NAME………………………………………………………... ADM NO……………………….

Candidates Signature…………………………………………. Date……………………………..

**PRIMARY TEACHER EDUCATION**

**SEMESTER: FOUR 2017 Time: 1 HOUR**



**VISION EMPOWERMENT TRAINING INSTITUTE**

Sunrays House, 4th floors Branch Milele Centre, 2nd floor

Near Khoja Round about, opp.old Behind Equity Bank, Kitengela

Nation hse. Behind Fire Station, P.O. Box 10829-00400Nairobi

Tom Mboya Street Tel: 0720655582 /0707585084

www.veti.ac.ke Email:*visionpowerment2006@yahoo.com*

**Unit: SCIENCE**

**INSTRUCTIONS TO CANDIDATES**

*Write your name and admission number in the space provided above.*

*Sign and write the date of examination in the spaces provided*

*This paper consists of* ***THREE****questions.*

*Answer* ***ALL*** *thequestions*

**For Examiners Use Only**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question** | **1** | **2** | **3** | **Totals** |
| **Maximum Score** | **10** | **10** | **10** | **30** |
| **Candidate’s Score** |  |  |  |  |

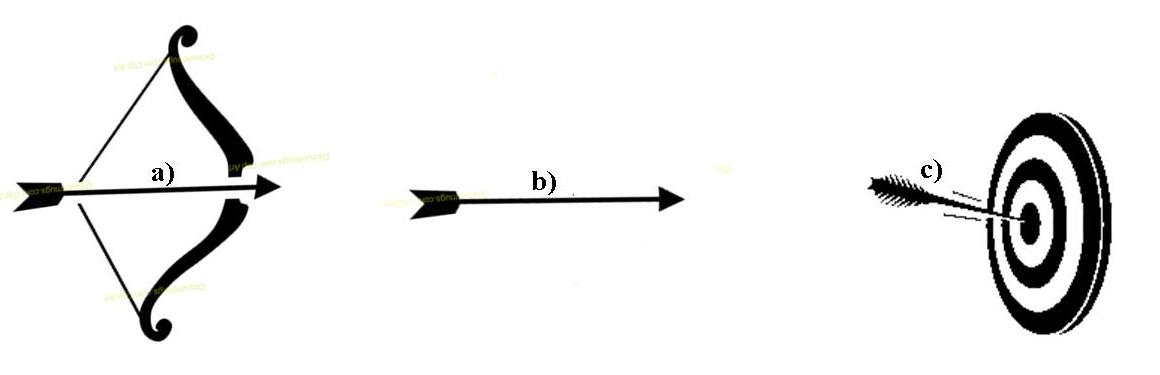
Candidate should check the question papers to ascertain all the pages and questions are printed as indicated and none is missing.

**QUESTION ONE**

1. Define the following terms: (2 Marks)
2. Mechanical energy
3. Light energy
4. Differentiate between kinetic energy and potential energy (2 Marks)
5. Differentiate between heat energy and temperature. (2 Marks)
6. The sun burns with a very loud noise. Explain why this noise cannot be heard from the earth while its heat can be felt from the earth. (2 Marks)
7. Differentiate between conduction and convection. (2 Marks)

**QUESTION TWO**

1. Calculate the work done by a ceiling by holding a bulb weighing 50g for 2 days. (2 Marks)
2. Study the diagram below and answer the questions that follow:



Target

1. Using well explained points, identify the point of: (4 Marks)

Maximum potential energy

Maximum kinetic energy

1. Given that the distance from the bow to the target is 200m and that the arrow is moving using a force of 10.5N, calculate the amount of work done. (2 Marks)
2. On an academic trip, a boy observed that water was flowing from a dam into a waterfall and produced a lot of sound. Outline the energy transformations that the water underwent. (2 Marks)

**QUESTION THREE**

1. Classify the various sources of light. (4 Marks)
2. Differentiate between transparent translucent and opaque materials (3 Marks)
3. Study the diagram below and answer the questions that follow:

Z

Y

R

P

Q

X

1. Name the parts labeled: (2 Marks)

X –

Y –

Z –

Q –

1. Given that angle XQZ is 35o, determine the size of angle YQZ (1 Marks)