Drainage basins as open systems *3.1.1.2*

Q1	***True or False?***	
A	Glaciers can generate an input into a river system	
B	Precipitation means rainfall in its various forms	
C	Groundwater can operate as an input, a store and an output of drainage systems	
D	Evaporation may be considered an output of a drainage basin	
E	A lake is only considered a water store if it is contained by a dam.	

Q2	**Match each term to the correct description**	
A	The loss of moisture to the atmosphere from plants via leaf stomata	
B	Water being absorbed by soil	
C	The transfer of water over impermeable material	
D	The loss of moisture to the atmosphere that resides on leaf, stem and branch surfaces plus from the internal structures of plants	
E	The movement of water through porous rock into underground stores	

Select from: **Percolation** **Transpiration** **Surface flow** **Evapotranspiration** **Infiltration**

Q3	**Tick which of the alternative sequences is most likely**	
A	Precipitation – Throughflow – Surface flow	
	Surface flow – Throughflow – Precipitation	
	Precipitation – Surface flow – Throughflow	
B	Percolation – Infiltration – Groundwater store	
	Infiltration – Percolation – Groundwater store	
	Infiltration – Groundwater store – Percolation	
C	Transpiration – Infiltration – Precipitation	
	Infiltration – Precipitation – Transpiration	
	Precipitation – Infiltration – Transpiration	
D	Evaporation – Interception – Precipitation	
	Precipitation – Evaporation – Interception	
	Interception – Evaporation – Precipitation	
E	Soil storage – Infiltration – Evaporation	
	Infiltration – Soil storage – Evaporation	
	Evaporation – Soil storage – Infiltration	

Drainage basins as open systems *3.1.1.2*

Q4	***Decide whether the resultant change in brackets will be an increase +, a decrease - , or no change =***		
A	Precipitation increases	(Surface flow?)	Rapid channel flow increase
B	Percolation reduces	Infiltration reduces	(Throughflow ?)
C	Precipitation stays same	Vegetation increases	(Surface flow ?)
D	Field capacity increases	(Infiltration ?)	(Surface flow ?)
E	(Evaporation ?)	Precipitation reduces	(Lake storage ?)

Q5	***Classify physical and human factors that could cause the following to occur***
A	A reduction in output of water from a river basin into a sea over a period of years.
B	An increase in the store of water in underground aquifers over a period of decades.