• The tropane alkaloid (–)-hyoscyamine is found in certain plants of the *Solanaceae* family. It is an anticholinergic agent that works by blocking the action of acetylcholine at parasympathetic sites in smooth muscle, secretory glands and the central nervous system.

Marks 4

Give the molecular formula of (–)-hyoscyamine.

 $C_{17}H_{23}O_3N$

List the functional groups present in (–)-hyoscyamine.

Tertiary amne, ester, primary alcohol and aromatic ring.