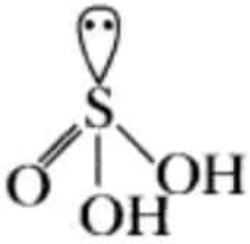
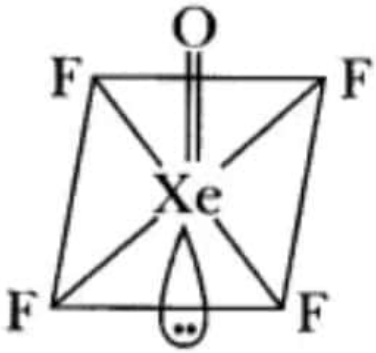
Write the structures of the following molecules: (i) H_2SO_3 (ii) $XeOF_4$

Answer:

(i)



(ii)



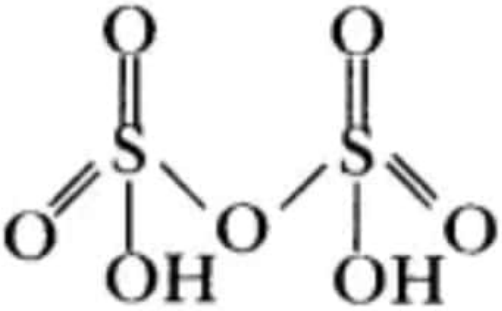
Question 9:

Write the structures of the following:

(i) $H_2S_2O_7$ (ii) XeO_3

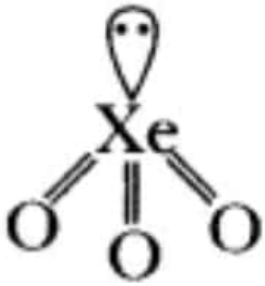
Answer:

(i)



$(H_2S_2O_7)$

(ii)

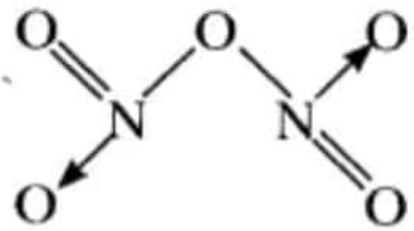


Write the structures of the following:

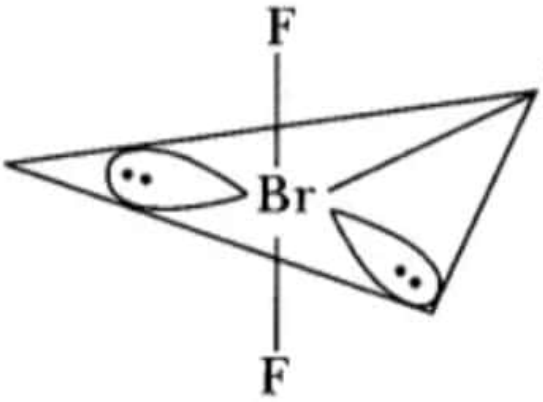
(i) N_2O_5 (ii) BrF_3

Answer:

(i)



(ii)



Question 11:

Give reasons for the following:

(i) N_2 is less reactive at room temperature.

(ii) H_2Te is the strongest reducing agent amongst all the hydrides of group 16-elements.

(iii) Helium is used in diving apparatus as a diluent for oxygen.

Answer:

(i) It is due to presence of triple bond which has high bond dissociation enthalpy.

(ii)H_2Te has longest bond length which has lowest bond dissociation enthalpy.

(iii) It is because helium is less soluble than N_2 in blood and does not cause pain.