

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF HEALTH TECHNOLOGY
DEPARTMENT OF BIOMEDICAL TECHNOLOGY
2014/2015 HARMATTAN SEMESTER EXAMINATION

BMT 421 (Ergonomics and Occupational safety)
2UNITS

Instruction: Answer each section on A separate Booklet. Choose a total of four (4) questions from the two sections with at least two questions from each section.

Time: 2 hours

SECTION A (ERGONOMICS)

Instructions: Answer 2 questions from this section

1. (i) List and explain the ergonomic principles that contribute to good workplace design (15 marks)
(ii) Discuss the ergonomic risk factors you know? (5 marks)
2. (i) Explain proper sitting position and how good seating arrangements can minimize stress to the back (10 marks)
(ii) How do you reduce back injuries resulting from manual material handling? (10 marks)
3. (i) How will you arrange your workspace to minimize injury and optimize productivity? (15 marks)
(ii) What considerations will you put in place in designing a workplace with disabled workers in mind? (5 marks)

SECTION B

(OCCUPATIONAL SAFETY)

- 1a. What do you understand by Radiation Pollution? (2 Marks)
- b. Outline five (5) sources of radiation Pollution (5 Marks)
- c. How can ionizing radiation be controlled? (10 Marks)
- 2a. Write briefly on electrical accidents (16 Marks)
- b. How can electrical accidents be prevented? Mention four preventive measures. (4 Marks)
- 3a. Discuss lead poisoning (15 Marks)
- b. Mention five (5) ways lead poisoning can be prevented (5 Marks)