

**PROGRAMME** : B-TECH: ENVIRONMENTAL HEALTH

MODULE : ENVIRONMENTAL WASTE MANAGEMENT IV

CODE : EWM411

**DATE** : 19 NOVEMBER, 2016

DURATION : 3 HRS

- **WEIGHT** : 50:50
- TOTAL MARKS : 150

NUMBER OF PAGES: 3 (THREE) INCLUDING THE COVER PAGE

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#### **INSTRUCTIONS:**

- **1. READ ALL QUESTIONS CAREFULLY BEFORE YOU ANSWER**
- 2. PLEASE ANSWER ALL QUESTIONS
- 3. PLEASE WRITE LEGIBLY
- 4. LEAVE SPACES BETWEEN QUESTIONS

5. DO NOT SPLIT THE ANSWERS TO QUESTIONS. IF SO, ONLY THE FIRST SECTION OF ANSWERS WILL BE MARKED.

6. INCORRECT NUMBERING OF ANSWERS WILL BE MARKED AS WRONG.

7. USE BLUE OR BLACK INK PEN <u>ONLY</u> TO ANSWER THE QUESTIONS.

#### 8. <u>KEEP SILENCE UNTIL THE END OF ASSESSMENT. IF YOU BREAK THIS INSTRUCTION</u> YOU WILL BE DISQUALIFIED.

### **QUESTION 1**

Identify and discuss ten factors that Environmental Health Practitioners can put in place in order to improve waste management in South Africa. [20]

#### **QUESTION 2**

In terms of the requirements/guidelines for Environmental Impact Assessment enshrined in the Government Gazette No 39343 of 30 October 2015, certain steps have to be followed during the process of Environmental Impact Assessment for a proposed environmental project. Mention and briefly discuss these steps. [16]

#### **QUESTION 3**

**3.1** The law may require submission of a written report to a decision-making body describing the environmental impacts of a proposed project and/or alternatives and mitigating measures and their assessment. What important information should be contained in this report? Elaborate. (10)

**3.2** There are eight guiding principles that govern the entire process of Environmental Impact Assessment. Mention and discuss these principles. (16)

[26]

#### **QUESTION 4**

The principle "Cradle-to-Grave" controls infectious and hazardous waste from inception to ultimate disposal and, certain steps are followed to ensure cradle to grave management. Discuss these steps. [20]

#### **QUESTION 5**

Define the following waste management concepts.

5.1 General waste	(2)
5.2Leachate	(2)

5.3 Medical waste	(1)
5.4 Polluter pays Principle	(1)
5.5 Volume reduction	(2)
5.6 Waste hierarchy	(2)
5.7 Generator	(1)
5.8 Environmental Impact Assessment	(2) [13]

## **QUESTION 6**

You have been appointed as a solid waste manager in a solid waste company in Seapoint, Cape Town. The owner of the company is interested in establishing another branch in Port Elizabeth and delegates you to design a long term project (10 years) on **recycling** of solid waste. Design this project and emphasize on the critical aspects that will make this project sustainable for ten (10) years. **[50]** 

# **QUESTION 7**

Arrange the following rights and sections in such a manner that it makes sense.

Right to equality - Section 11

Right to Human dignity - Section 10.

The right to life - Section 24

The right to privacy - Section 9

Right to Environment – Section 14