Fig 4.2: Clinical symptoms of Chikungunya Virus infected patients on fingers, feet and trunk
A) Swelling of wrist and Small finger joints
B) Swelling of ankle feet
C) Appearance of rash on side posterior area

Fig 4.3: RICA positive and negative test results of convalescent sera
Fig 4.4: MAC-ELISA positive and negative test result of convalescent sera

Fig 4.5: Gel photograph showing 330bp fragment of E1 gene of *Chikungunya virus* by Reverse Transcriptase - Polymerase Chain Reaction (RT-PCR)

Lane M: GeneRuler™ DNA Ladder (Fermentas)
Lane 1-3: CHIKV positive clinical samples
Lane 4: CHIKV negative clinical sample
**Fig 4.6**: Photograph showing blue (non-recombinant) and white (recombinant) colonies

**Fig 4.7**: Gel photograph showing recombinant clone confirmation Colony PCR

- Lane M: GeneRuler™ DNA Ladder (Fermentas)
- Lane 1: 330bp specific colony PCR Product

**Fig 4.8**: Restriction endonuclease analysis of Recombinant plasmids

- Lane M: GeneRuler™ DNA Ladder (Fermentas)
- Lane 1: Recombinant clone releasing no insert
- Lane 2: Recombinant clone, digested with EcoR1 enzyme, releasing 3015 bp (vector) and 330bp fragments (insert)
- Lane 3: Recombinant plasmid DNA