



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE
2024 1 EXAMINATION

COURSE CODE: EHS 520
COURSE TITLE: BIOMEDICAL AND SPECIAL WASTE
COURSE UNITS: 2 CREDIT UNITS
TIME ALLOWED: 1 ½ HOURS
TOTAL SCORE: 70 MARKS
INSTRUCTION: ANSWER ALL QUESTIONS

- 1 (a) What is *Biomedical Waste Recycling*? (5 Marks)
(b) Using the concept of 3R (reduce, reuse and recycle), discuss the steps involved in waste recycling (10 Marks)
(c) Write a short note on the goals of Integrated Waste Management (10 Marks)
- 2 (a) Discuss the rationale for waste sampling (5 Marks)
(b) Highlight five (5) factors to be considered when designing waste transport system aspect of waste management (5 Marks)
(c) Itemize five (5) occupational hazard associated with waste handling (10 Marks)
- 3 (a) Define the term "*Resource Recovery*" (5 Marks)
(b) Highlight five (5) effect of biomedical waste on the environment (5 Marks)
(c) Itemize five (5) specific effects of biomedical waste on human health (10 Marks)
(d) State five (5) guiding principles of the Integrated Biomedical Waste Management (5 Marks)

Q5 (a) Define neighborhood of x .

(4marks)

(b) Established that a subset A of X is open if and only if its complement A^c is closed in X .

(11 marks)

4.a Complete the ANOVA table below:

Source of variation	Degree of freedom	Sum of square	Mean square	F cal
Replication	3	85	28.33	-
Variety	4	525.7	131.425	4.461
Error	12	353.5	29.458	
Total	-	-		

(6 marks)

b.State three (3) uses of Chi square.(3 marks)

c. Complete the table below to know the Chi square value. 11 marks

Category	O	E	O-E	$(O-E)^2$	$(O-E)^2 / E$
Maize	95	80			
Sorghum	40	60			
Millet	30	20			
Rice	35	40			
			$\chi^2 =$	15.104	