END SEMESTER EXAMINATION: SP/2022

Subject Code GI 514: GEOINFORMATICS FOR CLIMATE CHANGE AND EIA

Full Marks: 50

Time: 2 hours

Each question comprises two alternatives each carrying 10 marks. Candidate has to answer ONLY ONE OF THEM. **Q1.** (a) Write the difference between weather and climate? (4) **(b)** Define (i) El-Nino (ii) La-Nina (iii) ENSO (2+2+2)OR Q1. (a) Define floods. Write the causes of floods? (5) **(b)** Discuss the types of floods? (5) Q2. The seasonal pattern of a time series satellite data (variation of DN value with time) is shown below. (x-axis: time; y-axis: DN in any spectral band) Write your inference about

(3)

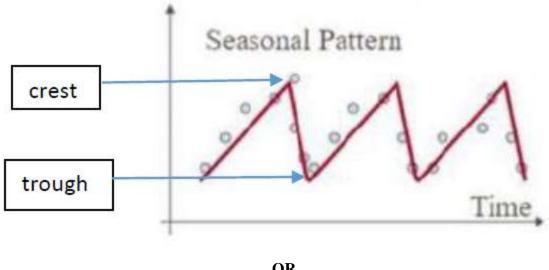
(3)

(4)

(i) The slope of the line connecting the crest and subsequent trough

(ii) The slope of the line connecting the trough and subsequent crest

(iii) Comparison between (i) and (ii)



OR **Q2.** Describe the role of remote sensing in monitoring forest fire. (10)Q3. Write the significance of glacier mass balance studies with reference to global warming. (10) OR **Q3.** Write the significance of snow area depletion curve with reference to global warming. (10)**Q4.** Discuss the effects of greenhouse gases on global warming. (10)OR **Q4.** (a) Discuss aerosol? (5) **(b)** Discuss the effect of radiative forcing? (5) Q5. (a) Define EIA? (2) **(b)** Write the scope of EIA? (3) (c) Write the steps of EIA? (5) OR

Q5. (a) Discuss the relation between EMP and EIA? (5)

(b) Discuss the methodology of EIA? (5)