

## 9.2.4 Terms Related to Detection

### 9.2.4.1 Classification of Detectors

#### *Classification According to the Form of Response*

##### **Differential Detectors**

These measure the instantaneous difference in the composition of the column effluent.

##### **Integral Detectors**

These measure the accumulated quantity of sample component(s) reaching the detector.

#### *Classification According to the Basis of Response*

##### **Concentration-Sensitive Detector**

A device the response of which is proportional to the concentration of a sample component in the eluent.

##### **Mass-Flow Sensitive Detector**

A device the response of which is proportional to the amount of sample component reaching the detector in unit time.

#### *Classification According to Detector Selectivity*

##### **Universal Detector**

A detector which responds to every component in the column effluent except the mobile phase.

##### **Selective Detector**

A detector which responds to a related group of sample components in the column effluent.

##### **Specific Detector**

A detector which responds to a single sample component or to a limited number of components having similar chemical characteristics.