

Topic: AIDS
Class: B.Sc Part –III (Hons.)
Paper- VII
Group – A

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5. Assembly and budding

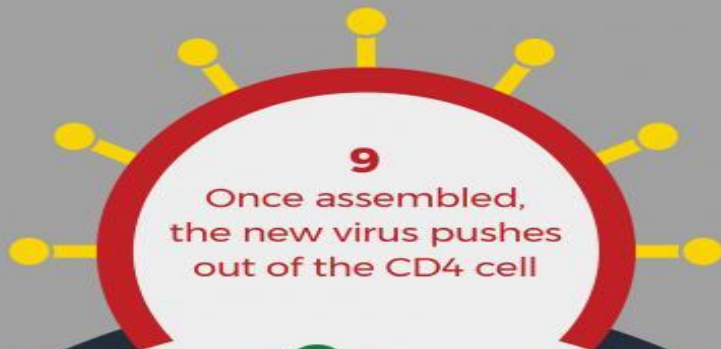
- These protein chains begin to assemble into new viruses at the cell wall.
- HIV protease inhibitors are designed to block the activity of HIV's protease enzyme.

- As the virus buds from the cell wall, its genome becomes enclosed in a capsid produced from HIV's *gag* protein.
- After the new virus is assembled, it must leave the cell by pushing through the cell wall.
- To leave the cell completely and become infectious,
- the virus must take lipids (fats) from the cell wall to make the surface glycoprotein's

- Maturation inhibitors are being developed to block the cutting of the *gag* protein that is needed to produce a mature virus.

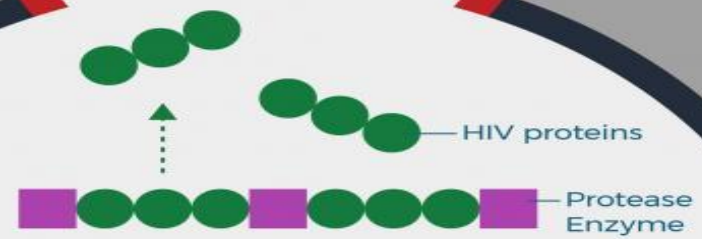
Assembly and Budding

ASSEMBLY AND BUDDING



9

Once assembled, the new virus pushes out of the CD4 cell



8

HIV proteins are cut into smaller chains by protease enzyme, before assembling at the cell wall.

10

When the new virus has left the CD4 cell, it will mature to become infectious HIV

