

A Hypersil BDS C18 with 5.0  $\mu\text{m}$  particle size (250 mmx4.6mm) column was used to separate the esomeprazole and tadalafil drugs at 20 °C.

The flow rate was 1.0 mL/min. The mobile phase acetonitrile:buffer (60:40) was kept flowing for 5 minutes until baseline became stable at 285 nm wavelength. The injection volume was fixed at 10  $\mu\text{L}$ , and the pH selected was 6.

### **2.10 System Precision Sample Test Preparation**

One homogenous sample solution of the drugs esomeprazole 60 mg and 40 mg tadalafil was prepared by weighing and dissolving them in 50mL of mobile phase solution as solvent and injected repeatedly (10 injection) in this test the data observed in table (7).

### **2.11 Method Precision Sample Test Preparation**

Six sample solution were prepared for the same homogenous sample solution preparation and injected triply for each sample to calculate their RSD% and assay% the data obtained in table (8).

### **2.12 Intermediate Precision Sample Test Preparation**

For the same six sample preparation of method precision are injected triple times for each sample but in different time and analyst, RSD% and assay% were calculated, data is shown in table (9).

### **2.13 Linearity Sample Test Preparation**

Five standard samples (50%, 80%, 100%, 120% and 150%) of the standard sample concentration for esomeprazole and tadalafil were prepared to evaluate the linearity. 50%