

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN PUBLIC HEALTH**

**PUHE 257: ENVIRONMENTAL IMPACT ASSESSMENT**

**STREAMS: BSC (PUBLIC HEALTH) Y2S2**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 05/07/2021**

**8.30 A.M. – 10.30 A.M.**

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**INSTRUCTIONS:**

- **Do not write anything on the question paper. Mobile phones and any other reference materials are NOT allowed in the examination room.**
- **The paper has three sections. Answer ALL questions in Sections I and II and ONE question in section III.**
- **All your answers for Section I (MCQs) should be on one page.**
- **Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.**
- **Write your answers legibly and use your time wisely.**

**SECTION I (20 MARKS)**

1. Which one of the steps below is NOT included in the scoping process? (select one)
- A. Set up the team of experts that will conduct the EIA.
  - B. Describe the project area and the area of the project influence.
  - C. Outline project alternative for preparation, implementation and closure.
  - D. Conduct public meetings and stakeholder consultations; integrate comments and collected feedback into project planning and alternatives.

2. EIA is usually required for a development project when
  - A. Large changes are expected in the environment
  - B. Limited impacts are expected in the environment
  - C. small area is expected to be affected by the project
  - D. There are potentials for Trans- boundary impact
3. Which one of the steps below is NOT included in the Screening process?
  - A. Set up the team of experts that will conduct the EIA.
  - B. Describe the project area and the area of the project influence.
  - C. Outline project alternative for preparation, implementation and closure.
  - D. Conduct public meetings and stakeholder consultations; integrate comments and collected feedback into project planning and alternatives.
4. What is meant by the development project's Areas of Influence?
  - A. The project environment that is located outside the area of the overall project and extends from its boundaries to a distance of 500 metres.
  - B. The sector within which the EIA will be developed (Mining, Tourism, etc.)
  - C. The environmental impacts that will occur outside of the project due to water flow, migratory species, etc.
5. Which of the following best describes Environmental Impact assessment?
  - A. detailed assessment of the planned project and selected alternatives compared to the baseline conditions
  - B. Qualitative descriptions measuring high, medium and low impacts
  - C. Quantitative descriptions such as indicating the cubic metres of water withdrawn, sewage produced, and pollutants released
  - D. All the data collection, analyses, and developed plans summarized together in a wellstructured and concise document
6. Which one is not a key step in developing an EMP?
  - A. Summary of the potential impacts of the proposal.
  - B. A review of EIA legislation in 5 different countries
  - c. Description of the recommended mitigation measures.
  - C. Statement of their compliance with relevant standards.

D. Allocation of resources and responsibilities for plan implementation. f. Schedule of the actions to be taken.

E. Program for monitoring and auditing.

7. Which one of the following best describes a contingency plan?

A. A set of guidelines ensuring that the development project will remain within its boundaries.

B. A plan of actions to prevent an emergency and to be taken when emergencies occur.

C. A plan describing the measures that will be taken to contain or treat any waste produced by the development project.

8. From the list below, please select the item that does NOT require any indicators in order to monitor identified environmental and social impacts and mitigation measures.

A. The amount and range of stakeholders who participated in the scoping stage

B. The most important impacts

C. The effectiveness of the mitigation measures to make sure that they indeed reduce the impacts.

D. The actions proposed in the contingency plans

9. There are many known shortcomings in EIA reports. Which one is NOT a known shortcoming?

A. The description of the proposal does not cover key features.

B. Appropriate mitigating measures are not considered.

C. Insufficient or outdated prediction models are used.

D. All relevant stakeholder's concerns are incorporated.

10. Kyoto Protocol is an important international treaty. Which one of the following sentences is NOT related to this protocol.

