

iii) Monthly?

iv) Daily? **(10 Marks)**

b) A person purchases a machine on 1st January 2009 and agrees to pay 10 installments each of K 12,000 at the end of every year inclusive of compound rate of 15%. Find the present value of the machine. **(10 Marks)**

6. a) With help of Venn diagrams explain real numbers and its subsets. **(10 Marks)**

b) Give detailed explanations about rational and irrational numbers and corresponding examples. **(10 Marks)**

7. a) In a G.P. the 9th term is 32805 and 6th term is 1215. Find the 12th term. **(10 Marks)**

b) MR. PHIRI is attending an interview for a job and the company gave two offers to him. Offer A: K20,000 to start with followed by a guaranteed annual increase of 6% for the first 5 years. Offer B: K22,000 to start with followed by a guaranteed annual increase of 3% for the first 5 years. What is his salary in the 4th year with respect to the offers A and B? **(10 Marks)**