**DARAJANI BOYS’ HIGH SCHOOL,**

P.O BOX 20-90129, NGWATA

**OPENER CAT, TERM II, 2015**

**FORM 4**

**BIOLOGY**

**NAME:………………………………………….………………………………………………… ADM.NO:……………… CLASS:………...**

1. Distinguish between continuous and discontinuous variations and give examples in each case. (4mks)

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1. Distinguish between the following terms as used in genetics:-
2. Genotype and phenotype (2mks)

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1. Dominant gene and recessive gene. (2mks)

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1. Homozygousity and heterozygousity (2mks)

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1. State the first law of heredity. (2mks)

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1. A cross between a red flowered and a white flowered mirabilis jalapa plant produced only pink flowered offsprings.
2. Explain the absence of red and white flowered plant in the F1 offsprings. (2mks)

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1. Using a genetic cross, show how the F2 generation was obtained by selfing the F1 generation.
2. Work out the following for the F2 generation:-
3. The genotype ratio. (1mk)

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1. Phenotype ration. (1mk)

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1. What would be the results of crossing one of the F1 offspring with a true breeding plant producing white flowers? (4mks)
2. (a) Name two types of mutations. (2mks)

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(b) Name the type of disorders that arise due to chromosomal mutation in human beings. (3mks)

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(c) Name one genetically inherited disorder in human beings. (1 mk)

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