Alp 2305: Agro meteorology and Crop water requirements
CAT   45 MINUTES
Answer all Questions

Q1(a) Define climate variability.   (1 mak)

b) What is the difference between climate change and global warming?

(3 mks)

c) Discuss the causes of climate variability and change.   (6 mks)

Q2a) The electromagnetic energy emitted by the sun is given as $E = \frac{Ahc}{\lambda}$

(i)Name the parameters in the equation   (2 marks)

(ii) Given 6.02 x 10^{23} photons/mol, $h = 6.626 \times 10^{-34}J$ s per photon, $c = 3.0 \times 10^8 m/s$. Calculate the energy emitted by the following parts of the electromagnetic spectrum.

- Blue-500nm
- Cyan-550nm
- (iii) Red-700nm   (6 marks)

(b) Explain in details the main parts of the electromagnetic spectrum that affect crop growth.

(6 marks)

c) Discuss the Physiological impact of wind in crop production. .   (6 marks