

FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI
SCHOOL OF ENVIRONMENTAL SCIENCES
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RAIN SEMESTER DEGREE EXAMINATION
EVT 518

2017/2018 SESSION

OIL SPILLAGE AND CONTROL. Time: 2 ½ hrs
INSTRUCTION: Answer four questions in all, at least one from each section

Section A

Question 1 (a) Explain the major considerations in the detection of spill technology and explain the technology that meets the above considerations.
(b) Explain the use of Dispersants in oil spill control in terms of mechanism of action, chemical formulation and methods of application.

Question 2. (a) i. What are the key considerations in oil spill control? ii. Explain the use of boom in oil spill containment.
(b). Explain the process of oil recovery using a named Skimmer

Section B

Question 3.

(a) Mention and discuss any four (4) major causes of oil spill in the Niger-Delta region of Nigeria.

(b) (i) What is oil weathering
(ii) Discuss any four (4) factors that influence the rate of oil weathering in the environment.

Question 4

Discuss the relevance of the following properties of oil and their implication(s) in the oil industry.

- (i) Specific gravity
- (ii) Flash point
- (iii) Viscosity and
- (iv) Pour point.

SECTION C

Question 5

(a) Why is a contingency plan necessary in the oil industry?
b) List 6 components of a contingency plan and discuss two of them in detail.

Question 6

(a) List 5 legal regulations enacted for the management of oil spills in Nigeria.
(b) Mention 4 environmental problems associated with oil exploration in Nigeria and discuss two of them in detail.