

The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER-2019

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN DISASTER, RISK & SUSTAINABLE DEVELOPMENT UNIT CODE: CODM 2304

UNIT TITLE: ENVIRONMENTAL POLLUTION AND CONTROL

DATE: DECEMBER, 2019 TIME:

INSTRUCTIONS:

• Answer question **ONE** (compulsory) and any other **TWO** questions

QUESTION ONE

- (a) Briefly explain the meaning of the following (6 marks)
 - i) Pollution
 - ii) Toxicity
 - iii) LD50
- (b) Giving examples, explain FIVE categories of Environmental pollutants (6 marks)
- (c) Discuss THREE sources of air pollution and their effects (6 marks)
- (d) Give the full names of the following pollutants (3 marks)

DDT

PCB

PAH

(e) Calculate the concentrations of the following quantities in ppm 2g/L (4 marks)

0.5kg/kg

(f) Highlight FIVE environmental impacts of pollution

(5 marks)

QUESTION TWO

- (a) Explain the environmental effects of the following priority pollutants (20 marks)
 - i) Suspended solids
 - ii) Nutrients
 - iii) Biodegradable organics
 - iv) Hot water

QUESTION THREE

(a) Discuss FIVE factors affecting toxicity of environmental pollutants

(20 marks)

QUESTION FOUR

(a) Explain FOUR important interactions between toxicants that influence their effects on the ecosystem (8 marks)

(b) Discuss FOUR technologies for Air pollution control

(12 marks)

OUESTION FIVE

(a) As a young upcoming disaster and environmental management expert, you are approached by your Governor to educate people on the methods of control of environmental pollution, Discuss key pollution management techniques you will recommend for the management of non-biodegradable pollutants in the local urban settings (20 marks)