

# **UNIVERSITY OF SWAZILAND**

**Faculty of Health Sciences**

**(BSC) IN ENVIRONMENTAL HEALTH**

**SECOND SEMESTER FINAL EXAMINATION PAPER MAY 2015**

**TITLE OF PAPER :** ENVIRONMENTAL IMPACT ASSESSMENT

**COURSE CODE :** EHS 403

**DURATION :** TWO HOURS

**MARKS :** 100

**INSTRUCTIONS :** ANSWER ONLY FOUR QUESTIONS

**:** EACH QUESTION CARRIES 25 MARKS

**:** BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR**

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### QUESTION ONE

- a) List the main functions of EIA. (3 marks)
- b) Outline the outcomes of scoping in EIA. (6 marks)
- c) Briefly define scoping and state who should be involved in scoping procedure. (9 marks)
- d) Outline the issues to be considered in a public involvement programme. (7marks)

**(25 MARKS)**

### QUESTION TWO

- a. Mitigation is a critical component of the EIA process. Show why mitigation of environmental impacts is important in and EIA process. (10 marks)
- b. Explain the management hierarchy that should be adopted to mitigate adverse (or negative) impacts. (6 Marks)
- c. Discuss the key criteria that should be used when assessing the significance of environmental impact (4 marks)
- d. Suggest Five ways to minimize conflict in environmental impact assessment public participation process. (5 marks)

**(25 MARKS)**

### QUESTION THREE

- a. Explain what is scoping in an EIA? (1 marks)
- b. Outline the scoping report contents in an environmental impact assessment report. (10 marks)
- c. Outline the outcomes of scoping in EIA. (6 marks)
- d. Outline any four key features of an EIA. (8 marks)

**(25 MARKS)**

#### QUESTION FOUR

An Investor wants to put up an Industrial Plant for the manufacture of paper and its derivatives for both local and external market. The Investor intends to establish the paper manufacturing mill in a relatively wet and forested area in one of the regions in Swaziland. As part of the paper mill, the Investor will also provide infrastructure and social amenities in the region. In view of the socio-economic and bio-physical environmental implications that may result due to the proposal, there has been public debate particularly on the loss of habitat/biodiversity and competition for scarce water resources in the region. Assuming your consultancy firm has won a contract to undertake Environmental Impact Assessment (EIA) study on this proposed project:

- a) Discuss the logical steps in the EIA process that your study team is likely to follow in order to achieve the task assigned to you. Justify the formation of the Interdisciplinary Team for this EIA study. (10 marks)
  
- b) Who would you consider to be the Key Stakeholders to participate in the EIA study process? Give reasons for your answer. (10 marks)
  
- c) List any Five typically projects that would require a full scale EIA. (5 marks)

**(25 MARKS)**

### QUESTION FIVE

- a) Internationally, the EIA process has been criticized for a lack of effective involvement of indigenous people. Briefly discuss the challenges associated with involvement of these groups and potential strategies for overcoming these challenges. (10 marks)
- b) With reference to suitable illustration, explain what you understand by the following typology of environmental impacts of development projects:
- i. Indirect Impacts (5 marks)
  - ii. Synergistic Impacts (5 marks)
  - iii. Induced or generated impacts (5 marks)

**(25 MARKS)**