

**National Open University of Nigeria**

**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**

**Faculty of Science**

**NOVEMBER, 2018 EXAMINATIONS**

**COURSE CODE: ESM 345**

**COURSE TITLE: APPLIED CLIMATOLOGY**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**INSTRUCTION: Answer Question ONE (1) and any other THREE (3) Questions**

1a) Discuss the four weather hazards to Agriculture **(8mks)**

1b) list four major climatic elements **(2mks)**

1c) Enumerate on the climatic cost in Industrial production **(8mks)**

1d) Highlight the effects of weather on aviationThunderstorm **(3mks)**

1e) Explain the problems to be tackled in the development of econo-climatic model **(4mks)**

2a) Define the term acid rain **(2mks)**

2b) Discuss the processes of acid rain formation **(4mks)**

2c) Enumerate on the effects of acid rain on;

i) Plants

ii) Aquatic animals

iii) Infrastructure (**6mks)**

2d) Briefly explain the three ways in which acid deposition alters the soil (**3mks)**

3a) Elucidate on the concept of drought **. (2mks)**

3b) write short notes on the following:

*i)Metrological Drought*

*ii)Agricultural Drought*

*iii)Hydrological Drought*

*iv)Socio-economic Drought* **(12mks)**

4a) Define the term flood **(2mks)**

4b) List the effects of flood under the following:

1. ***Primary (2mks)***
2. ***Secondary (4mks)***

4c) Enunciate on the principal types of floods **(7mks)**

5a) Name the three stages are involved in the process of erecting a building **(3mks)**

5b) Discuss any four effects of drought **(12mks)**