General Introduction

CAPTER 1

1. Global epidemiology report on HIV
2. Discovery of Human Immunodeficiency Virus
3. Origin and Evolution of HIV
4. Structure of HIV
5. HIV genome and Proteins – Structure and functions
6. Structures of Protease and Reverse Transcriptase
7. HIV replication
8. HIV subtype, sub-subtye and circulating recombinanat forms
9. HIV Treatment
10. HIV Drug resistance mechanisms

CHAPTER 2

1. Sequencing Technologies
   1. Next Generation Sequencing Technologies and
      1. Roche 454 Genome Sequencer
      2. Illumina/Solexa genome analyzer
      3. Applied BioScience SOLiD sequencer
      4. Ion torrent
   2. Note on Third Generation Sequencing Technologies