

GATTU SECONDARY SCHOOL, P.O. BOX 327 – 01030, GATUNDU.

FORM 2 MATHEMATICS MID TERM EXAMINATION. TERM I 2016

INSTRUCTIONS:

Name: _____ ADM.NO. _____ CLASS: _____

- i) Write your name in the spaces above.
- ii) Answer all the questions in the spaces provided below each question.
- iii) All working must be clearly shown giving answer at each stage.
- iv) Mathematical tables and non programmable silent electronic calculators may be used.

1. Express each of the fractions as a single fraction in its simplest form.

a) $\frac{x+y}{3} - \frac{2x-y}{2}$ (3mks)

b) $\frac{1}{x+1} - \frac{1}{x-1}$ (3mks)

2. Evaluate $\frac{1}{2} + \frac{1}{6}$ of $(\frac{13}{18} - \frac{5}{9}) \div \frac{1}{3}$ (4mks)

3. The sum of the interior angles of a polygon is 1440° . Find the number of sides. (3mks)

4. The external radius of culvert is 0.5m and it is 0.1m thick. If the culvert is 2.8m long, Find the volume of the material used to make it (Take $\pi = \frac{22}{7}$). (4mks)

5. The ratio of the cost of a commodity X to that of commodity Y is 2:3. The ratio of Y to Z is 6:1. If the total cost of the three commodities is 1100 shillings, Find the cost of X. (4mks)

b) Express the cost of Z as a percentage of the cost of Y. (3mks)

6. Solve the following simultaneous equations

$$3x + 4y = 18$$

$$2x - y = 1$$

(3mks)

7. Use a ruler and a pair of compasses to construct a triangle ABC in which AB = 7.5cm, BC = 6cm and AC = 4.5cm. (3mks)

b) Measure the angles of the triangle (3mks

$$\angle ABC =$$

$$\angle ACB =$$

$$\angle BAC =$$

c) Draw the circle passing through the points A, B and C. Measure the radius of the circle. Calculate the area of the circle. (5mks

8. A girl was allowed a discount of 11% for goods worth sh. 8000 and a discount of 8.6% for goods worth sh. 17000. What percentage discount was she allowed altogether.? (3mks

9. The length of an arc of a circle is $\frac{1}{10}$ of the circumference of the circle. If the area of the circle is 13.86cm^2 . Find the angle subtended by the arc at the centre of the circle. (3mks

b) The area of the sector enclosed by the arc. (3mks

10. The table below shows the amount of money charged for hiring a car for a given distance.

Distance (km)	10	20	30	40	50
Charges	75	100	125	150	175

- a) Draw a graph of the charges against the distance covered. (Use graph paper provided) (5mks)
- b) Use your graph to find the standing charge. (2mks)
- ii) How much money is charged for covering 28km, 33km and 42km. (3mks)
- iii) The distance covered if sh 131, sh 140 and sh 190 is charged. (3mks)

11. Measurements of a maize field using a base line PQ were recorded as below measurements are in metres.

	Q	
	240	
To R 60	190	
	180	75 to Y
	150	50 to X
To S 100	120	
	100	100 to N
To T 30	50	
	20	20 to M
	P	

- a) Use a suitable scale to draw the map of the maize field. (5mks)

**GATITU GIRLS SECONDARY SCHOOL BOX 327-01030 GATUNDU
BUSINESS STUDIES FORM TWO MID-TERM EXAM 1ST TERM 2016**

NAME.....**ADM**.....**CLASS**.....

1 Highlight five principles of a co-operative Society

5mks

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

2 Outline four reasons why one may prefer to buy goods from the Supermarket instead of the

(4mks)

- a) _____
- b) _____
- c) _____
- d) _____

3 Identify the terms given to each of the following statements.

(4 mks)

	Statement	Term
a.	Transport goods from producers to consumers	
b.	Activities carried out with a view of making profit.	
c.	A person who uses a good or service.	
d.	Increasing the usefulness of a good or services	

4 Outline four business resources that business can use to enhance its operation.

(4 marks)

- a) _____
- b) _____
- c) _____
- d) _____

5 Outline four characteristics of basic wants. (4 marks)

- a) _____
- b) _____
- c) _____
- d) _____

6 Outline four gaps in the market that may give rise to a business opportunity. (4 marks)

7 Ind

- a) _____
- b) _____
- c) _____
- d) _____

7 indicate in the table below the office machine used to perform the following functions. (4 marks)

	Function	Machine
a.	Folding documents, placing them in envelopes and sealing the envelopes.	
b.	Making holes on papers for filing	
c.	For destroying unwanted papers.	
d.	For trimming documents into required shapes and sizes.	

8. Highlight four features of direct production. (4 marks)

- a) _____
- b) _____
- c) _____
- d) _____

9. Highlight four circumstances under which a cheque can be dishoured 4mks

- a) _____
- b) _____
- c) _____
- d) _____

10. Outline four advantages of consumer co-operatives.

(4 mks)

a) _____

b) _____

c) _____

d) _____

11. Highlight four sources of capital for a sole proprietor

(4mks)

a) _____

b) _____

c) _____

d) _____

12. List four ways in which filing of documents may facilitate smooth running of an office

(4mks)

a) _____

b) _____

c) _____

d) _____

13. State four functions of pro-forma invoice in commercial transactions

(4mks)

a) _____

b) _____

c) _____

d) _____

14 List four circumstances under which a partnership can be dissolved

(4mks)

a) _____

b) _____

c) _____

d) _____

15. State four advantages of consumer co-operatives

(4mks)

a) _____

b) _____

c) _____

d) _____ (4mks)

16 Highlight **four** problems facing savings and credit co-operative societies (Saccos)

a) _____

b) _____

c) _____

d) _____ (5mks)

17. Outline five importances of business studies to the society

a) _____

b) _____

c) _____

d) _____

e) _____

THE END