

Answer 7

(a)

(i) 1 – Pollen tube, 2 - Nucellus, 3 - Embryo sac, 4 - Endosperm nucleus, 5 - Egg cell, 6 - Synergids, 7 - Integument, 8 - Micropyle, 9 - Germinating pollen.

(ii) Part 1 is the pollen tube. A pollen grain reaches the stigma, absorbs nutrients secreted by the stigma and starts to grow as a pollen tube.

The intine of the pollen grain grows into a tube and passes through the style by dissolving its tissue by enzyme action.

(iii) Part 2 i.e. the nucellus is a nutritive tissue.

(b)

(i) An antibiotic is a chemical substance produced by a living organism which can stop the growth of some disease producing fungi or bacteria.

(ii) Criteria for a good antibiotic:

1. An antibiotic should be able to kill a variety of disease-producing microorganisms.
2. It should not produce any undesirable effects.
3. It should not kill the normal bacteria of the host.

(iii) Uses of antibiotics:

1. Antibiotics are used as food preservatives for fish and meat.
2. They are also used to treat animal feed.
3. They are used to control the growth of plant pathogens.