the following questions.

(a)   (i)   Give the four figure grid reference of the trigonometrical station (2208m).

(1 mark)

(ii)   What is the general direction of the flow of River Voi (Goshi)?   (1 mark)

(b)   (i)   Measure the length of the road labelled A23. Give your answer in kilometres.

(2 marks)

(ii)   Citing evidence from the map, identify **three** social services offered in the area covered by the map.   (6 marks)

(c)   Describe the relief of the area covered by the map.   (7 marks)

(d)   Citing evidence from the map, explain **four** factors that may have influenced agricultural activities in the area.   (8 marks)

7.   (a)   (i)   What is a rock?   (2 marks)

(ii)   Give **two** examples of plutonic igneous rocks.   (2 marks)

(b)   Describe the processes of formation of each of the following types of sedimentary rocks:

(i)   Mechanically formed.   (4 marks)

(ii)   Organically formed.   (4 marks)

(c)   State the characteristics of rocks.   (5 marks)

(d)   You are planning to carry out a field study on rocks within the local environment.

(i)   List **three** methods you would use to record data.   (3 marks)

(ii)   State **three** problems you are likely to encounter.   (3 marks)

(iii)   Give **two** economic uses of rocks you are likely to identify.   (2 marks)

8.   (a)   (i)   Identify the **two** types of earthquake waves.   (2 marks)

(ii)   Describe the **two** ways through which the strength of an earthquake is measured.   (6 marks)

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(b) (i) Explain how vulcanicity causes earthquakes. (6 marks)

(ii) Name **three** major earthquake zones of the world. (3 marks)

(c) Explain **four** effects of earthquakes on the human environment. (8 marks)

9. (a) Name **two** types of landslides. (2 marks)

(b) Explain how each of the following factors influence mass wasting:

(i) Climate (6 marks)

(ii) Slope (2 marks)

(c) (i) State **four** causes of soil creep. (4 marks)

(ii) Using a diagram, describe the process of solifluction. (5 marks)

(d) You intend to carry out a field study on the effects of mass wasting within the local environment.

(i) Give **two** methods of data collection that you would use for the study. (2 marks)

(ii) State **two** negative effects of mass wasting on the physical environment that you are likely to identify. (2 marks)

(iii) Give **two** follow-up activities you would be involved in after the field study. (2 marks)

10. (a) (i) Name the **three** types of river erosion. (3 marks)

(ii) Describe each of the following processes of river erosion:

I. Abrasion (4 marks)

II. Solution (3 marks)

(c) Describe the characteristics of the upper stage of a river. (6 marks)

(d) (i) What is river rejuvenation? (2 marks)

(ii) Give **four** causes of river rejuvenation. (4 marks)

(iii) Identify **three** features that result from river rejuvenation. (3 marks)

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