

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF PHYSICAL SCIENCES
DEPARTMENT OF GEOLOGY

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BTech (GEOLOGY), 2015/2016 SESSION

COURSE: GEL 416 (MICROPALEONTOLOGY)

UNIT: 3

DATE: 13th April, 2016.

TIME ALLOWED: 2 Hours

Instructions: Answer **question 1** and any other 3 questions. Provide well labelled diagrams where necessary.

1. Describe in detail the kerosene method of foraminiferal recovery from a set of given rock samples.
- 2a. Describe foraminiferal wall structure.
 - b. Comment briefly on its taxonomic and paleoenvironmental significance.
- 3a. Discuss the ecology of Dinoflagellates.
 - b. Explain thermal alteration of pollen and spores and its value in hydrocarbon exploration.
- 4a. Describe exine sculpture and structure.
 - b. Comment on their taxonomic significance.
- 5a. Write explanatory notes on any two of the following:
 - i. Apertures in foraminifera.
 - ii. Palynological Marine Index (PMI).
 - iii. Morphological features of calcareous nannofossils.
6. Explain the following growth patterns in foraminifera. Provide examples.
 - i. Septate.
 - ii. Non-septate.
 - iii. Multiform.