1. A certain compound occupied a site Y of an enzyme near to the active site. This immediately resulted in the change of shape of the active site. Y is called a/an _____

- **A.** inactive site
- **B.** binding site
- **C.** competitive site
- **D.** allosteric site

When a drug binds to an enzyme from a site other than the active site, it is called an allosteric site. Binding to this site causes the change in shape of active site such that the substrate cannot recognise it.

2. Which of the following analgesics have antipyretic properties?

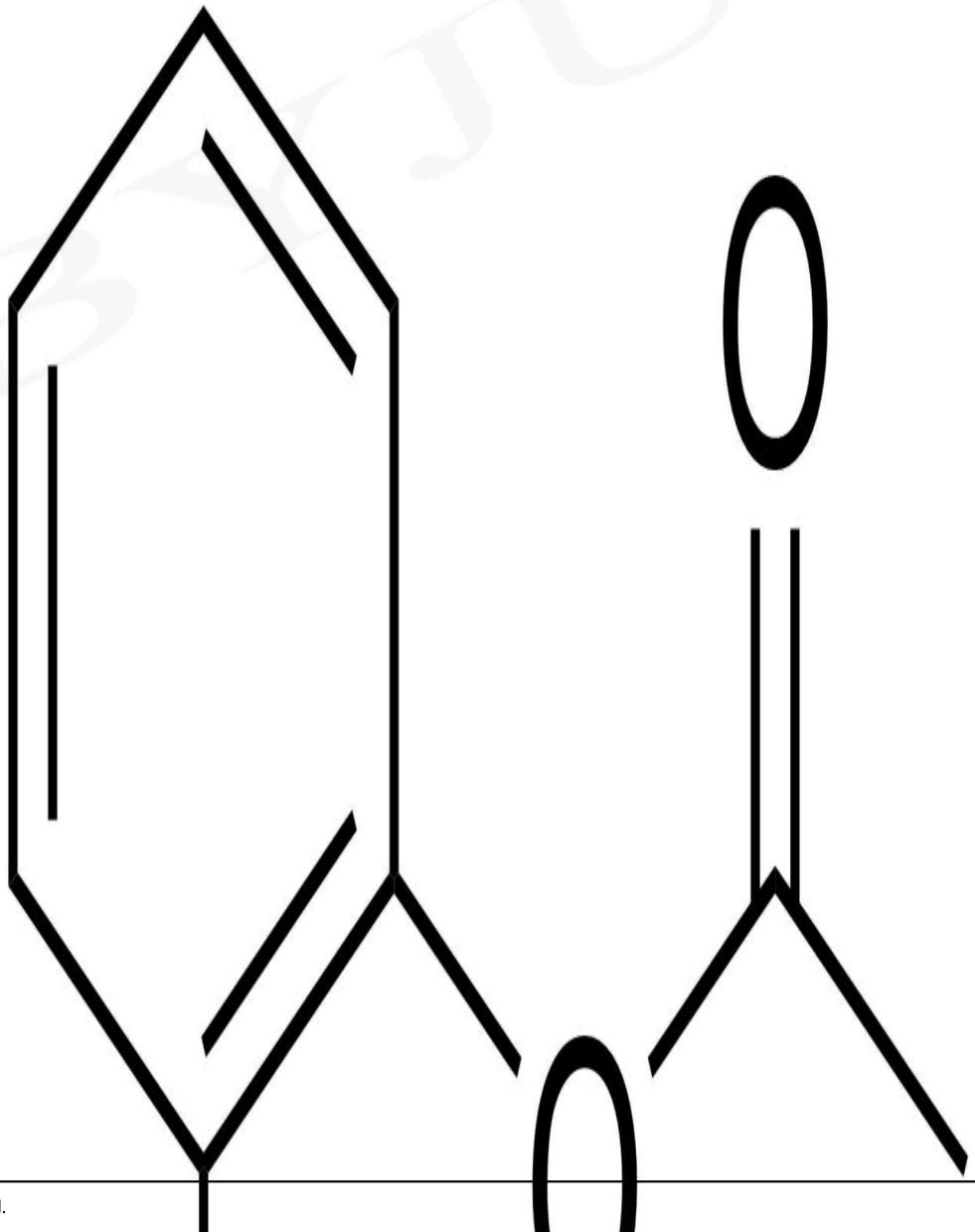
A. Aspirin

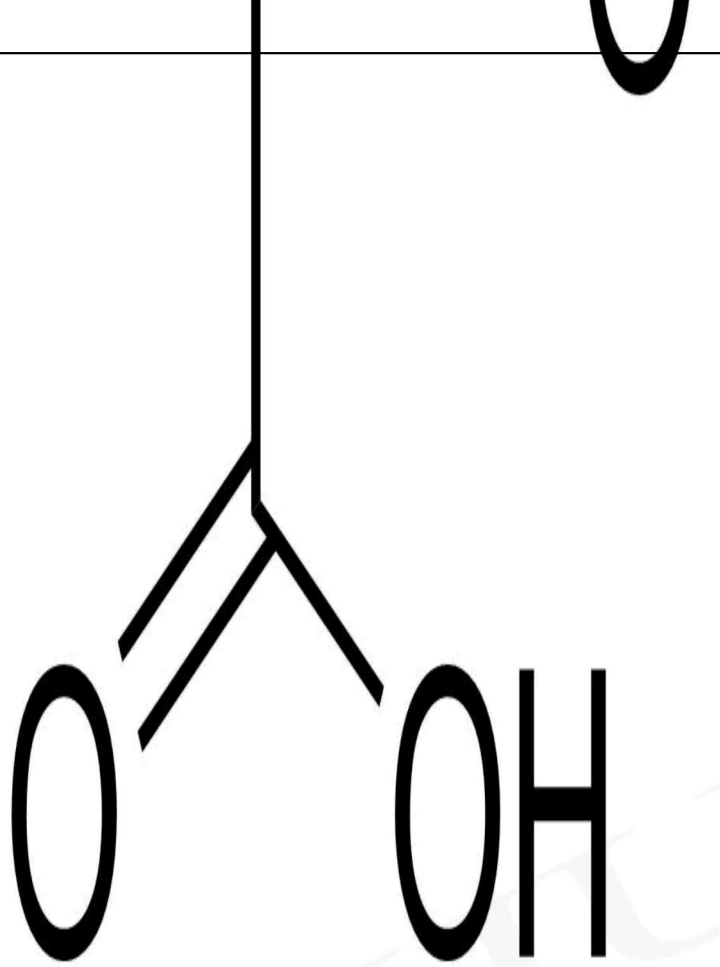
B. Heroin

C. Codeine

D. Morphin

Aspirin is 2-acetoxybenzoic acid, is a non-addictive drug that blocks the production of prostaglandins and relive pain and inflammation. It also has the effect of lowering the body temperature during fever (antipyretic) and preventing platelet coagulation. Because of its anti blood clotting action, aspirin finds use in prevention of heart attacks.





Aspirin

3. Artificial sweetener, which is stable under cold conditions only, is:

A. Saccharine

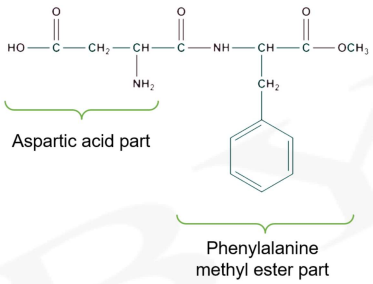
B. Sucralose

C. Aspartame

D. Alitame

Aspartame is stable at cold conditions but unstabe at cooking temperature.
It is 100 times sweeter than the cane sugar.
Hence, it is used only in cold foods.
It is the Methyl ester of dipeptide formed from aspartic acid and phenylalanine.

Structure of aspartame:

