1	You are given two complex numbers- $C_1 = 8 + 7i$ and $C_2 = -9-15i$ Find a] C_1 / C_2 b] mod C_1 c] show- $mod(C_1 + C_2) \leq mod(C_1) + mod(C_2)$ d] $Conj(C_1) \times Conj(C_2) = Conj(C_1 \times C_2)$ e] $mod(C_1)\ mod(C_2) = mod(C_1\ C_2)$	5
2	Given : c1= 5+2i and c2=3-7i V= $\|8 + 11i\ 6 + 15i\ 0.53 - 19i\ 12 + 7i\|$ W = $\|9 - 2i\ 2 + 4i\ 2\ 9.4 + 5i\|$ Show that: a] c1.(V+W)=c1.V+c1.W b] c1.(c2.V)=(c1xc2).V	3
3	How will you obtain a vector V given below from a complex vector space, using following basis B1 and B2. Do B1 and B2 form the Basis of the complex vector space ? Given :B1= $\{1\ 0\ -\ 1\ 1\ 2\ 2\ 0\ 1\ 1\}$, B2= $\{1\ 0\ 0\ 1\ 1\ 0\ 1\ 1\ 1\}$, and V= $\|4\ 3\ 8\|$	3
4	(i) What is a complex number? How is it represented in different forms? What is its importance in Quantum Computing? (ii) What are real and complex vector spaces? (iii) What are basis and dimensions?	2+1+1