

NNAMDI AZIKIWE UNIVERSITY AWKA  
DEPARTMENT OF GEOLOGICAL SCIENCES  
POSTGRADUATE EXAMINATION (M.Sc). June, 2013  
GLS 614: HYDROGEOLOGICAL PROVINCES OF NIGERIA .  
TIME ALLOWED; Three hours.

INSTRUCTION; Answer question No.1 and any other three.

1. Compare and contrast the problems and prospects of groundwater resources availability, distribution and development, in the basement Complex areas and sedimentary areas of Nigeria. Give specific examples.
  - 2(a) Differentiate between (i) pollution and contamination; and (ii) point and distributed sources of pollution.
  - (b) Discuss the causes and viable control measures of pollution, citing both local and global examples.
- 3 Discuss the hydrogeology/hydrochemistry of (i) coal fields, (ii) oil fields, and (iii) carbonate terrain, using specific case examples
4. Explain the causes, consequences, and viable control options of gully erosion in Nigerian sedimentary basins. Use specific case examples.
- 5.(i) Compare and contrast the groundwater resources potentials of the Niger Delta area of Nigeria and the Asu River Group, with emphasis on geological controls.  
(ii) Discuss the hydrogeological implications of fractures in rocks.

THE END.