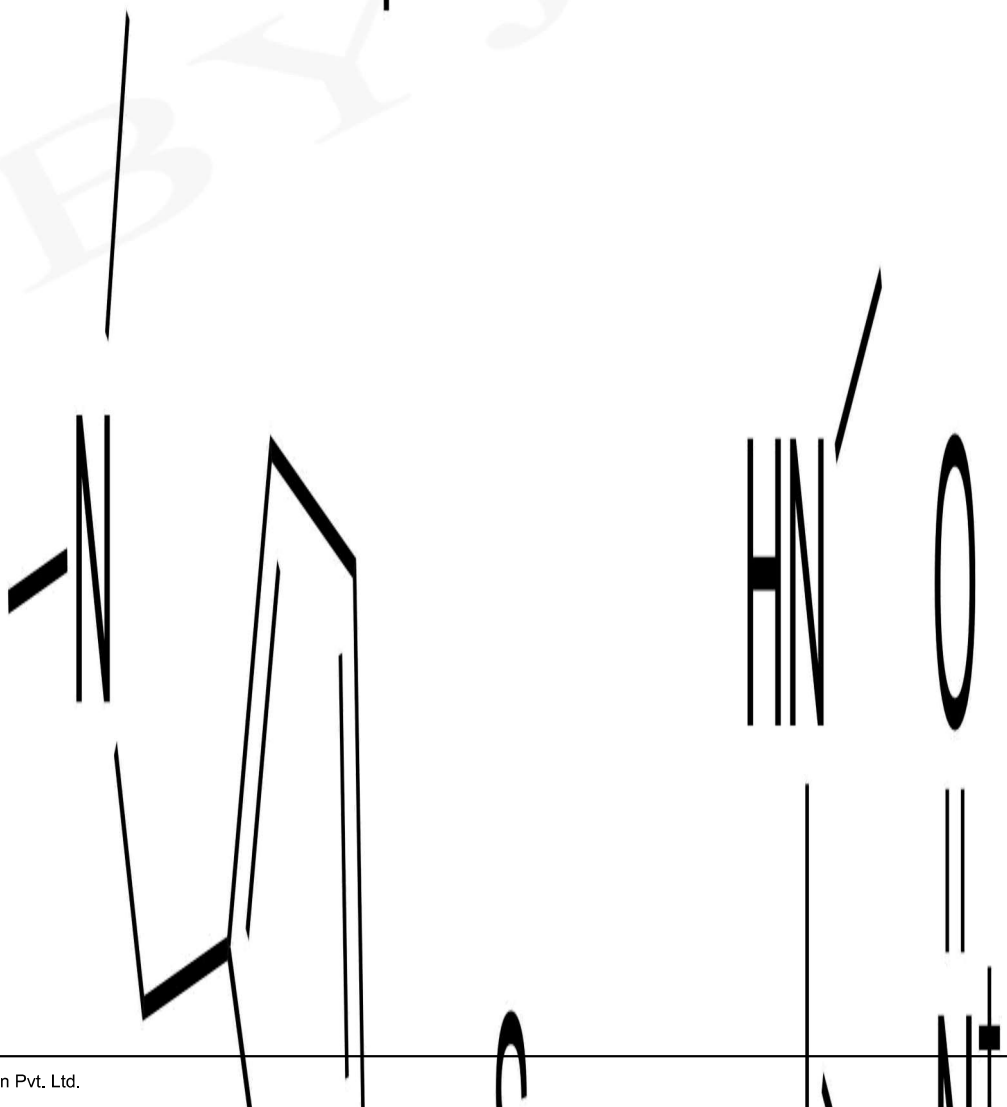


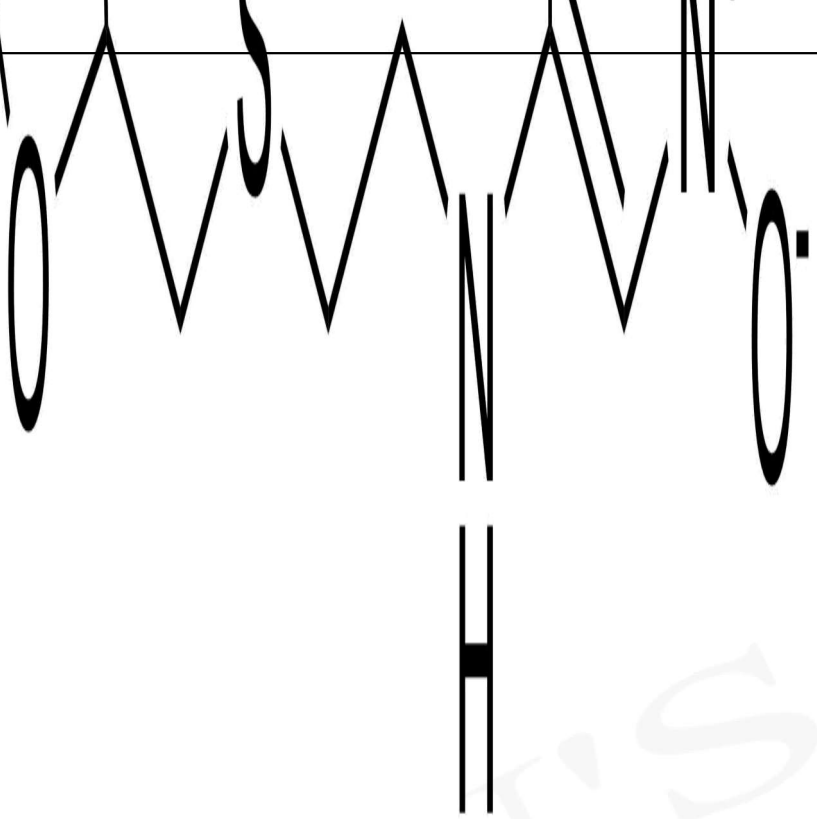
4. Which of the following compounds is not an antacid?

