



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS

2018/2019 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER

**SCHOOL OF TOURISM & NATURAL RESOURCES
MANAGEMENT**

BACHEOR OF ARTS IN GEOGRAPHY

COURSE CODE: GEO 421

COURSE TITLE: APPLIED CLIMATOLOGY

DATE: 5TH DECEMBER 2018

TIME: 1100 - 1300HRS

INSTRUCTIONS TO CANDIDATES

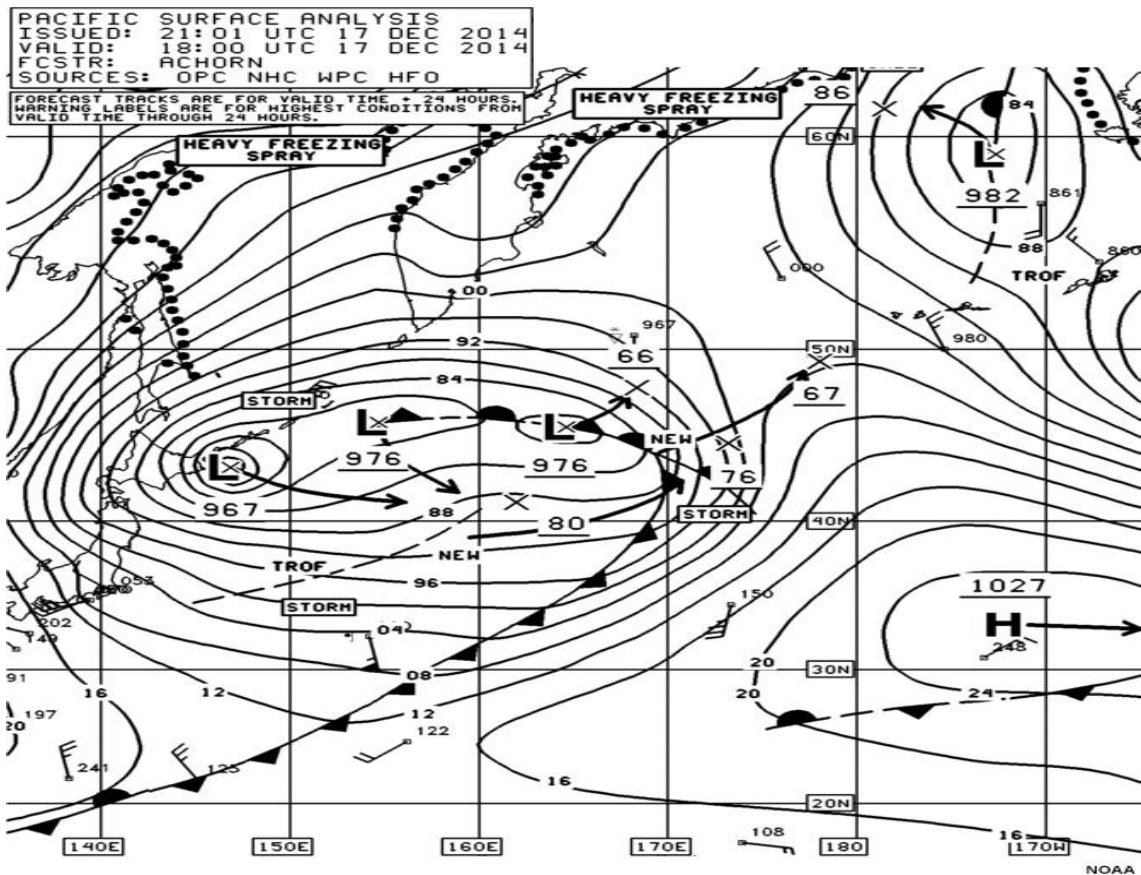
Answer question **ONE** and any other **TWO** questions. Use of simple scientific calculators is allowed. . Use illustrations where appropriate.

This paper consists of 2 printed pages. Please turn over

SECTION A (ANSWER ALL QUESTIONS)

Q1

- a. Differentiate between Bio climatology and Agro climatology (2 marks)
- b. What, in your opinion, contributes the most to the creation of an urban heat island effect? (2 mark)
- c. Explain how one could identify the following meteorological drought characteristics in a region.
 - i. Drought intensity (2 marks)
 - ii. Drought onset (2 marks)
 - iii. Spatial coverage (2 marks)
 - iv. Drought presence (2 marks)
- d. Give a suitable label to the figure given below (2 marks)
- e. Selection four symbols and explain their meaning (8 marks)



- f. Consider any two of the following statements about the environmental comfort and give your justification for each.
 - i. It is possible for some populations can become less sensitive to temperature extremes (4 marks)

- ii. Thermal equilibrium is influenced by personal physical factors that are individual to each occupant in space. (4 marks)
- iii. Acclimatization leads to less discomfort and better work performance. (4 marks)

[Total 30 marks]

SECTION B (ANSWER ANY TWO)

Q2) Discuss how the tourism industry could assist our climate change mitigation efforts. (20 marks)

Q3 Discuss the relationship between flooding and human health effects in developing countries. (20 marks)

Q4 Below is the **Z-Score Index** . Explain how it could be used by a geography student in an applied climatology project. (20 marks)

$$ZSI = (P_i - P) / SD$$

Q5 “ the tribal grass-thatched huts are symbols of indigenous knowledge, poverty and poor health” . . Discuss this statement with close reference to traditional buildings in Kenya.

(20 marks)

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