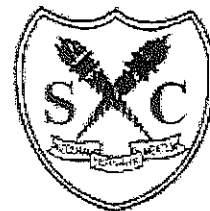


ASQUAM SERVARE MENTEM

SASTRI COLLEGE
DEPARTMENT OF TECHNOLOGY
SEPTEMBER CONTROL TEST
TECHNOLOGY -GRADE 8
2018



ASQUAM SERVARE MENTEM

EXAMINER: MR R.RAJKUMAR

MODERATOR: E. MUZAHANEMO

MR I. RAMKLOWN

DURATION: 1 HOURS

DATE: 26 SEPTEMBER 2018

TOTAL MARKS=50

Instructions to learners.

1. Read all questions carefully.
2. Number your answers as the questions are numbered exactly.
3. Write neatly and legibly.
4. Approved scientific calculators may be used.
5. Round off all answers to TWO decimal places unless told otherwise.

Question 1:

Match the statement in column A with the correct word from Column B. Write only the question number and the letter that represents the correct answer.

COLUMN A	COLUMN B
1.1) Enables the driven and driver to rotate in the same direction.	a) Pivot
1.2) Fixed point on a lever.	b) Mechanical advantage
1.3) The ratio of the load and the effort in a given system is known as...	c) Headgear
1.4) Lifting mechanism above a mine shaft	d) Driven gear
1.5) Input gear	e) Idler gear

(5x1=5)

Question 2:


2.1) Copy and complete the table below. For each class of lever, draw and label a force diagram and give ONE example of each lever system identified.

Type of lever (class) :	Force diagram:	Example of lever:
Class 1	a)	d)
Class 2	b)	e)
Class 3	c)	f)

(6)

2.2 If a lever is used to move a rock with a load of 20N and the effort required is 2N, calculate the mechanical advantage of the system because of the lever. (3)

2.3 A device has a mechanical advantage of 6 of which is achieved by a load of 12N, calculate the effort that is used to move this load. (3)

2.4  (2)

2.1.4 Identify the class of lever shown above. (2)

2.1.5 If the load is placed as shown above is 10 times the effort force. What is the mechanical advantage due to the load? (3)

2.2) Suppose two boys, Sahil and Yaseen are playing on a see-saw Sahil is 25m away from the fulcrum.

2.2.1) Draw a fully labelled sketch of the two boys on the see-saw (4)

2.2.2) If yasin's weight is 60N and Sahil's weight is 100N, calculate :
 2.2.2.1) The distance Yasin is away from the fulcrum. (5)
 2.2.2.2) The mechanical advantage. (3)

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Question 3:**THE IMPACT OF TECHNOLOGY.****ANSWER THE FOLLOWING QUESTIONS IN FULL SENTENCES.**

3.1 What does AMD stand for? (2)

3.2 How does AMD impact us negatively?
 State two reasons. (4)

3.3 How has national legislation responded to this crisis? State or name at least two laws put in place to try and prevent this from happening. (4)

3.4 The skills that indigenous miners developed is seen in the fact that by the time the European settler community arrived in south Africa, almost all surface metals and minerals had already been used up.

3.4.1 Choose and discuss only ONE method of indigenous mining and how effective they were by using this method (6)

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