- **A.** Phenelzine
- **B.** Ranitidine
- **C.** sodium hydrogencarbonate
- **D.** Cimetidine

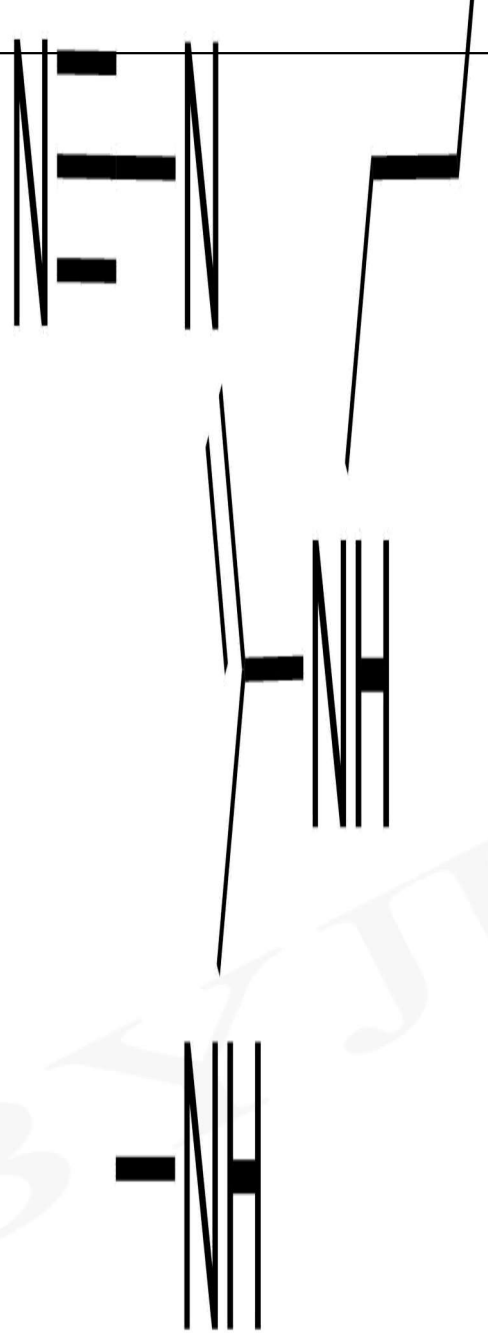
Phenelzine is a antidepressant, while cimetidine (Tegamet), ranitidine (Zantac) and sodium hydrogencarbonate are antacids.

phenelzine





ranitidine



cimetidine

5. Antiseptics and disinfectants either kill or prevent growth of microorganisms. Which of the following statements is not true?

A. Chlorine is used as strong disinfectants

B. Dilute solutions of Boric acid and Hydrogen Peroxide are strong disinfectants

C. Disinfectants harm the living tissues

D. A 0.2% solution of phenol is an antiseptic while 1% solution acts as a disinfectant

Antiseptic and disinfectants both either kill or prevent the growth of microorganisms. The main point of difference between these two is that the former (antiseptic) are used for living beings whereas disinfectants are not safe for living tissues.
A substance like phenol in its lower concentration (0.2%) behaves as antiseptic whereas in higher concentration (1%) as a disinfectant.
Chlorine is a strong disinfectants whereas dilute solutions of boric acid and hydrogen peroxide are mild antiseptic.

Hence, statement (b) is false.