A. Kyoto Protocol was adopted in 1997.

B. The first commitment period of Kyoto Protocol ended in 2012

C. Kyoto Protocol is about reduction of emission of greenhouse gases.

D. The second commitment period of Kyoto Protocol will end in 2030.

11. The methodology used to predict impacts depends on:

A. The type and size of the EIA team

- B. Nature of the potential impact
- C. The experience of the authorities
- D. Time to do the EIA and EMP

12. The Screening Criteria under Environment Impact Assessment are based upon some or all of the following codes.

- 1. Scales of investment
- 2. Type of development
- 3. Location of development

Select the correct option from the codes given below:

- A. Only 1 & 2
- B. Only 2 & 3
- C. Only 1 & 3
- D. 1, 2 & 3

1. Terms of Reference (TORs) are always prescribed in national EIA legislation- A True . B. False?

2. Which statement best describes a contingency plan?

- A. A set of guidelines ensuring that the development project will remain within its boundaries.
- B. A plan of actions to prevent an emergency and to be taken when emergencies occur.
- C. A plan describing the measures that will be taken to contain or treat any waste produced by the development project.

15. From the list below, select the item that does NOT require any indicators in order to monitor identified environmental and social impacts and mitigation measures: (Select one):

- A. The amount and range of stakeholders who participated in the scoping stage
- B. The most important impacts
- C. The effectiveness of the mitigation measures to make sure that they indeed reduce the impacts.
- D. The actions proposed in the contingency plans

3. which is the first step in EIA

- A. Project Identification

- B. Project Monitoring
- C. Project Appraisal
- D. Project Proposal

4. Which category of projects have a high significant impact on the environment?

- A. Category A
- B. Category B
- C. Category C
- D. Category D

5. The EIA tool with ability to identify action- effect- impact relationships is

- A, Matrices
- A. Swot
- B. Flow Charts
- C. Check Lists

6. Which is the EIA tool that will reveal a comprehensive consequences of a contemplated project

- A, Matrices
- A. Swot
- B. Flow Charts
- C. Check List

7. The purpose of mitigation is to

- A. Find a way to do things in a better way
- B. Restore social and environmental benefits
- C. Prevent, minimize and remediate the negative impacts
- D. To warrantee that residual impacts are under the acceptable limits
- E. All of the above

8. The methodology used to predict impacts depends on:

- A. The type and size of the EIA team
- B. Nature of the potential impact

- C. The experience of the authorities
- D. Time to do the EIA and EMP

**SECTION II (30 MARKS)**

Answer **ALL** questions in this section

1. A car washing and lubricating company has been operating for several years (more than 10 yrs) in a terrain with the following characteristics: Porous, filterable with a freatic level near to the surface (1.5 m depth). The company is located close by an estuary branch which is quite useful for them since they discharge all the disposals and waste generated by this activity directly into the estuary. These disposals contain a high levels of oils and greases. All the dumping from the car maintenance goes directly into the soil since there are not palettes or gutters. The lubricating company operates 20hrs a day for seven days per week. The Municipality has since, through the local people complained and has arranged the execution of an EIA. As a Public Health officer,

a. Describe the type of environmental evaluation that has to be carried out by the Municipality in this case. (3 Marks)

b. Name the **Five** types of professionals that will be part of the consultancy group performing the EIA. (5 Marks)

c. Suggest any **three** environmental impacts that are likely to result from the company's activities (3 Marks)

d. Describe **three** mitigation measures you will propose as part of your EMP to mitigate the impacts identified. (3 Marks)

2. Outline **five** specific areas included in an EIA Statement (5 Marks)

3. Outline **five** contributions of the Rio Declaration (1992) to the review and improvement in EIA legal, policy and institutional arrangements (5 Marks)

4. Explain how each of the following tools are used in scoping and impact assessment (6 Marks)

i. Checklists

ii. Matrices

iii. Consultations

**SECTION III (20 MARKS)**

Answer **ONE** question in this section.

1. Discuss the techniques used in predicting the impacts in an EIA process. (20 Marks)

2. Discuss the major challenges of enforcing EIA processes as required by law in Kenya (20 Marks)

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